

# *General catalogue*

*Edition 1 - 2016*

# TECNOALARM INTERNATIONAL LEADER OF SECURITY



## An Italian story

Tecnoalarm, with more than thirty-five years of experience in the security sector, is synonymous of an unceasing research and technological innovation.

Today, the company from Turin, which has achieved a position of absolute excellence in Italy and in Europe, is rapidly conquering markets worldwide. This not only thanks to the technological know-how, the sophisticated inspection techniques and the ability to always propose advanced solutions and high quality products, but also to the great attention that the company pays to the market trends and to the voices of qualified operators in the sector.



Architects, planners and interior designers can find in Tecnoalarm the ideal partner for the design, installation and management, even customized, of integrated solutions aimed at protecting locations such as dwellings, buildings, commercial and industrial areas, airports, highly sensitive locations and large retail complexes and centers.

The technological innovation and design, strictly "made in Italy", are enriched by that "touch of genius" which is the unique characteristic of Italian style. Tecnoalarm is proud to spread this culture, these values and this knowledge around the world.



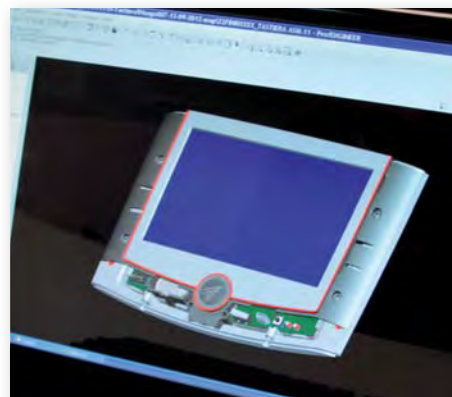
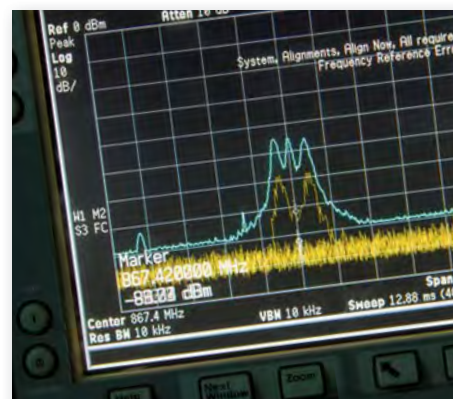
## Advanced security solutions

The Tecnoalarm research department has developed an extensive range of detectors for the three levels of intrusion protection: perimeter protections of the estate, those for the outdoor and the indoor of the building. The perimeter protection is made with long-range barriers, which have been specifically developed for outdoor installations like industrial sites, warehouses, courtyards or gardens. Barriers and detectors protect the outside of the building and the access ways like doors and windows.

The indoor detectors capture the presence of intruders in each specific area of the building as well as sabotage attempts thanks to innovative anti-tamper protections like the antimasking control.

The Tecnoalarm systems can be integrated with wireless components for an easy installation in inaccessible places. All the wireless devices are equipped with dual-band technology to ensure a good quality of transmission and reception of the wireless signals.

The user interface is friendly with control units which also integrate interactive voice functions.







### **RSC® Technology (Remote Sensitivity Control)**

The innovative RSC® technology permits the communication between the alarm system and the Tecnoalarm software operated in the installer's office thanks to a specific protocol developed by the Tecnoalarm research department. The sophisticated technology allows to check functioning of each device to guarantee a continuous and reliable service and ensure an efficient use of the system's resources. RSC® technology is a valid tool for a preventive maintenance of the systems.



### **RDV® Technology (Remote Digital Verification)**

Another showpiece of Tecnoalarm is the RDV® technology protected by international patent. It allows the final user to verify in real time if the alarm has been caused by an intrusion. The digital alarm signal is transformed into a particular sound signal whose intensity is directly proportional to the detected movement. This signal is sent to the user's mobile phone or the central monitoring station for the necessary action.





**Tecnoalarm**  
Hi-Tech Security Systems

## Certificate of Attendance

*This is to certify that Mr/Ms.*  
**Peter Smith**

*Company*  
**Security Center Ltd.**

*has attended a training course  
on the following alarm system equipment*

TPA-20 TPA-20 GSM	TPA-28 TPA-28 GSM	TPI-10	TPO-48	TPO-440	PERIMETER PROTECTION
ADVANCED PROGRAMMING LEVEL 2	WIRELESS TECHNOLOGY	UTS 43 PROX UTS 4 UTS C	CABLE TO EUROPEAN STANDARDS	PROGRAMMING AND MANAGEMENT SOFTWARE	TCMOP

Videoalarm Tecnoalarm

24/7 RSC ESEC SECURE

It is only thanks to an appropriate project and a correct installation, that you make full use of a Tecnoalarm security system. For this reason, the systems are installed by professionals who are able to carry out a correct risk analysis and who have a wide experience and technical knowledge acquired by attending training courses on a regular basis. Tecnoalarm professionals propose solutions which guarantee the highest level of protection for your home with both passive and electronic protections, and which comply with the current standards. Concerning this issue, Tecnoalarm has published the **Guide to the European Standards for Burglar Alarm Systems** with the purpose to explain in a simple and comprehensive way the national and European regulatory framework.



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# SYSTEMS

The continuous evolution of the Tecnoalarm systems, the great attention the company pays to the sector's standards as well as the implementation of ever new and sophisticated technologies guarantee the highest protection and security standards. To clearly display the systems' rapid technological progress and to provide a useful instrument for the comparison of the systems in matters of their technological content, Tecnoalarm introduces the "technical evaluation index".

## Technical evaluation index

The technical evaluation is made on the basis of the system's equipment taking into account, in particular, three categories, the serial ports, the communication vectors and the Videoalarm devices and telematic services. The evaluation is made using the letters A to C and considers both the quantity and technical merit of the implemented equipment. The highest rating A is assigned for a comprehensive and technically advanced equipment.

### Serial ports

According to fittings, up to three serial ports with different specializations permit the connection of peripheral devices for system management, detection and alarm notification.

### Communication vectors

Both integrated and optional communication vectors, which are classified as ATE2 or ATE4 depending on the protocols used, permit the transmission of the events in the formats PSTN, GSM-GPRS, IP and GSM.

### Videoalarm and telematic services

According to fittings, it is possible to implement the Videoalarm devices and the exclusive telematic services DDNS Tecnoalarm, SNTP and Mail Server Tecnoalarm, as well as manage the systems with the app myTecnoalarm.

Technical evaluation index	Serial ports			Communication vectors				Videoalarm/Telematic Services			
	SERIAL BUS	SENSOR BUS	SIREN BUS	PSTN	GSM-GPRS	IP	GSM-EXT	VIDEOALARM IP	VIDEOALARM CCTV	DDNS Tecnoalarm	myTecnoalarm
TP4-20	C			ATE2		ATE2	ATE2				
TP4-20 GSM	C				ATE2	ATE2					
TP8-28	A			ATE2		ATE4	ATE2				
TP8-28 GSM	A				ATE4	ATE4	ATE2				
TP10-42	A			ATE2	ATE4	ATE4	ATE2				
TP8-88	A			ATE2	ATE4	ATE4	ATE2				
TP20-440	A			ATE2	ATE4	ATE4	ATE2				

ATE (Alarm Transmission Equipment) - A: excellent - B: good - C: satisfactory



**TP4-20**  
**TP4-20 GSM**

**TP8-28**  
**TP8-28 GSM**

**TP10-42**

**TP8-88**

**TP20-440**

**Tecnalarm**  
*più informazioni*

# Telematic Services

# Tecnoalarm



## **Tecnoalarm telematic services**

The new generation systems are compatible with the exclusive telematic services DDNS Tecnoalarm, SNTP and Mail Server Tecnoalarm. These services are managed automatically by a dedicated server and are provided free-of-charge to the customers of Tecnoalarm in order to simplify and protect the Ethernet connection of their systems.



### **DDNS Tecnoalarm**

The system's name and IP address are automatically recorded on the Tecnoalarm DDNS server and transmitted to the internet. Whenever the system registers that its IP address has changed, it automatically communicates the new address to the DDNS server which updates the registered IP address and transmits the information to the DNS servers on the internet.



### **SNTP**

The system's internal clock is automatically synchronized with an NTP server which uses the universal coordinated time (UTC).



### **Mail Server Tecnoalarm**

The systems are equipped with a Mailer Client for the transmission of emails. The Mail Server Tecnoalarm provides a hard-programmed account for the system, through which it transmits the emails received from the system to a total of 8 recipients. The emails contain the time of occurrence of the events as well as the system status.



# App myTecnoalarm



myTecnoalarm

## myTecnoalarm

The app for iPhone and Android allows to interact with the Tecnoalarm burglar alarm systems in a natural and intuitive way.

The communication between the app and the system is established in real time on demand. The user can manage the system's programs and remote controls, check their status and query the stored events by a few simple operations on his iPhone or smartphone.



### Security

The communication protocol provides the encryption of the data and a 2-factor authentication: passphrase and access code.



### Management of the programs

Icons simplify the identification of the programs and the program status check. Arming, disarming and partset becomes rapid and intuitive.



### Management of the remote controls

The app permits an easy and intuitive management of the home automation.



### Event log

The user can download the event log of the system and scroll the events.



### Settings

This menu allows the user to customize the icons and program an alphanumeric description of the programs and remote controls.

**The app myTecnoalarm is available for iPhone and Android and can be downloaded from the corresponding app store.**



# TP4-20

# TP4-20 GSM

TP4-20 TP4-20 GSM TP4-20 TP4-20 GSM TP4-20 TP4-20 GSM TP4-20 TP4-20 GSM

# TP4-20 - TP4-20 GSM

Remotely manageable serial control panel  
with 4 to 20 hard-wired/wireless zones



# TP4-20 - TP4-20 GSM







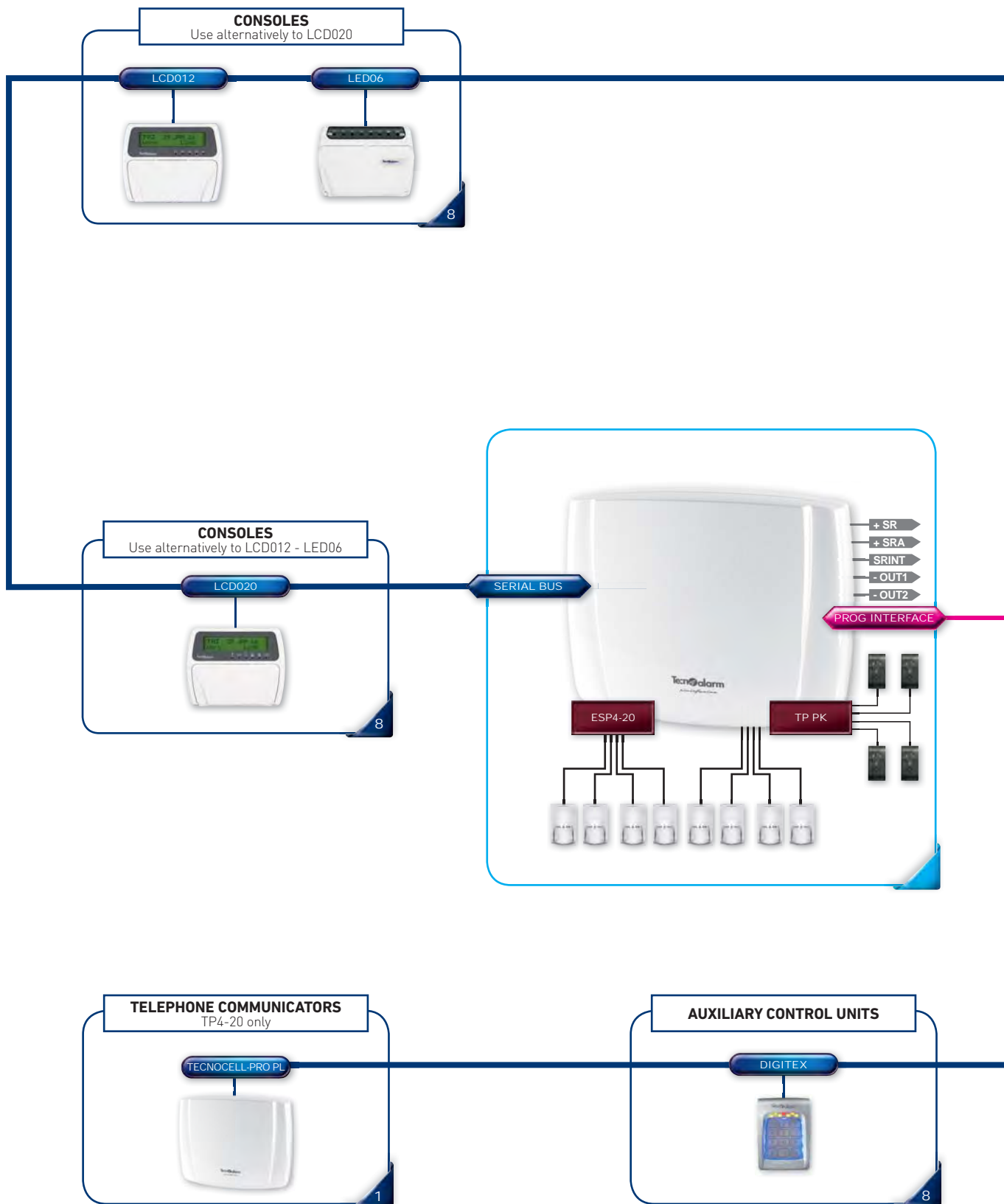
INPUTS	CPU	ESP4-20	SPEED 8 STD	SPEED 4	SPEED 8	SPEED ALM8 PL
CONVENTIONAL*	4	4 (2 Zone Bus)	8	4	8	8
ZONE BUS	-		-			

\* The following contact types can be programmed: NC (normally closed), NO (normally open), BIL (end-of-line resistor), B24 (double end-of-line resistor). The following filters can be programmed: time, pulse count or inertia.

Technical evaluation index	Serial ports			Communication vectors				Videoalarm/Telematic Services			
	SERIAL BUS	SENSOR BUS	SIREN BUS	PSTN	GSM	IP	GSM-EXT	VIDEOALARM IP	VIDEOALARM CCTV	DDNS	myTecnalarm
TP4-20				ATE2	ATE2	ATE2					
	C			C							
TP4-20 GSM				ATE2	ATE2						
	C			C							
TP8-28				ATE2	ATE4	ATE2					
	A			B							
TP8-28 GSM				ATE4	ATE4	ATE2					
	A			B							
TP10-42				ATE2	ATE4	ATE4	ATE2				
	A			A							
TP8-88				ATE2	ATE4	ATE4	ATE2				
	A			A							
TP20-440				ATE2	ATE4	ATE4	ATE2				
	A			A							

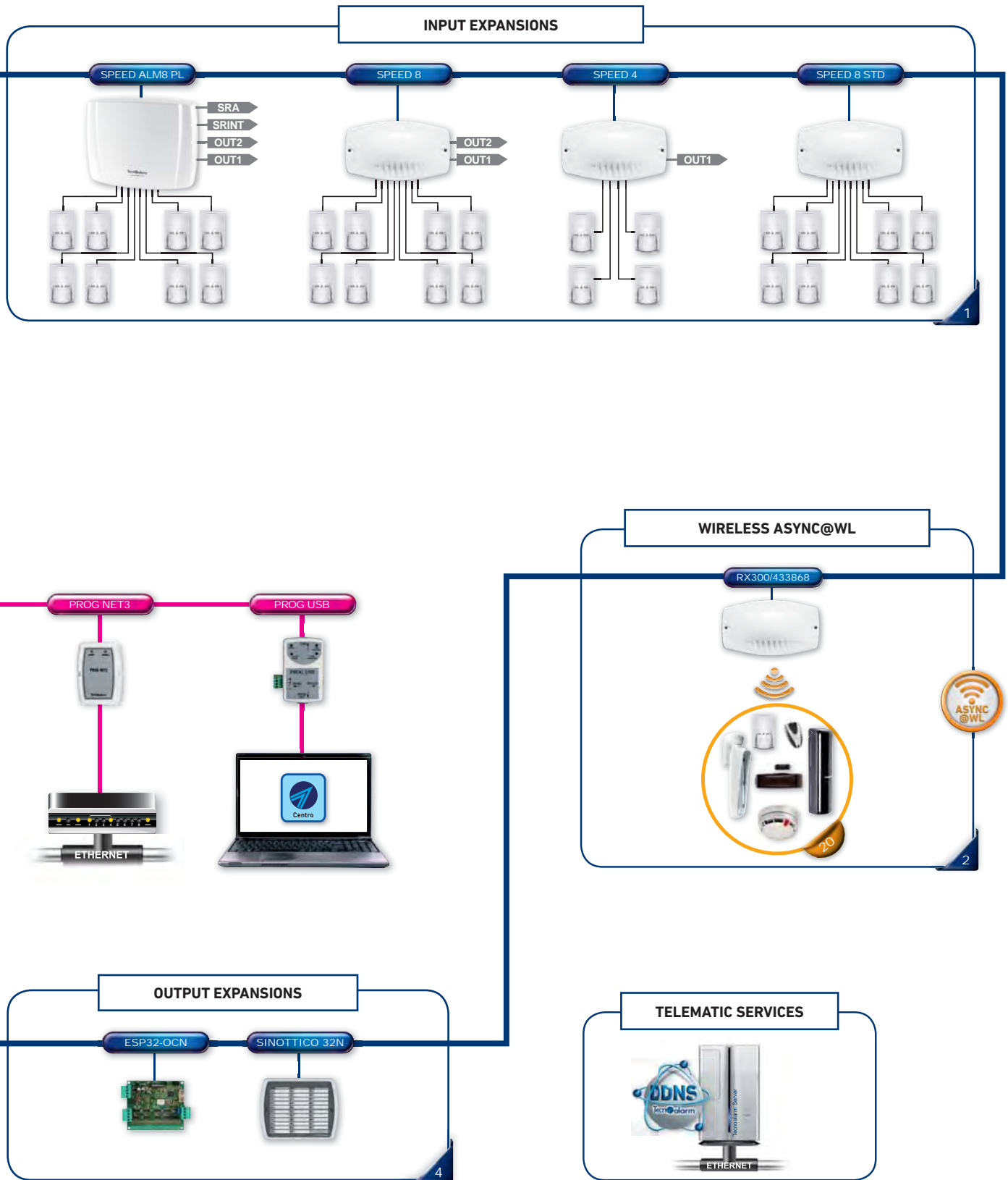
ATE (Alarm Transmission Equipment) - A: excellent - B: good - C: satisfactory

# TP4-20 - TP4-20 GSM



The label indicates the number of connectable devices per type.

# System configuration



# TP4-20 - TP4-20 GSM

## TP4-20

- Management of max. 20 wireless zones (using 16 of which alternatively to the hard-wired zones)
- 1 tamper input
- 4 zone inputs for conventional detectors
- 1 RS485 port for conventional peripheral devices
- 1 alarm output for indoor siren
- 1 alarm output for outdoor siren
- 2 programmable logic outputs
- On-board PSTN interface:  
8 channels with 2 telephone numbers each
- Event notification in the formats:  
speech, SMS, Ring, DTMF, FSK and data
- Communication vectors:  
PSTN (on-board), GSM and TCP/IP (optional)
- Voice synthesis
- 4 programs
- 2 remote controls
- 4 timers
- 2 access periods
- 20 access codes
- 16 keys/transponders/RFID cards
- 16 wireless keys
- Digital control of the radio range and interferences
- Event buffer with a capacity of 512 events
- Battery test with automatic disconnection in case of failure
- 1.1A linear power supply

## TP4-20 GSM

As TP4-20 but with on-board GSM interface

N.B. The control panel TP4-20 without voice synthesis software module is only available in Italy.

Standard equipment	       
Expansions	  
Control modes	  
Automation	  
Software options/Compatibility with monitoring software	
Ports	








## TP4-20 • TP4-20 GSM - Technical and functional specifications

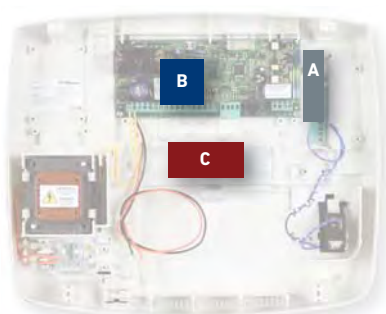
<b>Zones</b>	Total logic zones	<b>20</b>
	CPU hard-wired zones	<b>4 conventional</b>
	Total hard-wired zones	<b>16</b>
	Total wireless zones	<b>20</b>
<b>Outputs</b>	CPU outputs	<b>3 + 2 programmable</b>
<b>System features</b>	RS485 serial bus	<b>1</b>
	Event buffer capacity	<b>512 events</b>
<b>Programs and access management</b>	Programs	<b>4</b>
	Codes	<b>20</b>
	Keys/transponders/RFID	<b>16</b>
	Wireless keys	<b>16</b>
<b>Automation</b>	Timers	<b>4</b>
	Access periods	<b>2</b>
	Remote controls	<b>2</b>
	TCS (test call with TCP/IP)	<b>✓</b>
<b>Telephone section TP4-20</b>	Channels	<b>8</b>
	PSTN vector	<b>On-board</b>
	GSM vector (optional)	<b>TECNOCELL-PRO PL</b>
	IP vector (optional)	<b>PROG NET3</b>
	Transmittable events	<b>86</b>
	Telephone numbers/ IP addresses	<b>2 per channel (max. 16 digits)</b>
	Call event queue	<b>16</b>
	Communication protocols	<b>144</b>
<b>Telephone section TP4-20 GSM</b>	Channels	<b>8</b>
	GSM vector	<b>On-board</b>
	IP vector (optional)	<b>PROG NET3</b>
	Transmittable events	<b>86</b>
	Telephone numbers/ IP addresses	<b>2 per channel (max. 16 digits)</b>
	Call event queue	<b>16</b>
<b>Serial expansions</b>	Communication protocols	<b>21</b>
	Hard-wired input expansions	<b>1</b>
	Wireless expansions	<b>2</b>
	Consoles	<b>8</b>
	Auxiliary control units	<b>4</b>
	Output expansions	<b>4</b>
<b>Electrical specifications</b>	GSM telephone communicator (TP4-20 only)	<b>1</b>
	Operating voltage	<b>230V AC +/-10% 50Hz</b>
	CPU board consumption TP4-20	<b>145mA @ 13.8V DC</b>
	CPU board consumption TP4-20 GSM	<b>130mA @ 13.8V DC</b>
	Power supply	<b>1.1A @ 13.8V DC</b>
<b>Physical specifications</b>	Battery	<b>12V/7Ah</b>
	Environmental class	<b>II</b>
	Casing	<b>ABS</b>
	Dimensions (L x H x D)	<b>350 x 285 x 93mm</b>
	Weight TP4-20 (w/o battery)	<b>2.6kg</b>
	Weight TP4-20 GSM (w/o battery)	<b>2.7kg</b>
	Operating temperature	<b>-10°C...+55°C</b>
	Humidity (w/o condensation)	<b>93%</b>
<b>Conformity</b>	Directive	<b>R&amp;TTE 1999/05/EC</b>

# TP4-20 - TP4-20 GSM

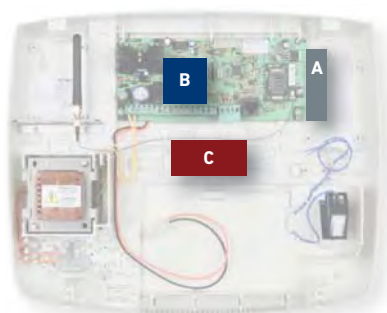
## Internal expansions and interfaces

<div>ESP4-20</div>	<div><div></div><div>Approved for certified systems</div></div>				<div><div>ZONE BUS DETECTORS</div></div>	<div><div>4</div><div>CONVENTIONAL DETECTORS</div></div>
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>		
	<div>Expansion module with 4 parallel inputs for the connection of conventional detectors and Zone Bus detectors (only the first two inputs)</div>					
<div>Item no. F127TP420ESP</div>						
<div>TP PK</div>					<div><div>KEY INTERFACE</div></div>	<div><div>4</div><div>READERS</div></div>
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>		
	<div>Transponder interface Up to 4 readers can be connected in parallel.</div>					
<div>Item no. F127TP6PK</div>						
<div>PROG NET3</div>					<div><div></div><div>IP</div></div>	
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>		
	<div>Ethernet interface The interface implements the IP vector and permits remote management with TCP/IP. Dimensions (L x H x D) 67 x 95 x 31mm - Gray color</div>					
<div>Item no. F130PROGNET3</div>						







## MOUNTING POSITIONS










TP4-20










TP4-20 GSM


MODELS								
Model	Item no.							
TP4-20	Only in Italy			✓		Optional	1.1A	✓
TP4-20/V	F101TP420/V-UK		✓	✓		Optional	1.1A	✓
TP4-20 GSM	F101TP420G/V-UK		✓		✓	Optional	1.1A	✓

OPTIONS		
Option	Item no.	
VOCABOLARIO	F127TP420VOC	Voice synthesis software module

VECTORS TP4-20									
Vector	Device	Class	DDNS	APP	RDV®	SMS	Remote controls	Remote management	Monitoring
PSTN	ON-BOARD	ATE2			✓		✓	✓	✓
GSM-EXT*	TECNOCELL-PRO PL	ATE2						✓	✓
IP*	PROG NET3	ATE2	✓					✓	✓
* The vectors GSM-EXT and IP are optional and require the installation of external interfaces.									

VECTORS TP4-20 GSM									
Vector	Device	Class	DDNS	APP	RDV®	SMS	Remote controls	Remote management	Monitoring
GSM	ON-BOARD	ATE2			✓	✓	✓	✓	✓
IP*	PROG NET3	ATE2	✓					✓	✓
* The IP vector is optional and requires the installation of an external interface.									

## TP4-20 GSM - Accessories

	<b>GSM ANTENNA EXTENSION</b>
	4m extension cord for the connection of the antenna to the GSM-GPRS module
	Item no. C126PROLANTENNA

# TP8-28

# TP8-28 GSM

TP8-28 TP8-28 GSM TP8-28 TP8-28 GSM TP8-28 TP8-28 GSM TP8-28 TP8-28 GSM

# TP8-28 • TP8-28 GSM

Remotely manageable serial control panel  
with 8 to 28 hard-wired/wireless zones



# TP8-28 - TP8-28 GSM







INPUTS	CPU	ESP4-20	SPEED 8 STD	SPEED 4	SPEED 4-140C	SPEED 8	SPEED ALM8 PL	SPEED 4 PLUS	SPEED 8 PLUS	SPEED ALM8 PLUS
CONVENTIONAL*	2	4	8	4	4	8	8	4	-	-
ZONE BUS	-	-	-	-	-	-	-	4	8	8
SENSOR BUS	6	-	-	-	-	-	-	4	8	8

\* The following contact types can be programmed: NC (normally closed), NO (normally open), BIL (end-of-line resistor), B24 (double end-of-line resistor). The following filters can be programmed: time, pulse count or inertia.

## Videalarm

		Cameras	Recording	Viewing
	UTS V4	4	-	1/4
	UTS V8	8	-	1/4

Technical evaluation index	Serial ports			Communication vectors				Videoalarm/Telematic Services			
	SERIAL BUS	SENSOR BUS	SIREN BUS	PSTN	GSM-GPRS	IP	GSM-EXT	VIDEOALARM IP	VIDEOALARM CCTV	DDNS	myTecnalarm
TP4-20				ATE2		ATE2	ATE2				
	C			C				C			
TP4-20 GSM				ATE2	ATE2						
	C			C				C			
TP8-28				ATE2	ATE4	ATE2					
	A			B				B			
TP8-28 GSM				ATE4	ATE4	ATE2					
	A			B				B			
TP10-42				ATE2	ATE4	ATE4	ATE2				
	A			A				A			
TP8-88				ATE2	ATE4	ATE4	ATE2				
	A			A				A			
TP20-440				ATE2	ATE4	ATE4	ATE2				
	A			A				A			

ATE (Alarm Transmission Equipment) - A: excellent - B: good - C: satisfactory

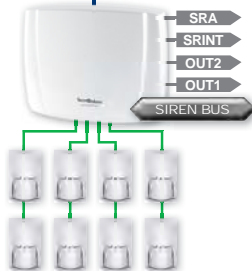
# TP8-28 - TP8-28 GSM

## POWER SUPPLIES INPUT EXPANSIONS

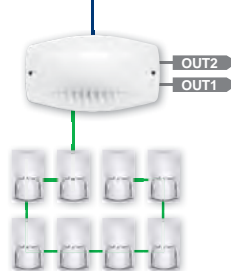
TAPS-8 BUS



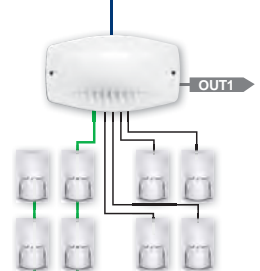
SPEED ALM8 PLUS



SPEED 8 PLUS



SPEED 4 PLUS



## CONSOLES

LCDPROX1



LCD300/S



UTS 4.3 PROX



UTS V8



UTS V4



UTS C



8

## BUS SIRENS

SAEL 2010 BUS



SIRTEC BUS



2

## TELEPHONE COMMUNICATORS

TECNOCELL-PRO PL



1

## AUXILIARY CONTROL UNITS

DIGITEX



APR CARD



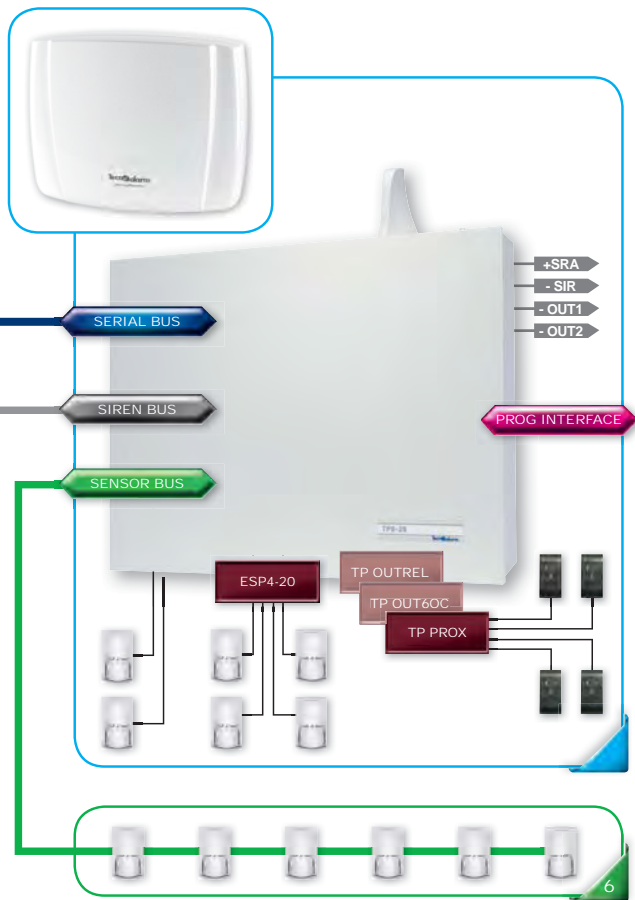
APR FINGER



APR FINGER-CARD



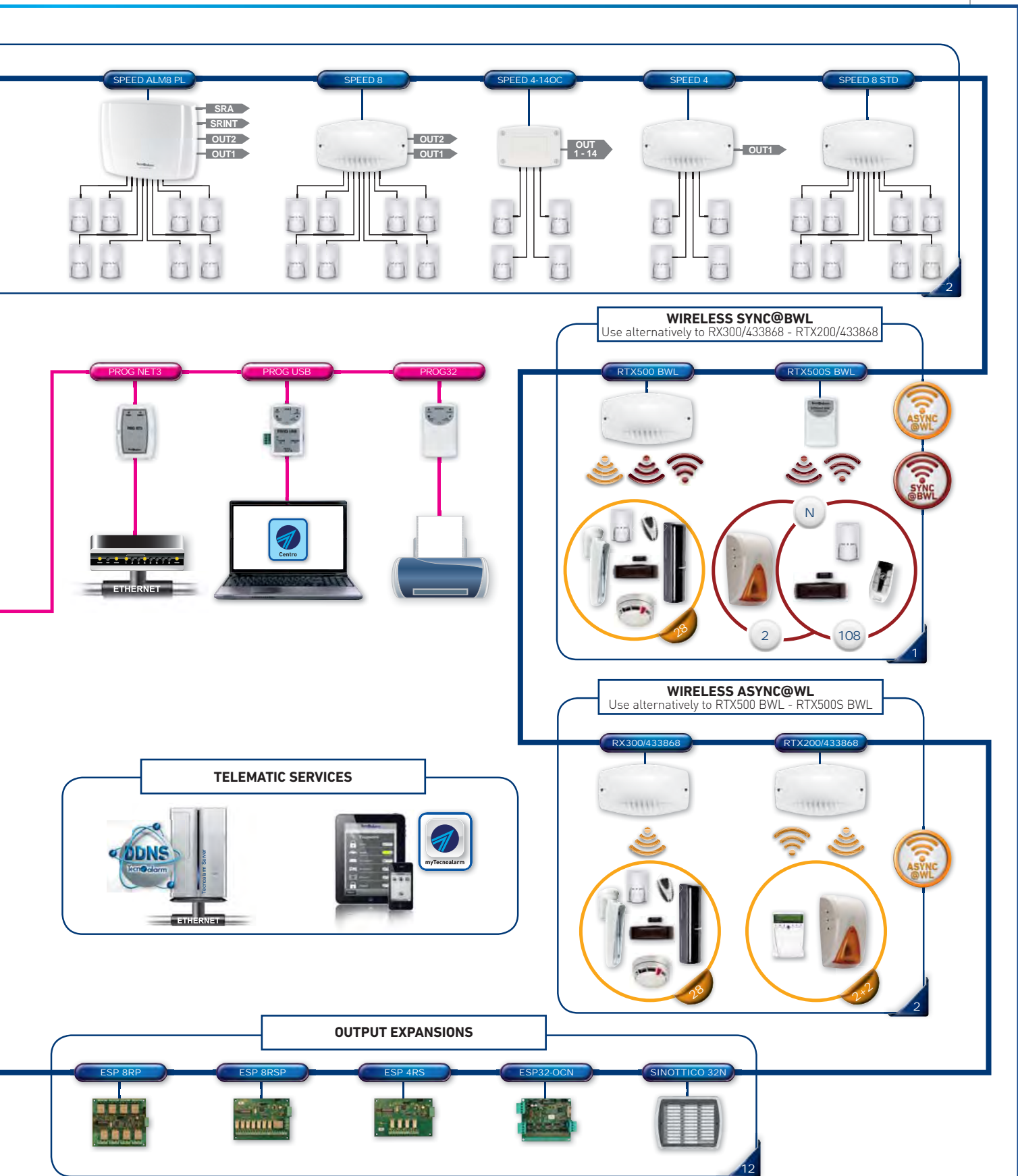
8



6


















The label indicates the number of connectable devices per type.



# TP8-28

## TP8-28

- Management of max. 28 hard-wired zones
- Management of max. 28 wireless zones (used alternatively to the hard-wired zones)
- 1 tamper input
- 2 zone inputs for conventional detectors
- 1 Sensor Bus port for 6 RSC® peripheral devices
- 1 RS485 port for conventional peripheral devices (optional)
- 1 Siren Bus port for 2 RSC® sirens
- 1 alarm output for indoor siren
- 2 programmable logic outputs
- On-board PSTN interface: 8 channels with 2 telephone numbers each
- Event notification in the formats: speech, SMS, Ring, DTMF, FSK and data
- Communication vectors: PSTN (on-board), GSM and TCP/IP (optional)
- Voice synthesis (optional)
- Management of multiuser systems with common zones
- 8 programs
- 8 remote controls
- 6 timers
- 4 access periods
- 6 cyclic timers
- Biennial or perpetual calendar
- Management of biometric finger print and RFID card readers
- 120 access codes
- 100 finger prints
- 100 transponders/RFID cards
- 80 wireless keys
- Digital control of the radio range and interferences
- Programmable coincidence function
- Event buffer with a capacity of 1,500 events
- 14.4V power supply output for battery recharge
- Battery test with automatic disconnection in case of failure
- 2A linear power supply
- 4 fasce orarie di accesso
- Certified to EN 50131

Standard equipment						
Expansions						
Control modes						
Automation						
Software options/Compatibility with monitoring software						
Ports						

## TP8-28 - Technical and functional specifications

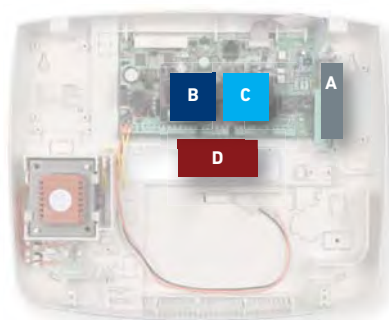
Zones	Total logic zones	28
	CPU hard-wired zones	2 conventional
		6 Sensor Bus
	Total hard-wired zones	28
	Total wireless zones	28
Outputs	CPU outputs	4 programmable
	Sirens	4
System features	RS485 serial bus	3
	Voice synthesis	Optional
	Event buffer capacity	1,500 events
Programs and access management	Programs	8
	Codes	120
	Finger prints	100
	Transponders/RFID	100
	Wireless keys	80
Automation	Timers	6
	Access periods	4
	Calendar	Biennial or perpetual
	Remote controls	8
	Cyclic timers	6
	TCS (test call with TCP/IP)	✓
Telephone section	Channels	8
	PSTN vector	On-board
	GSM vector (optional)	TECNOCELL-PRO PL
	IP vector (optional)	PROG NET3
	Transmittable events	129
	Telephone numbers/ IP addresses	2 per channel (max. 24 digits)
	Call event queue	32
	Communication protocols	160
Videolarm	Videolarm CCTV	✓
Serial expansions	Hard-wired input expansions	2
	Wireless expansions	2
	Consoles	8
	Auxiliary control units	8
	Output expansions	12
	GSM telephone communicator	1
	Bus sirens	2
	Wireless sirens	2
	Wireless consoles	2
Advanced programming	Actions	128
	Timers	64
	Counters	16
	Telephone index	6 numbers
	Reserved output expansions	4
Accessory management	App (iPhone + Android)	✓
	Printer management	✓
Electrical specifications	Operating voltage	230V AC +/- 10% 50Hz
	CPU board consumption	150mA @ 13.8V DC
	Power supply	2A @ 14.4V DC
	Battery (ABS casing)	12V/7Ah
	Battery (metal casing)	12V/18Ah
Physical specifications	Environmental class	II
	Dimensions ABS casing (L x H x D)	350 x 285 x 93mm
	Dimensions metal casing (L x H x D)	455 x 365 x 110mm
	Weight ABS casing (w/o battery)	2.7kg
	Weight metal casing (w/o battery)	5.6kg
	Operating temperature	-10°C...+55°C
	Humidity (w/o condensation)	93%
Conformity	Standards	EN 50131-1 EN 50131-3 EN 50136-2-1
	Security grade TP8-28 EN - TP8-28 EN MET	2
	Notified body	IMQ

## Internal expansions and interfaces

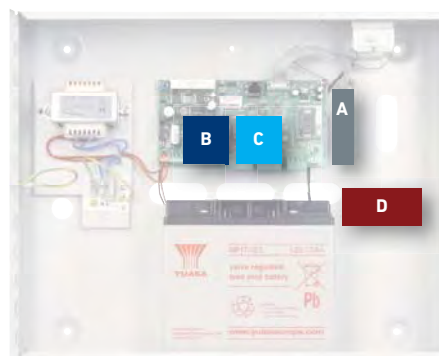
<b>ESP4-20</b>		 Approved for certified systems		
<b>Mounting position</b>	A	B	C	D
Expansion module with 4 parallel inputs for the connection of conventional detectors and Zone Bus detectors (only the first two inputs)				
Item no. F127TP420ESP				
<b>TP PROX</b>		 Approved for certified systems		
<b>Mounting position</b>	A	B	C	D
Transponder interface Up to 4 ATPROX readers can be connected in parallel.				
Item no. F127TPPROX				
<b>TP OUT60C</b>		 Approved for certified systems		
<b>Mounting position</b>	A	B	C	D
Expansion module with 6 open-collector outputs which can be freely associated to the logic outputs of the system				
Item no. F127TPOUT60C				
<b>TP OUTREL</b>		 Approved for certified systems		
<b>Mounting position</b>	A	B	C	D
Expansion module providing 1 relay output with potential-free contact The output is programmable and can be freely associated to the logic outputs of the system.				
Item no. F127TPOUTREL				
<b>TP BUSVOC</b>		 Approved for certified systems		
<b>Mounting position</b>	A	B	C	D
Expansion module with 1 RS485 port and voice channel (S wire) for the connection of serial expansions				
Item no. F127TPBUSVOC				
<b>TP BUS</b>		 Approved for certified systems		
<b>Mounting position</b>	A	B	C	D
Expansion module with 1 RS485 port for the connection of serial expansions				
Item no. F127TPBUS				
<b>PROG NET3</b>				
<b>Mounting position</b>	A	B	C	D
Ethernet-Interface The interface implements the IP vector and permits remote management with TCP/IP. Dimensions (L x H x D) 67 x 95 x 31mm - Gray color				
Item no. F130PROGNET3				



## MOUNTING POSITIONS



TP8-28



TP8-28 MET

MODELS		CERTIFIED EN 50131-1 EN 50131-3 EN 50136-2-1	SERIAL BUS CONNECTION	PSTN	IP	ADVANCED PROGRAMMING	POWER SUPPLY	ABS BOX	METAL BOX
Model	Item no.								
TP8-28	F101T28-UK		Optional	✓	Optional	Optional	2A	✓	
TP8-28 EN	F101T28EN-UK	Security grade 2	Optional	✓			2A	✓	
TP8-28 MET	F101T28M-UK		Optional	✓	Optional	Optional	2A		✓
TP8-28 MET	F101T28ENM/V-UK	Security grade 2	Optional	✓			2A		✓

OPTIONS		
Option	Device	
ADVANCED PROGRAMMING	F127T28/AV	Advanced programming software module

VECTORS			DDNS	APP	RDV®	SMS	REMOTE CONTROLS	Remote management	CMS SERVICE
Vector	Device	Class							
PSTN	ON-BOARD	ATE2			✓		✓	✓	✓
GSM-EXT*	TECNOCELL-PRO PL	ATE2			✓			✓	✓
IP*	PROG NET3	ATE2/4	✓	✓				✓	✓


























\* The vectors GSM-EXT and IP are optional and require the installation of external interfaces.

**Class** - The class defines the performance criteria of the alarm transmission equipment (ATE) for alarm notification. In compliance with the valid standards, the criteria of performance are divided into six classes from ATE1 to ATE6. The system's vectors are classified as ATE2 or ATE4 according to the communication protocols used. The class ATE4 requires the use of encrypted protocols. The IP vector has been certified class ATE4 on the basis of internal tests executed by Tecnoalarm.

# TP8-28 GSM

## TP8-28 GSM

- Management of max. 28 hard-wired zones
- Management of max. 28 wireless zones (used alternatively to the hard-wired zones)
- 1 tamper input
- 2 zone inputs for conventional detectors
- 1 Sensor Bus port for 6 RSC® peripheral devices
- 1 RS485 port for conventional peripheral devices
- 1 Siren Bus port for 2 RSC® sirens
- 1 alarm output for indoor siren
- 1 alarm output for outdoor siren
- 2 programmable logic outputs
- On-board GSM-GPRS interface: 8 channels with 2 telephone numbers each
- Event notification in the formats: speech, SMS, Ring, DTMF, FSK and data
- Communication vectors: GSM-GPRS (on-board), GSM and TCP/IP (optional)
- GSM network cell scanner function
- Jammer detector function
- Voice synthesis
- Management of multiuser systems with common zones
- 8 programs
- 8 remote controls
- 6 timers
- 4 access periods
- 6 cyclic timers
- Biennial or perpetual calendar
- Management of biometric finger print and RFID card readers
- 120 access codes
- 100 finger prints
- 100 transponders/RFID cards
- 80 wireless keys
- Digital control of the radio range and interferences
- Programmable coincidence function
- Event buffer with a capacity of 1,500 events
- 14.4V power supply output for battery recharge
- Battery test with automatic disconnection in case of failure
- 2A linear power supply
- Certified to EN 50131











Standard equipment							
Expansions							
Control modes							
Automation							
Software options/Compatibility with monitoring software							
Ports							

## TP8-28 GSM - Technical and functional specifications

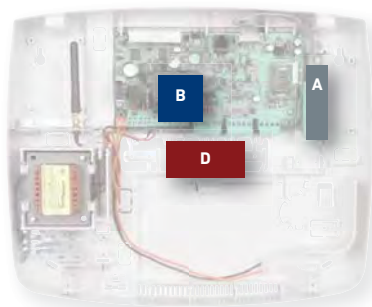
Zones	Total logic zones	28
	CPU hard-wired zones	2 conventional
		6 Sensor Bus
	Total hard-wired zones	28
	Total wireless zones	28
Outputs	CPU outputs	4 programmable
	Sirens	4
System features	RS485 serial bus	3
	Voice synthesis	✓
	Event buffer capacity	1,500 events
Programs access management	Programs	8
	Codes	120
	Finger prints	100
	Transponders/RFID	100
	Wireless keys	80
Automation	Timers	6
	Access periods	4
	Calendar	Biennial or perpetual
	Remote controls	8
	Cyclic timers	6
	TCS (test call with TCP/IP)	✓
Telephone section	Channels	8
	GSM-GPRS vector	On-board
	GSM vector (optional)	TECNOCELL-PRO PL
	IP vector (optional)	PROG NET3
	Transmittable events	129
	Telephone numbers/ IP addresses	2 per channel (max. 24 digits)
	Call event queue	32
	Communication protocols	67
Videoalarm	CCTV	✓
Serial expansions	Hard-wired input expansions	2
	Wireless expansions	2
	Consoles	8
	Auxiliary control units	8
	Output expansions	12
	GSM telephone communicator	1
	Bus sirens	2
	Wireless sirens	2
Advanced programming	Wireless consoles	2
	Actions	128
	Timers	64
	Counters	16
	Telephone index	6 numbers
Accessory management	Reserved output expansions	4
	App (iPhone + Android)	✓
Electrical specifications	Printer management	✓
	Operating voltage	230V AC +/- 10% 50Hz
	CPU board consumption	220mA @ 13.8V DC
	Power supply	2A @ 14.4V DC
	Battery (ABS casing)	12V/7Ah
	Battery (metal casing)	12V/18Ah
Physical specifications	Environmental class	II
	Dimensions ABS casing (L x H x D)	350 x 285 x 93mm
	Dimensions metal casing (L x H x D) (w/o antenna)	455 x 365 x 110mm
	Antenna height	90mm
	Weight ABS casing (w/o battery)	2.8kg
	Weight metal casing (w/o battery)	5.7kg
	Operating temperature	-10°C...+55°C
	Humidity (w/o condensation)	93%
Conformity	Standards	EN 50131-1 EN 50131-3 EN 50136-2-1
	Security grade TP8-28 GSM EN	2
	Security grade TP8-28 GSM EN MET	3
	Notified body	IMQ

# TP8-28 GSM

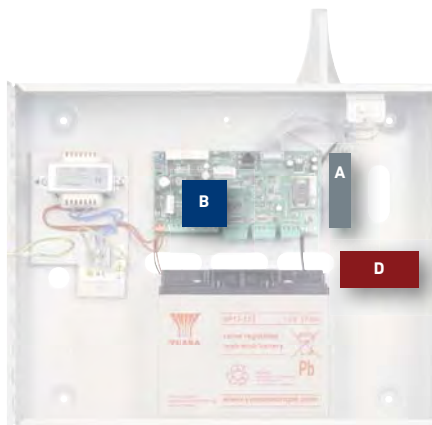
## Internal expansions and interfaces

<div>ESP4-20</div>	<div><div></div><div>Approved for certified systems</div></div>					<div><div>ZONE BUS DETECTORS</div></div>	<div><div>4</div><div>CONVENTIONAL DETECTORS</div></div>
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>Expansion module with 4 parallel inputs for the connection of conventional detectors and Zone Bus detectors (only the first two inputs)</div>	
<div>Item no. F127TP420ESP</div>							
<div>TP PROX</div>	<div><div></div><div>Approved for certified systems</div></div>					<div><div>KEY INTERFACE</div></div>	<div><div>4</div><div>READERS</div></div>
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>Transponder interface Up to 4 ATPROX readers can be connected in parallel.</div>	
<div>Item no. F127TPPROX</div>							
<div>TP OUT60C</div>	<div><div></div><div>Approved for certified systems</div></div>					<div><div>6</div><div>OUTPUTS</div></div>	
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>Expansion module with 6 open-collector outputs which can be freely associated to the logic outputs of the system</div>	
<div>Item no. F127TPOUT60C</div>							
<div>TP OUTREL</div>	<div><div></div><div>Approved for certified systems</div></div>					<div><div>1</div><div>OUTPUT</div></div>	
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>Expansion module providing 1 relay output with potential-free contact The output is programmable and can be freely associated to the logic outputs of the system.</div>	
<div>Item no. F127TPOUTREL</div>							
<div>PROG NET3</div>						<div><div></div><div>IP</div></div>	
<div></div>	<div>Mounting position</div>	<div>A</div>	<div>B</div>	<div>C</div>	<div>D</div>	<div>Ethernet-Interface The interface implements the IP vector and permits remote management with TCP/IP. Dimensions (L x H x D) 67 x 95 x 31mm - Gray color</div>	
<div>Item no. F130PROGNET3</div>							









## MOUNTING POSITIONS










TP8-28 GSM



TP8-28 GSM MET

MODELS									
Model	Item no.								
TP8-28 GSM	F101T28G/V-UK		✓	✓	Optional	Optional	2A	✓	
TP8-28 GSM EN	F101T28GEN/V-UK	Security grade 2	✓	✓			2A	✓	
TP8-28 GSM MET	F101T28G/VM-UK		✓	✓	Optional	Optional	2A		✓
TP8-28 GSM EN MET	F101T28GE/VM-UK	Security grade 3	✓	✓			2A		✓


OPTIONS		
Option	Item no.	
ADVANCED PROGRAMMING	F127T28/AV	Advanced programming software module

VECTORS									
Vector	Device	Class	DDNS	APP	RDV®	SMS	Remote controls	Remote management	Monitoring
GSM-GPRS	ON-BOARD	ATE2/4			✓	✓	✓	✓	✓
GSM-EXT*	TECNOCELL-PRO PL	ATE2			✓			✓	✓
IP*	PROG NET3	ATE2/4	✓	✓				✓	✓

**\* The vectors GSM-EXT and IP are optional and require the installation of external interfaces.**

**Class** - The class defines the performance criteria of the alarm transmission equipment (ATE) for alarm notification. In compliance with the valid standards, the criteria of performance are divided into six classes from ATE1 to ATE6. The system's vectors are classified as ATE2 or ATE4 according to the communication protocols used. The class ATE4 requires the use of encrypted protocols. The IP vector has been certified class ATE4 on the basis of internal tests executed by Tecnoalarm.

## TP8-28 GSM - Accessories

	<b>GSM ANTENNA EXTENSION</b>
	4m extension cord for the connection of the antenna to the GSM-GPRS module
	Item no. C126PROLANTENNA

# TP10-42

TP10-42 TP10-42 TP10-42 TP10-42 TP10-42 TP10-42 TP10-42 TP10-42 TP10-42



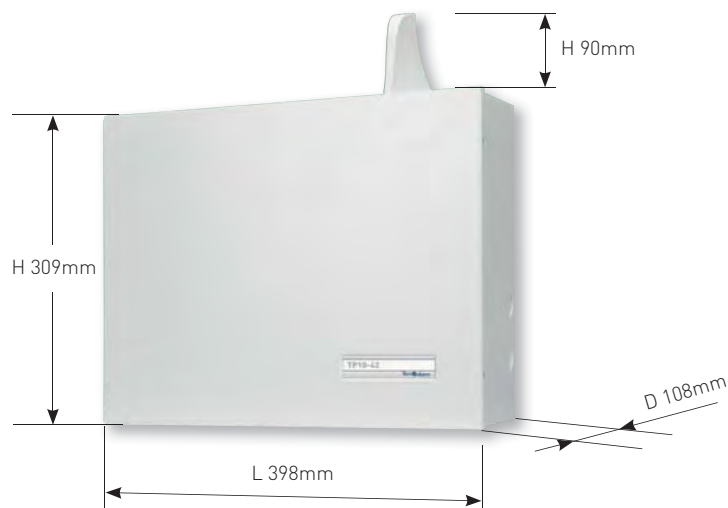
# TP10-42

Remotely manageable serial control panel  
with 10 to 42 hard-wired/wireless zones



# TP10-42





INPUTS	CPU	ESP4-20	SPEED 8 STD	SPEED 4	SPEED 4-140C	SPEED 8	SPEED ALM8 PL	SPEED 4 PLUS	SPEED 8 PLUS	SPEED ALM8 PLUS
CONVENTIONAL*	4	4	8	4	4	8	8	4	-	-
ZONE BUS	-		-							
SENSOR BUS	6	-	-	-	-	-	-	4	8	8

\*The following contact types can be programmed: NC (normally closed), NO (normally open), BIL (end-of-line resistor), B24 (double end-of-line resistor). The following filters can be programmed: time, pulse count or inertia.

## Videalarm

	Cameras	Recording	Viewing		Cameras	Recording	Viewing
UTS V4	4	-	1/4	UTS E	24	8	1/4
UTS V8	8	-	1/4				

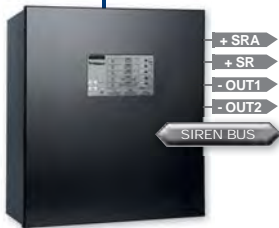
Technical evaluation index	Serial ports			Communication vectors				Videoalarm/Telematic Services			
	SERIAL BUS	SENSOR BUS	SIREN BUS	PSTN	GSM-GPRS	IP	GSM-EXT	Videalarm IP	Videalarm CCTV	DDNS	myTecnosalarm
TP4-20				ATE2		ATE2	ATE2				
		C			C				C		
TP4-20 GSM				ATE2	ATE2						
		C			C				C		
TP8-28				ATE2		ATE4	ATE2				
		A			B				B		
TP8-28 GSM				ATE4	ATE4	ATE2					
		A			B				B		
<b>TP10-42</b>				ATE2	ATE4	ATE4	ATE2				
		A			A				A		
TP8-88				ATE2	ATE4	ATE4	ATE2				
		A			A				A		
TP20-440				ATE2	ATE4	ATE4	ATE2				
		A			A				A		

ATE (Alarm Transmission Equipment) - A: excellent - B: good - C: satisfactory

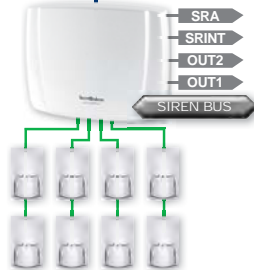
# TP10-42

## POWER SUPPLIES INPUT EXPANSIONS

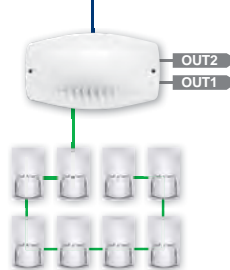
### TAPS-8 BUS



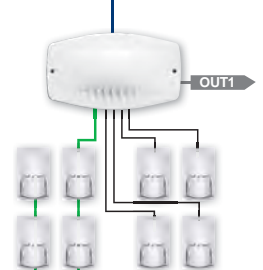
### SPEED ALM8 PLUS



### SPEED 8 PLUS



### SPEED 4 PLUS



## CONSOLES

### LCDPROX1



### LCD300/S



### UTS 4.3 PROX



### UTS V8



### UTS V4



### UTS C



8

## BUS SIRENS

### SAEL 2010 BUS



### SIRTEC BUS



4

## TELEPHONE COMMUNICATORS

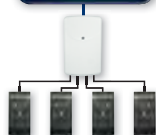
### TECNOCELL-PRO PL



1

## AUXILIARY CONTROL UNITS

### TP SKN



### PROX K6N



### DIGITEX



### APR CARD



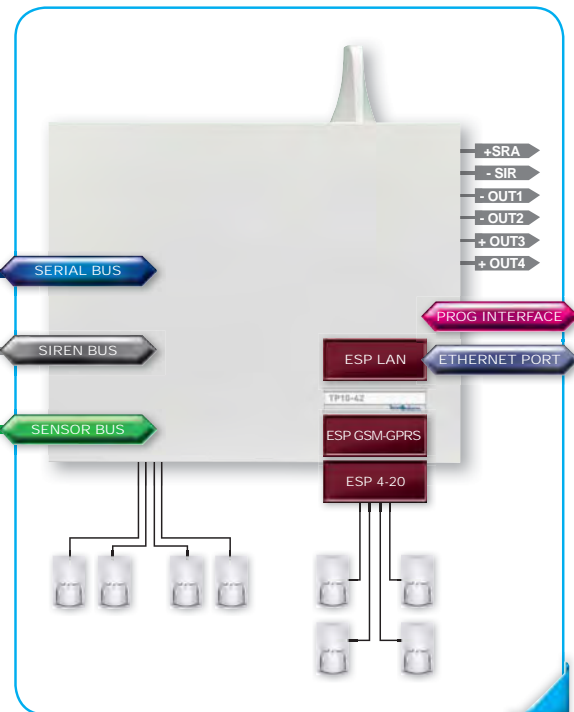
### APR FINGER



### APR FINGER-CARD



8

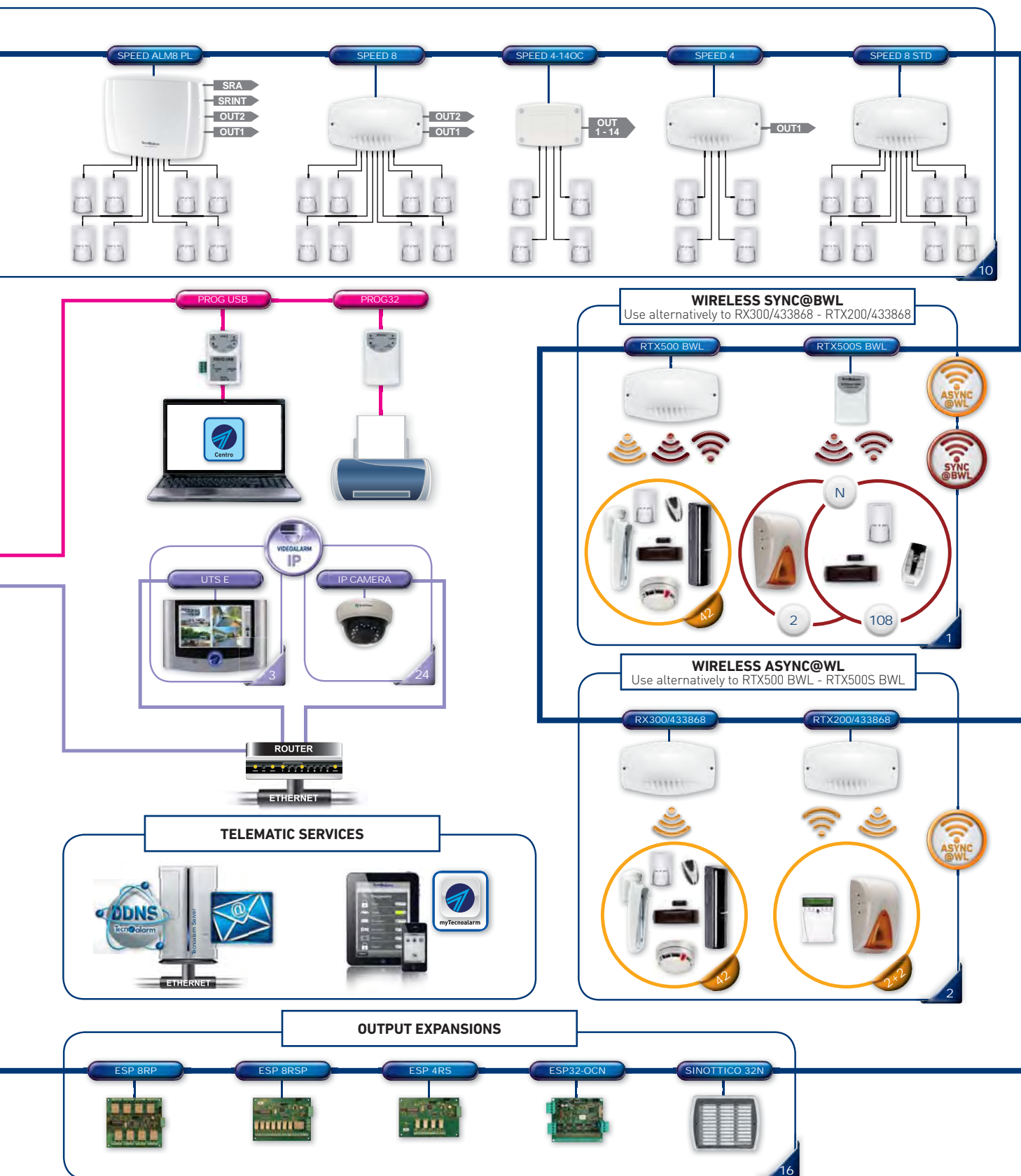


6



The label indicates the number of connectable devices per type.




























# System configuration



# TP10-42

## TP10-42

- Management of max. 42 hard-wired zones
- Management of max. 42 wireless zones (used alternatively to the hard-wired zones)
- 1 tamper input
- 4 zone inputs for conventional detectors
- 1 Sensor Bus port for 6 RSC® peripheral devices
- 1 RS485 port for conventional peripheral devices
- 1 Siren Bus port for 4 RSC® sirens
- 1 alarm output for indoor siren
- 1 alarm output for outdoor siren
- 16 programmable logic outputs
- On-board PSTN interface:  
8 channels with 2 telephone numbers each
- Event notification in the formats:  
speech, SMS, Ring, DTMF, FSK and data
- Communication vectors:  
PSTN (on-board), GSM-GPRS, GSM and TCP/IP (optional)
- GSM network cell scanner function
- Jammer detector function
- Voice synthesis
- Management of multiuser systems with common zones
- Management of the telematic services DDNS  
Tecnoalarm, SNTP and Mail Server Tecnoalarm
- 8 programs
- 8 remote controls
- 8 timers
- 6 access periods
- 8 cyclic timers
- Quadrennial or perpetual calendar
- Management of biometric finger print  
and RFID card readers
- 122 access codes
- 100 finger prints
- 100 transponders/RFID cards
- 80 wireless keys
- Digital control of the radio range and interferences
- Programmable coincidence function
- Event buffer with a capacity of 7,600 events
- 14.4V power supply output for battery recharge
- Battery test with automatic disconnection  
in case of failure
- 3A linear power supply

Standard equipment							
Expansions							
Control modes							
Automation							
Software options/Compatibility with monitoring software							
Ports							













## TP10-42 - Technical and functional specifications

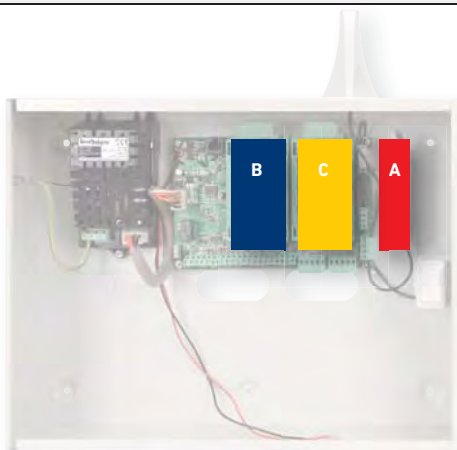
Zones	Total logic zones	42
	CPU hard-wired zones	4 conventional
		6 Sensor Bus
	Total hard-wired zones	42
	Total wireless zones	42
Outputs	CPU outputs	6 programmable
	Sirens	8
System features	RS485 serial bus	3
	Voice synthesis	✓
	Event buffer capacity	7,600 events
Programs and access management	Programs	8
	Codes	122
	Finger prints	100
	Transponders/RFID	100
	Wireless keys	80
Automation	Timers	8
	Access periods	6
	Calendar	Quadrennial or perpetual
	Remote controls	8
	Cyclic timers	8
	TCS (test call with TCP/IP)	✓
Telephone section	Channels	8
	PSTN vector	On-board
	GSM-GPRS vector (optional)	ESP GSM-GPRS
	GSM vector (optional)	TECNOCELL-PRO PL
	IP vector (optional)	ESP LAN
	Transmittable events	157
	Telephone numbers/IP addresses	2 per channel (max. 24 digits)
	Call event queue	32
	Communication protocols	216
Telematic services	DDNS Tecnoalarm	✓
	Mail Server Tecnoalarm	✓
	SNTP	✓
Videoalarm	CCTV	✓
	IP	✓
Serial expansions	Hard-wired input expansions	10
	Wireless expansions	2
	Consoles	8
	Auxiliary control units	8
	Output expansions	16
	GSM telephone communicator	1
	Bus sirens	4
	Wireless sirens	2
	Wireless consoles	2 (ASYN@WL)
Advanced programming	Actions	1,024
	Timers	512
	Counters	128
	Telephone index	48 numbers
	Reserved output expansions	4
Accessory management	App (iPhone + Android)	✓
	Printer management	✓
Electrical specifications	Operating voltage	230V AC +/- 10% 50Hz
	CPU board consumption	150mA @ 13.8V DC
	Power supply	3A @ 14.4V DC
	Battery	12V/12Ah
Physical specifications	Environmental class	II
	Casing	Metallico
	Dimensions (L x H x D) (w/o antenna)	398 x 309 x 108mm
	Antenna height	90mm
	Weight (w/o battery)	4.5kg
	Operating temperature	-10°C...+55°C
	Humidity (w/o condensation)	93%
Conformity	Directive	R&TTE 1999/05/EC







# TP10-42

## Internal expansions and interfaces









<b>ESP4-20</b>	 Approved for certified systems	 			
	<b>Mounting position</b> <table border="1"> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table> <p>Expansion module with 4 parallel inputs for the connection of conventional detectors and Zone Bus detectors (only the first two inputs).</p> <p><b>Item no. F127TP420ESP</b></p>	A	B	C	
A	B	C			
<b>ESP LAN</b>	 Approved for certified systems				
	<b>Mounting position</b> <table border="1"> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table> <p>Ethernet-Interface The interface implements the IP vector and permits remote management with TCP/IP.</p> <p><b>Item no. F127ESPLAN</b></p>	A	B	C	
A	B	C			
<b>ESP GSM-GPRS</b>	 Approved for certified systems				
	<b>Mounting position</b> <table border="1"> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table> <p>Interface for the connection of the control panel with the GSM or GSM-GPRS network The interface allows to use the GSM or GSM-GPRS network as communication vector.</p> <p><b>Item no. F127ESPGSMGPRS</b></p>	A	B	C	
A	B	C			

### MOUNTING POSITIONS



MODELS								
Model	Item no.							
TP10-42	F101T42-UK		✓	Optional	Optional	Optional	3A	✓


OPTIONS		
Option	Item no.	
ADVANCED PROGRAMMING	F127T42/AV	Advanced programming software module

VECTORS										
Vector	Device	Class	DDNS	MAIL	APP	RDV®	SMS	Remote controls	Remote management	Monitoring
PSTN	ON-BOARD	ATE2				✓		✓	✓	✓
GSM-GPRS*	ESP GSM-GPRS	ATE2/4				✓	✓	✓	✓	✓
GSM-EXT*	TECNOCELL PRO PL	ATE2				✓			✓	✓
IP*	ESP LAN	ATE2/4	✓	✓	✓				✓	✓

\* The vectors GSM-GPRS, GSM-EXT and IP are optional and require the installation of internal and external interfaces.

**Class** - The class defines the performance criteria of the alarm transmission equipment (ATE) for alarm notification. In compliance with the valid standards, the criteria of performance are divided into six classes from ATE1 to ATE6. The system's vectors are classified as ATE2 or ATE4 according to the communication protocols used. The class ATE4 requires the use of encrypted protocols. The IP vector has been certified class ATE4 on the basis of internal tests executed by Tecnoalarm.

## TP10-42 - Accessories

	<b>GSM ANTENNA EXTENSION</b>
	4m extension cord for the connection of the antenna to the GSM-GPRS module
	Item no. C126PROLANTENNA



# TP8-88

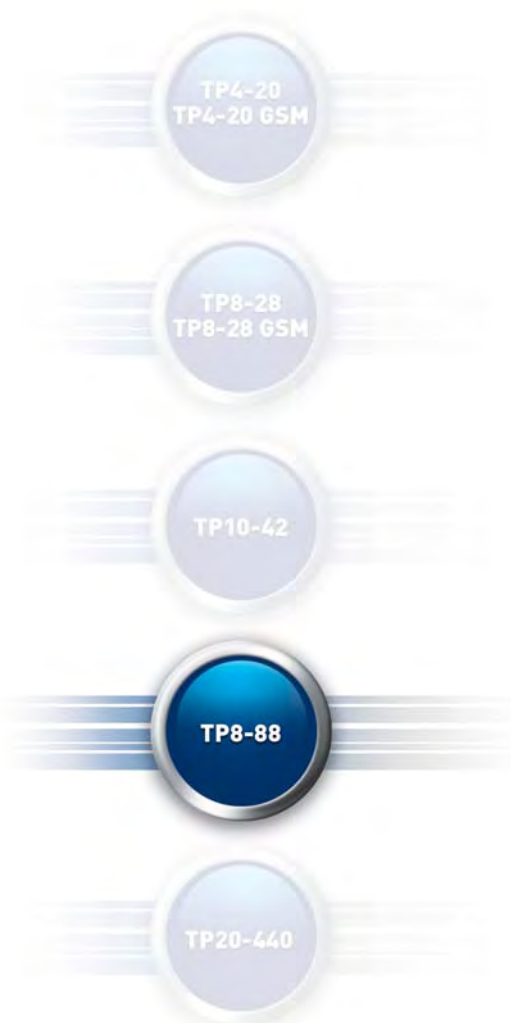
TP8-88 TP8-88 TP8-88 TP8-88 TP8-88 TP8-88 TP8-88 TP8-88 TP8-88 TP8-88

# TP8-88

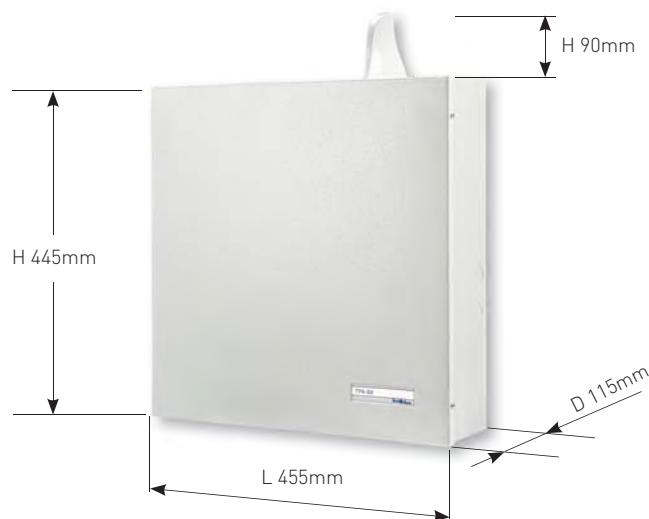
Remotely manageable serial control panel  
with 8 to 88 hard-wired/wireless zones



# TP8-88







INPUTS	CPU	ESP 4IN	SPEED 8 STD	SPEED 4	SPEED 4-140C	SPEED 8	SPEED ALM8 PL	SPEED 4 PLUS	SPEED 8 PLUS	SPEED ALM8 PLUS
CONVENTIONAL*	8	4	8	4	4	8	8	4	-	-
ZONE BUS	-		-							
SENSOR BUS	8	-	-	-	-	-	-	4	8	8

\*The following contact types can be programmed: NC (normally closed), NO (normally open), BIL (end-of-line resistor), B24 (double end-of-line resistor). The following filters can be programmed: time, pulse count or inertia.

## Videalarm

		Cameras	Recording	Viewing			Cameras	Recording	Viewing
	UTS V4	4	-	1/4		UTS E	24	8	1/4
	UTS V8	8	-	1/4					

Technical evaluation index	Serial ports			Communication vectors				Videoalarm/Telematic Services			
TP4-20				ATE2		ATE2	ATE2				
	C			C				C			
TP4-20 GSM				ATE2	ATE2						
	C			C				C			
TP8-28				ATE2		ATE4	ATE2				
	A			B				B			
TP8-28 GSM				ATE4	ATE4	ATE2					
	A			B				B			
TP10-42				ATE2	ATE4	ATE4	ATE2				
	A			A				A			
<b>TP8-88</b>				ATE2	ATE4	ATE4	ATE2				
	<b>A</b>			<b>A</b>				<b>A</b>			
TP20-440				ATE2	ATE4	ATE4	ATE2				
	A			A				A			

ATE (Alarm Transmission Equipment) - A: excellent - B: good - C: satisfactory

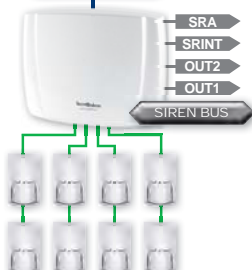
# TP8-88

## POWER SUPPLIES INPUT EXPANSIONS

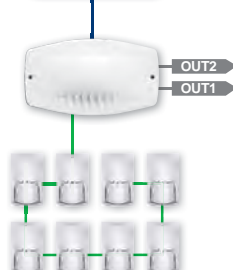
TAPS-8 BUS



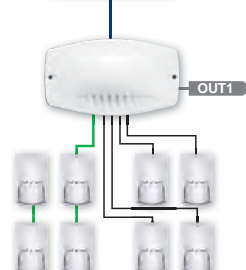
SPEED ALM8 PLUS



SPEED 8 PLUS



SPEED 4 PLUS



## CONSOLES

LCDPROX1



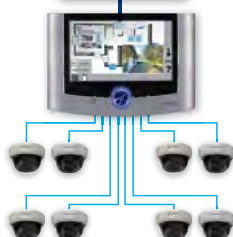
LCD300/S



UTS 4.3 PROX



UTS V8



UTS V4



UTS C



15

## BUS SIRENS

SAEL 2010 BUS



SIRTEC BUS



8

## TELEPHONE COMMUNICATORS

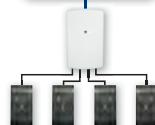
TECNOCELL-PRO PL



1

## AUXILIARY CONTROL UNITS

TP SKN



PROX K6N



DIGITEX



APR CARD



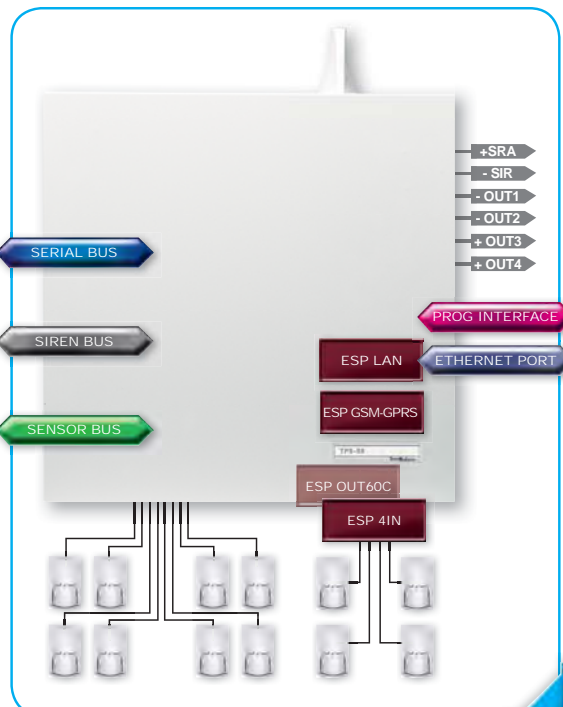
APR FINGER



APR FINGER-CARD



15

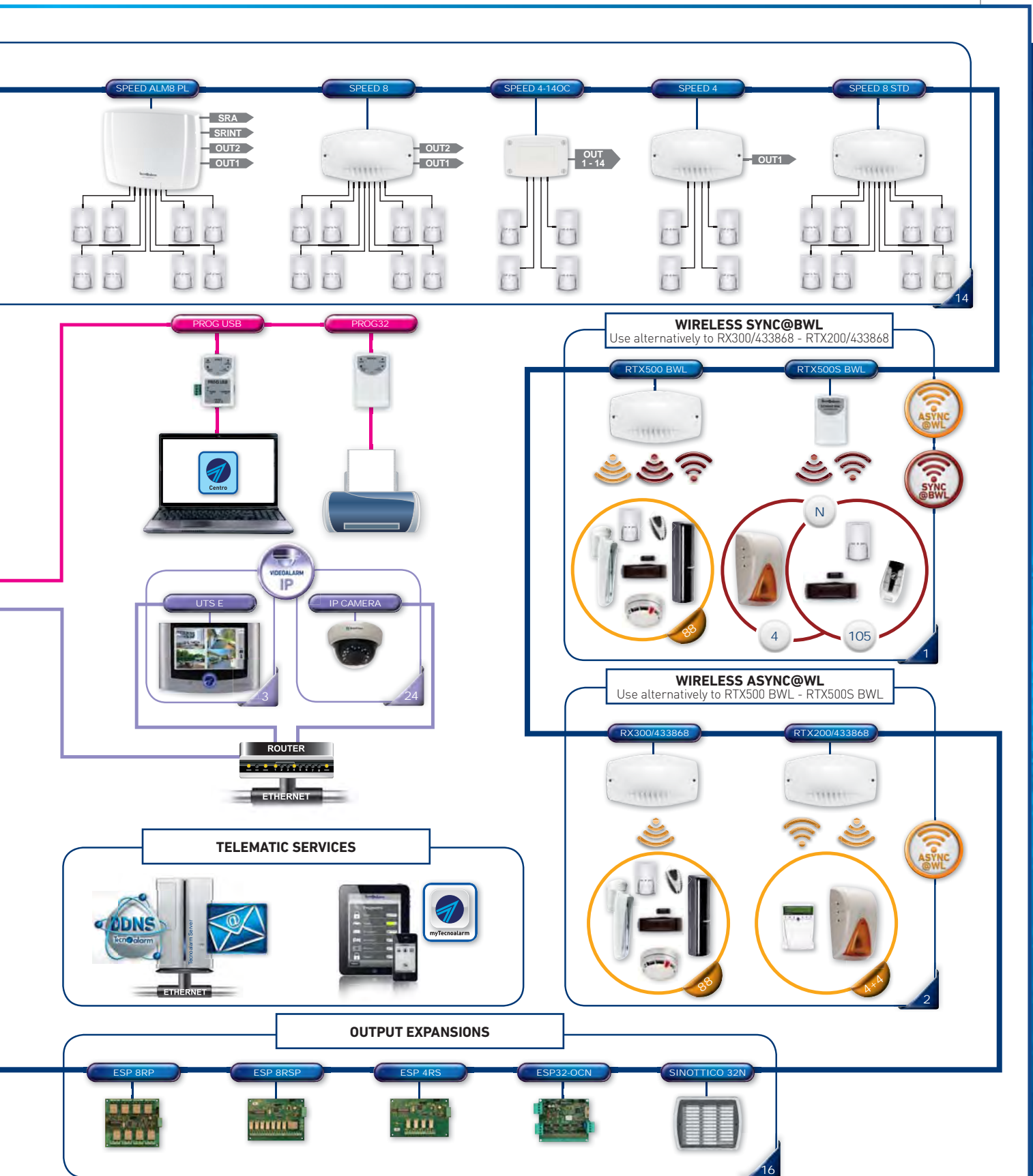


8



The label indicates the number of connectable devices per type.



# System configuration



# TP8-88

## TP8-88

- Management of max. 88 hard-wired zones
- Management of max. 88 wireless zones (used alternatively to the hard-wired zones)
- 1 tamper input
- 8 zone inputs for conventional detectors
- 1 Sensor Bus port for 8 RSC® peripheral devices
- 1 RS485 port for conventional peripheral devices
- 1 Siren Bus port for 8 RSC® sirens
- 1 alarm output for indoor siren
- 1 alarm output for outdoor siren
- 6 programmable logic outputs
- On-board PSTN interface: 8 channels with 2 telephone numbers each
- Event notification in the formats: speech, SMS, Ring, DTMF, FSK and data
- Communication vectors: PSTN (on-board), GSM-GPRS, GSM and TCP/IP (optional)
- GSM network cell scanner function
- Jammer detector function
- Voice synthesis
- Management of multiuser systems with common zones
- Management of the telematic services DDNS Tecnoalarm, SNTP and Mail Server Tecnoalarm
- 8 programs
- 8 remote controls
- 16 timers
- 8 access periods
- 8 cyclic timers
- Quadrennial or perpetual calendar
- Management of biometric finger print and RFID card readers
- 202 access codes
- 100 finger prints
- 120 transponders/RFID cards
- 100 wireless keys
- Digital control of the radio range and interferences
- Programmable coincidence function
- Event buffer with a capacity of 7,600 events
- 14.4V power supply output for battery recharge
- Battery test with automatic disconnection in case of failure
- 6A linear power supply
- Certified to EN 50131














Standard equipment							
Expansions							
Control modes							
Automation							
Software options/Compatibility with monitoring software							
Ports							

## TP8-88 - Technical and functional specifications

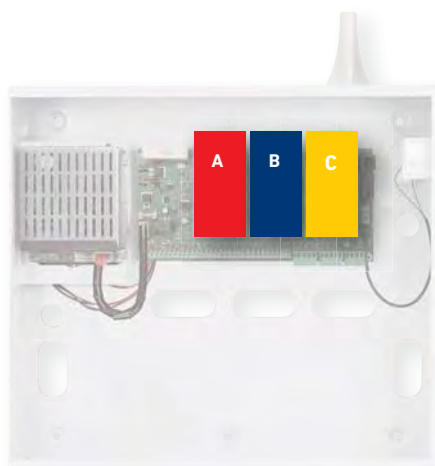
Zones	Total logic zones	88
	CPU hard-wired zones	8 conventional
		8 Sensor Bus
	Total hard-wired zones	88
Outputs	CPU outputs	6 programmable
	Sirens	8
System features	RS485 serial bus	3
	Voice synthesis	✓
	Event buffer capacity	7,600
Programs and access management	Programs	8
	Codes	202
	Finger prints	100
	Transponders/RFID	120
	Wireless keys	100
Automation	Timers	16
	Access periods	8
	Calendar	Quadrennial or perpetual
	Remote controls	8
	Cyclic timers	8
	TCS (test call with TCP/IP)	✓
Telephone section	Channels	8
	PSTN vector	On-board
	GSM-GPRS vector (optional)	ESP GSM-GPRS
	GSM vector (optional)	TECNOCELL-PRO PL
	IP vector (optional)	ESP LAN
	Transmittable events	249
	Telephone numbers/ IP addresses	2 per channel (max. 24 digits)
	Call event queue	32
	Communication protocols	216
Telematic services	DDNS Tecnoalarm	✓
	Mail Server Tecnoalarm	✓
	SNTP	✓
Videoalarm	CCTV	✓
	IP	✓
Serial expansions	Hard-wired input expansions	14
	Wireless expansions	2
	Consoles	15
	Auxiliary control units	15
	Output expansions	16
	GSM telephone communicator	1
	Bus sirens	8
	Wireless sirens	4
	Wireless consoles	4 (ASYN@WL)
Advanced programming	Actions	1,024
	Timers	512
	Counters	128
	Telephone index	48 numbers
	Reserved output expansions	4
Accessory management	App (iPhone + Android)	✓
	Tecno out protocol	Optional
	Printer management	✓
Electrical specifications	Operating voltage	230V AC +/- 10% 50Hz
	CPU board consumption	150mA @ 13.8V DC
	Power supply	6A @ 14.4V DC
	Battery	2x 12V/18Ah
Physical specifications	Environmental class	II
	Casing	Metal
	Dimensions (L x H x D) (w/o antenna)	455 x 445 x 115mm
	Antenna height	90mm
	Weight (w/o battery)	7kg
	Operating temperature	-10°C...+55°C
	Humidity (w/o condensation)	93%
Conformity	Standards	EN 50131-1 EN 50131-3 EN 50136-2-1
	Security grade	3
	Notified body	IMQ

# TP8-88









## Internal expansions and interfaces

<b>ESP 4IN</b>	 Approved for certified systems	 			
	<b>Mounting position</b> <table> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table> <p>Expansion module with 4 parallel inputs for the connection of conventional detectors and Zone Bus detectors</p> <p><b>Item no. F127ESP4IN</b></p>	A	B	C	
A	B	C			
<b>ESP OUT60C</b>	 Approved for certified systems				
	<b>Mounting position</b> <table> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table> <p>Expansion module with 6 open-collector outputs which can be freely associated to the logic outputs of the system</p> <p><b>Item no. F127ESP0UT60C</b></p>	A	B	C	
A	B	C			
<b>ESP LAN</b>	 Approved for certified systems				
	<b>Mounting position</b> <table> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table> <p>Ethernet-Interface The interface implements the IP vector and permits remote management with TCP/IP.</p> <p><b>Item no. F127ESPLAN</b></p>	A	B	C	
A	B	C			
<b>ESP GSM-GPRS</b>	 Approved for certified systems				
	<b>Mounting position</b> <table> <tr> <td>A</td> <td>B</td> <td>C</td> </tr> </table> <p>Interface for the connection of the control panel with the GSM or GSM-GPRS network The interface allows to use the GSM or GSM-GPRS network as communication vector.</p> <p><b>Item no. F127ESPGSMGPRS</b></p>	A	B	C	
A	B	C			









### MOUNTING POSITIONS





MODELS									
Model	Item no.								
TP8-88	F101T88-UK		✓	Optional	Optional	Optional	Optional	6A	✓
TP8-88 EN	F101T88EN-UK	Security grade 3	✓	Optional	Optional			6A	✓


OPTIONS		
Option	Item no.	
ADVANCED PROGRAMMING	F127T88/AV	Advanced programming software module
TECNO OUT	F127T88/TECNO	Software module for management of the Tecno out protocol

VECTORS										
Vector	Device	Class	DDNS	MAIL	APP	RDV®	SMS	Remote controls	Remote management	Monitoring
PSTN	ON-BOARD	ATE2				✓		✓	✓	✓
GSM-GPRS*	ESP GSM-GPRS	ATE2/4				✓	✓	✓	✓	✓
GSM-EXT*	TECNOCELL-PRO PL	ATE2				✓			✓	✓
IP*	ESP LAN	ATE2/4	✓	✓	✓				✓	✓

**\* The vectors GSM-GPRS, GSM-EXT and IP are optional and require the installation of internal and external interfaces.**

**Class** - The class defines the performance criteria of the alarm transmission equipment (ATE) for alarm notification. In compliance with the valid standards, the criteria of performance are divided into six classes from ATE1 to ATE6. The system's vectors are classified as ATE2 or ATE4 according to the communication protocols used. The class ATE4 requires the use of encrypted protocols. The IP vector has been certified class ATE4 on the basis of internal tests executed by Tecnoalarm.

## TP8-88 - Accessories

	<b>GSM ANTENNA EXTENSION</b>
	4m extension cord for the connection of the antenna to the GSM-GPRS module
	Item no. C126PROLANTENNA



# TP20-440

TP20-440 TP20-440 TP20-440 TP20-440 TP20-440 TP20-440 TP20-440 TP20-440

# TP20-440

Remotely manageable serial control panel  
with 20 to 440 hard-wired/wireless zones



# TP20-440





INPUTS	CPU	ESP 4IN	SPEED 8 STD	SPEED 4	SPEED 4-140C	SPEED 8	SPEED ALM8 PL	SPEED 4 PLUS	SPEED 8 PLUS	SPEED ALM8 PLUS
CONVENTIONAL*	12	4	8	4	4	8	8	4	No	No
ZONE BUS	No		No							
SENSOR BUS	8	No	No	No	No	No	No	4	8	8

\*The following contact types can be programmed: NC (normally closed), NO (normally open), BIL (end-of-line resistor), B24 (double end-of-line resistor). The following filters can be programmed: time, pulse count or inertia.

## Videalarm

		Cameras	Recording	Viewing			Cameras	Recording	Viewing
	UTS V4	4	-	1/4		UTS E	24	8	1/4
	UTS V8	8	-	1/4					

Technical evaluation index	Serial ports			Communication vectors				Videoalarm/Telematic Services			
TP4-20				ATE2		ATE2	ATE2				
	C			C				C			
TP4-20 GSM				ATE2	ATE2						
	C			C				C			
TP8-28				ATE2		ATE4	ATE2				
	A			B				B			
TP8-28 GSM				ATE4	ATE4	ATE2					
	A			B				B			
TP10-42				ATE2	ATE4	ATE4	ATE2				
	A			A				A			
TP8-88				ATE2	ATE4	ATE4	ATE2				
	A			A				A			
<b>TP20-440</b>				ATE2	ATE4	ATE4	ATE2				
	<b>A</b>			<b>A</b>				<b>A</b>			

ATE (Alarm Transmission Equipment) - A: excellent - B: good - C: satisfactory

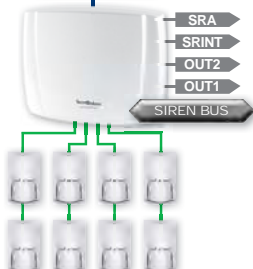
# TP20-440

## POWER SUPPLIES INPUT EXPANSIONS

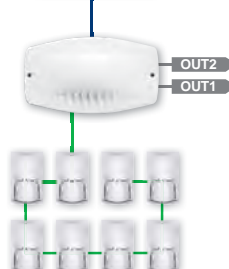
TAPS-8 BUS



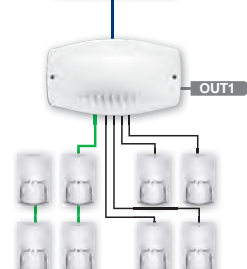
SPEED ALM8 PLUS



SPEED 8 PLUS



SPEED 4 PLUS



## CONSOLES

LCDPROX1



LCD300/S



UTS 4.3 PROX



UTS V8



UTS V4



UTS C



32

## BUS SIRENS

SAEL 2010 BUS



SIRTEC BUS



24

## TELEPHONE COMMUNICATORS

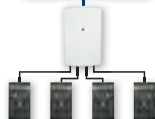
TECNOCELL-PRO PL



1

## AUXILIARY CONTROL UNITS

TP SKN



PROX K6N



DIGITEX



APR CARD



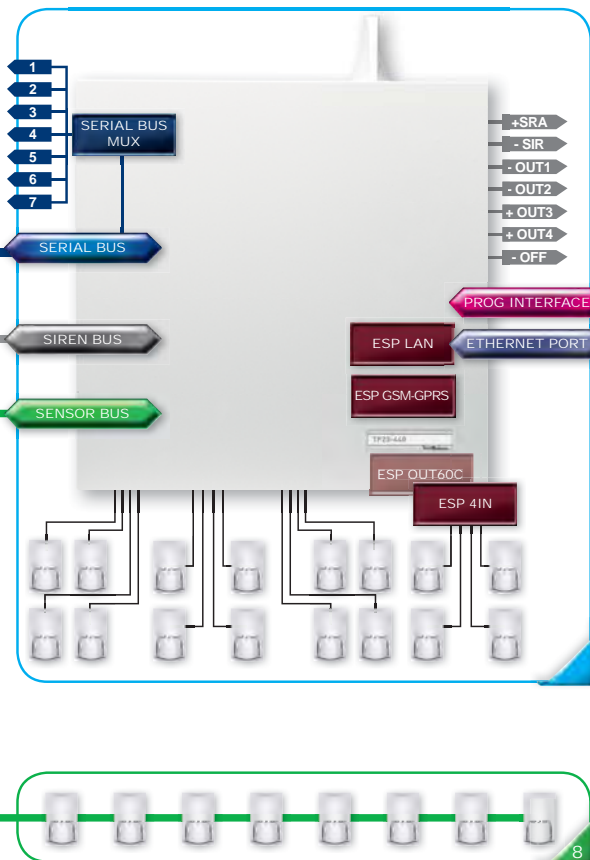
APR FINGER



APR FINGER-CARD



32

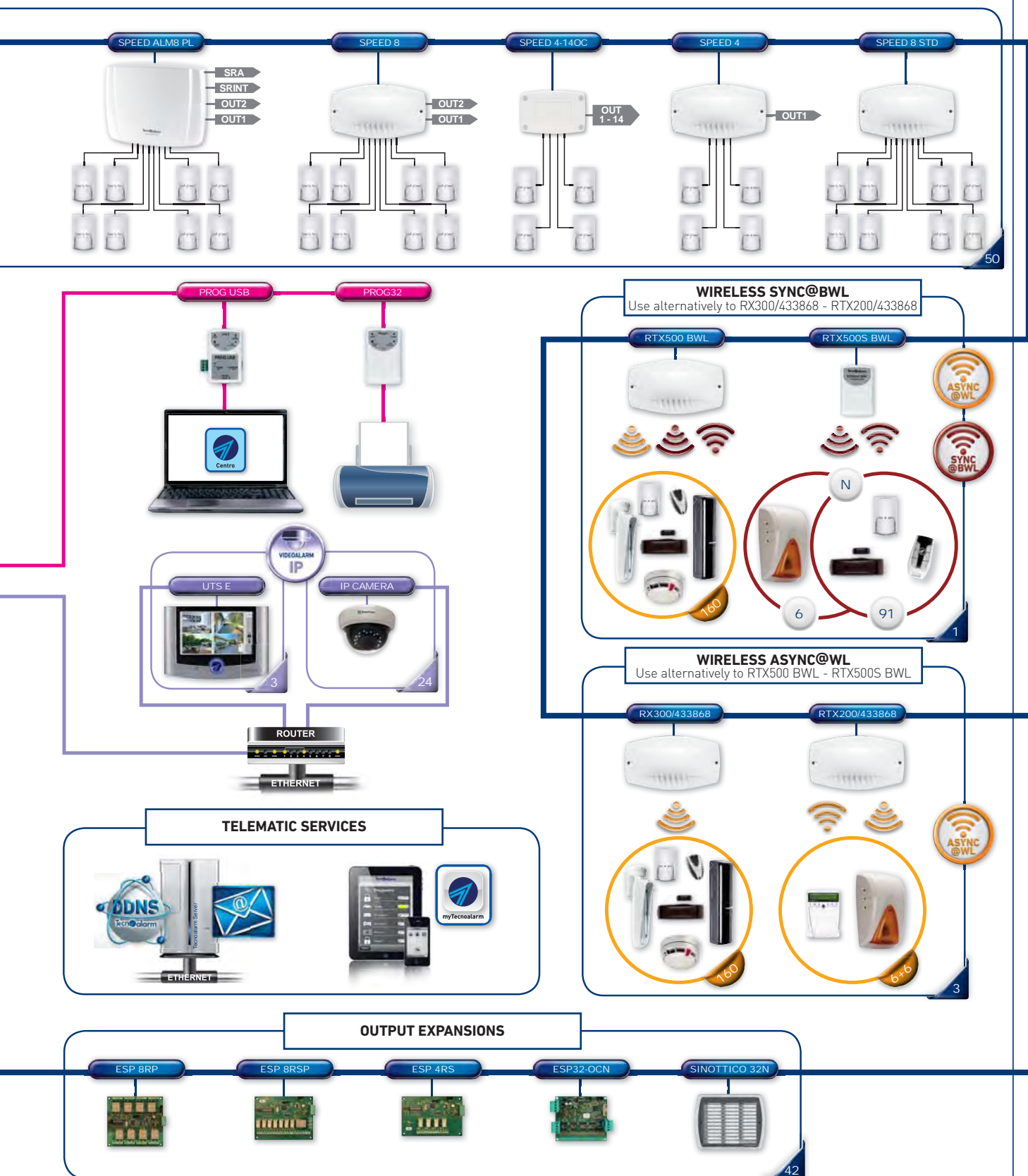


8

The label indicates the number of connectable devices per type.








# System configuration



# TP20-440

## TP20-440

- Management of max. 424 hard-wired zones
- Management of max. 160 wireless zones
- 1 tamper input
- 12 zone inputs for conventional detectors
- 1 Sensor Bus port for 8 RSC® peripheral devices
- 1 RS485 port for conventional peripheral devices
- 1 Siren Bus port for 32 RSC® sirens
- 1 alarm output for indoor siren
- 1 alarm output for outdoor siren
- 6 programmable logic outputs
- 1 open-collector output OFF-
- 1 module Serial Bus Mux with 7 terminals for branching of the serial bus
- On-board PSTN interface:  
8 channels with 2 telephone numbers each
- Event notification in the formats:  
speech, SMS, Ring, DTMF, FSK and data
- Communication vectors:  
PSTN (on-board), GSM-GPRS, GSM and TCP/IP (optional)
- GSM network cell scanner function
- Jammer detector function
- Voice synthesis
- Management of multiuser systems with common zones
- Management of the telematic services DDNS Tecnoalarm, SNTP and Mail Server Tecnoalarm
- 32 programs
- 32 remote controls
- 64 timers
- 16 access periods
- 10 cyclic timers
- Quadrennial or perpetual calendar
- Management of biometric finger print and RFID card readers
- 1,000 access codes
- 100 finger prints
- 1,000 transponders/RFID cards
- 250 wireless keys
- Digital control of the radio range and interferences
- Programmable coincidence function
- Event buffer with a capacity of 32,000 events
- 14.4V power supply output for battery recharge
- Battery test with automatic disconnection in case of failure
- 8A linear power supply














Standard equipment							
Expansions							
Control modes							
Automation							
Software options/Compatibility with monitoring software							
Ports							

## TP20-440 - Technical and functional specifications

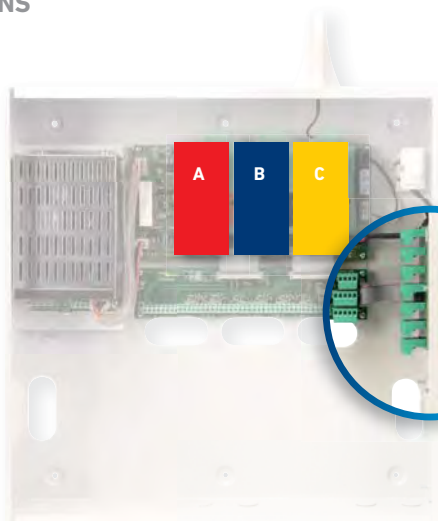
Zones	Total logic zones	440	Videoalarm	CCTV	✓
	CPU hard-wired zones	12 conventional 8 Sensor Bus		IP	✓
	Total hard-wired zones	424	Serial expansions	Hard-wired input expansions	50
	Total wireless zones	160		Wireless expansions	3
Outputs	CPU outputs	6 programmable		Consoles	32
	Sirens	32		Auxiliary control units	32
System features	RS485 serial bus	3		Output expansions	42
	Voice synthesis	✓		GSM telephone communicator	1
	Event buffer capacity	32,000 events		Bus sirens	24
Programs and access management	Programs	32		Wireless sirens	6
	Codes	1,000		Wireless consoles	6 (ASYN@WL)
	Finger prints	100	Advanced programming	Actions	2,048
	Transponders/RFID	1,000		Timers	512
	Wireless keys	250		Counters	256
Automation	Timers	64		Telephone index	48 numbers
	Access periods	16		Reserved output expansions	16
	Calendar	Quadrennial or perpetual	Accessory management	App (iPhone + Android)	✓
	Remote controls	32		Tecno out protocol	Optional
	Cyclic timers	10		Printer management	✓
	TCS (test call with TCP/IP)	✓	Electrical specifications	Operating voltage	230V AC +/- 10% 50Hz
Telephone section	Channels	8		CPU board consumption	150mA @ 13.8V DC
	PSTN vector	On-board		Power supply	8A @ 14.4VDC
	GSM-GPRS vector (optional)	ESP GSM-GPRS		Battery	2x 12V/18Ah
	GSM vector (optional)	TECNOCELL-PRO PL	Physical specifications	Environmental class	II
	IP vector (optional)	ESP LAN		Casing	Metal
	Transmittable events	1,097		Dimensions (L x H x D) (w/o antenna)	455 x 445 x 115mm
	Telephone numbers/ IP addresses	2 per channel (max. 24 digits)		Antenna height	90mm
	Call event queue	96		Weight (w/o battery)	7.8kg
	Communication protocols	216		Operating temperature	-10°C...+55°C
Telematic services	DDNS Tecnoalarm	✓		Humidity (w/o condensation)	93%
	Mail Server Tecnoalarm	✓	Conformity	Directive	R&TTE 1999/05/EC
	SNTP	✓			

# TP20-440

## Internal expansions and interfaces

<b>ESP 4IN</b>	 Approved for certified systems	 			
	<b>Mounting position</b> <table border="1"> <tr> <td>A</td><td>B</td><td>C</td></tr> </table> <p>Expansion module with 4 parallel inputs for the connection of conventional detectors and Zone Bus detector</p> <p><b>Item no. F127ESP4IN</b></p>	A	B	C	
A	B	C			
<b>ESP OUT60C</b>	 Approved for certified systems				
	<b>Mounting position</b> <table border="1"> <tr> <td>A</td><td>B</td><td>C</td></tr> </table> <p>Expansion module with 6 open-collector outputs which can be freely associated to the logic outputs of the system</p> <p><b>Item no. 127ESP0UT60C</b></p>	A	B	C	
A	B	C			
<b>ESP LAN</b>	 Approved for certified systems				
	<b>Mounting position</b> <table border="1"> <tr> <td>A</td><td>B</td><td>C</td></tr> </table> <p>Ethernet-Interface The interface implements the IP vector and permits remote management with TCP/IP.</p> <p><b>Item no. F127ESPLAN</b></p>	A	B	C	
A	B	C			
<b>ESP GSM-GPRS</b>	 Approved for certified systems				
	<b>Mounting position</b> <table border="1"> <tr> <td>A</td><td>B</td><td>C</td></tr> </table> <p>Interface for the connection of the control panel with the GSM or GSM-GPRS network The interface allows to use the GSM or GSM-GPRS network as communication vector.</p> <p><b>Item no. F127ESPGSMGPRS</b></p>	A	B	C	
A	B	C			

## MOUNTING POSITIONS



### SERIAL BUS MUX

The SERIAL BUS MUX module, standard equipment for the TP20-440 system, permits the distribution of the devices connected via RS485 serial bus over several terminals. It is possible to wire one branch line of the serial bus to each terminal (each branch line may not exceed a maximum length of 25 meters).



MODELS		CERTIFIED EN 50131-1 EN 50131-3 EN 50136-2-1	PSTN	GSM-GPRS	IP	ADVANCED PROGRAMMING	TECNO OUT	POWER SUPPLY	METAL BOX
Model	Item no.								
TP20-440	F101T440-UK		✓	Optional	Optional	✓	Optional	8A	✓


OPTIONS		
Option	Item no.	
TECNO OUT	F127T440/TECNO	Software module for management of the Tecno out protocol

VECTORS			DDNS	MAIL	APP	RDV®	SMS	Remote controls	Remote management	Monitoring
Vector	Device	Class								
PSTN	ON-BOARD	ATE2				✓		✓	✓	✓
GSM-GPRS*	ESP GSM-GPRS	ATE2/4				✓	✓	✓	✓	✓
GSM-EXT*	TECNOCELL-PRO PL	ATE2				✓			✓	✓
IP*	ESP LAN	ATE2/4	✓	✓	✓				✓	✓

\* The vectors GSM-GPRS, GSM-EXT and IP are optional and require the installation of internal and external interfaces.

**Classe** - The class defines the performance criteria of the alarm transmission equipment (ATE) for alarm notification. In compliance with the valid standards, the criteria of performance are divided into six classes from ATE1 to ATE6. The system's vectors are classified as ATE2 or ATE4 according to the communication protocols used. The class ATE4 requires the use of encrypted protocols. The IP vector has been certified class ATE4 on the basis of internal tests executed by Tecnoalarm.

#### TP20-440 - Accessories

	<b>GSM ANTENNA EXTENSION</b>
	4m extension cord for the connection of the antenna to the GSM-GPRS module
	Item no. C126PROLANTENNA

# VIDEOALARM

## Evolution

The ongoing evolution of the Tecnoalarm systems reaches a new milestone of technological excellence: Videoalarm.

## New concepts

With the Videoalarm devices, Tecnoalarm redefines the traditional concepts of video surveillance extending the features of the Tecnoalarm burglar alarm systems with video functions.

## Integration

The integration of the two systems is complete and synergistic, with great benefits of compactness, functionality and high-performance, benefits that the conventional video surveillance systems are not able to provide.



### VIDEOALARM CCTV

The Videoalarm CCTV devices are managed by the console UTS V, equipped with video balun interfaces for the connection of analogue surveillance cameras using a UTP CAT 5 cable.



### VIDEOALARM IP

The Videoalarm IP cameras and devices are connected via the Ethernet to the console UTS E. The console is compatible with the Tecnoalarm systems with integrated IP interface as well as the self-powered Ethernet switch TECNOSWITCH with 8 PoE Plus ports.



### Technical partner

Tecnoalarm is the exclusive distributor of Everfocus cameras in Italy.



# Videolarm



Ask for the Videolarm catalogue

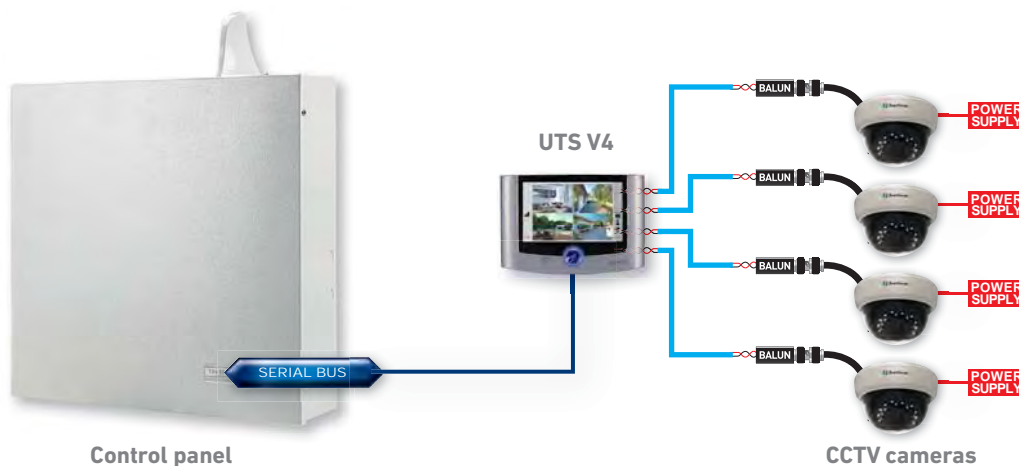


# Videoalarm

## Touch screen video consoles

### UTS V4 - UTS V8










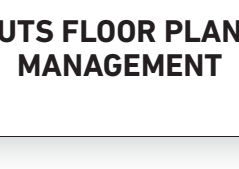








The consoles UTS V4 and UTS V8 permit the integration of CCTV surveillance devices into the burglar alarm systems from Tecnoalarm. The integration of intrusion detection and video functions transforms the passive video surveillance into something dynamic and responsive. The result are extremely synergistic and flexible systems geared toward the customer.





### UTS V4 - UTS V8 - Technical and functional specifications

General features	Standard models	UTS V4 UTS V8
	Models with floor plan management	UTS V4 A UTS V8 A
	Address programming	Digital
	Connection	RS485
CCTV camera management	Type of cameras	Analogue
	Video standard	960H PAL/NTSC
	Cameras managed	4 UTS V4 8 UTS V8
	Inputs	4 passive video baluns
	Camera connection	UTP CAT 5
	Viewing mode	Full screen/mosaic (4 live streams)
	Viewing time	Programmable
	Camera association	Zone/Program/ Remote control
User interface	Associations managed	Max. 4 per camera
	Screen	Color 7" TFT multi-point capacitive touch screen
	Resolution	800 x 480 pixel
	System-user interaction	Icons
	Voice synthesis	Bi-lingual
	Help function	Vocal and graphic
	Programs managed	32



Floor plan management	Floor plans managed	Max. 32
	Icons per floor plan	Max. 32
	Cameras per floor plan	Max. 4
	Viewing mode	Manual/automatic
	Graphic interface	Programmable
Hardware	Flash memory	1 Gbit
	RAM	32 MBit
	USB port	USB type B
Electrical specifications	Rated voltage	12V DC
	Operating voltage	10V...15V DC
	Stand-by consumption	280mA @ 12V DC
	Max. consumption	500mA @ 12V DC
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
Physical specifications	Environmental class	II
	Protection class	IP40
	Casing	ASA
	Dimensions [L x H x D]	225 x 157 x 32mm
	Weight	350g
	Operating temperature	+5°C...+40°C

	<b>UTS V4</b>	      
	<p><b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Touch screen video console for the integration of Videoalarm CCTV into the burglar alarm systems from Tecnoalarm</p> <p>The console provides 4 video inputs for the connection of 960H analogue surveillance cameras. The cameras can be associated to 4 zones, programs or remote controls each. The live streams of the cameras can be viewed in sequence (full screen mode) or on mosaics (showing 4 live streams simultaneously), both automatically or manually.</p> <p>USB port - Stylish design - Ultra-thin casing - Surface and flush mounting - White cover plate (exchangeable)</p>	
	<b>Item no. F127UTSV4</b>	
	<b>UTS V8</b>	<p>As UTS V4 but with 8 video inputs</p>
	<b>Item no. F127UTSV8</b>	
	<b>UTS V4 A</b>	      
	<p><b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>As UTS V4 but with interactive floor plan management</p> <p>Each floor plan manages up to 32 icons, which can be associated to the devices or the navigation functions, and 4 live streams of the surveillance cameras. In case of alarm, the console automatically shows the corresponding floor plan. The floor plans can also be viewed on-demand.</p>	
	<b>Item no. F127UTSV4AVA</b>	
	<b>UTS V8 A</b>	<p>As UTS V4 A but with 8 video inputs</p>
	<b>Item no. F127UTSV8AVA</b>	

#### UTS V - Options

<b>UTS FLOOR PLAN MANAGEMENT</b>	Software plug-in for floor plan management	 
	<b>Item no. F127TSP7L/AV</b>	

#### UTS V - Accessories

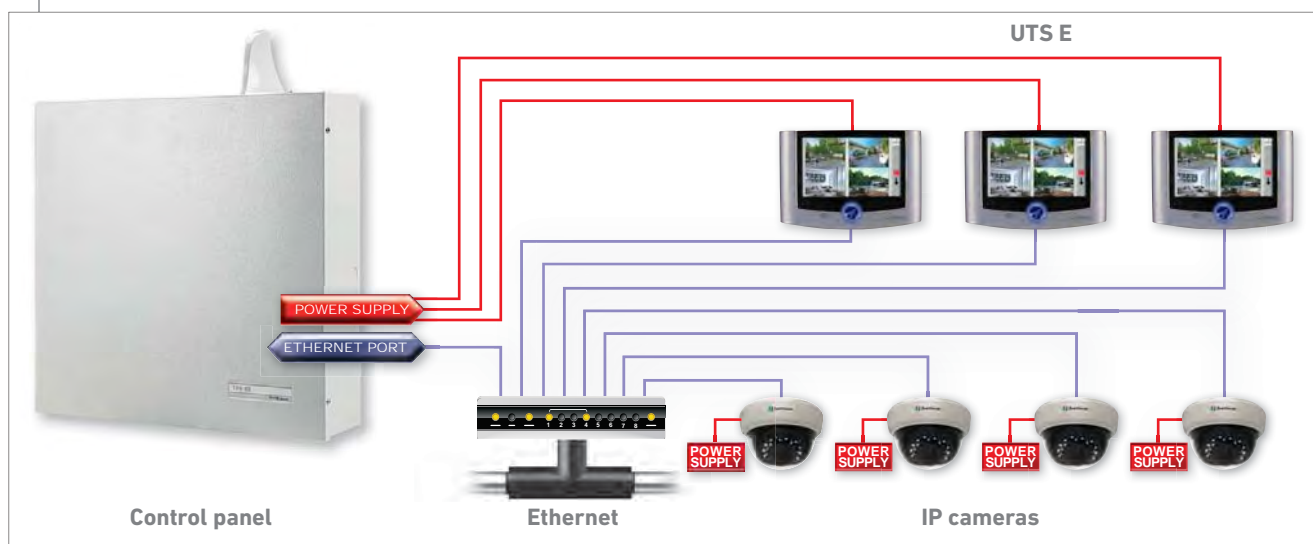
	<b>Item no. F127UTSVCGM</b> Silver gray cover plate
	<b>Item no. F127UTSVCG</b> Titanium gray cover plate
	<b>Item no. F127UTSVCN</b> Black cover plate
	Flush mounting box - Dimensions (L x H x D) 195 x 147 x 35mm.
	<b>Item no. C210INCASSOUTS</b>



## Touch screen video consoles

### UTS E


The console UTS E implements IP surveillance devices into the burglar alarm systems from Tecnoalarm. The integration of the IP surveillance devices, which are easily installed via Ethernet, permits the building of extremely flexible and top-performing systems.






### UTS E - Technical and functional specifications



General features	Model	UTS E
	Connection	UTP CAT 5
IP camera management	Type of cameras	IP
	Video standard	H264
	Cameras managed	24
	Live streams recorded	8
	Cameras viewed	24
	Viewing mode	Full screen/mosaic (4 live streams)
	Viewing time	Programmable
	Camera association	Zone
	Programmable functions	Viewing
		Recording of clips
	Max. recording time	30s
User interface	Event recording interval	10s before
		20s after
	Screen	Color 7" TFT multi-point capacitive touch screen
	Resolution	800 x 480 pixel
	System-user interaction	Icons
	Voice synthesis	✓
	Programs managed	32
Floor plan management	Floor plans managed	Max. 32
	Icons per floor plan	Max. 32
	Cameras per floor plan	Max. 4
	Viewing mode	Manual/automatic
Hardware	Flash memory	1 Gbit
	RAM	1 Gbit
	USB port	USB type A
	SD card	Optional
Electrical specifications	Rated voltage	12V DC
	Operating voltage	10V...15V DC
	Stand-by consumption	250mA @ 12V DC
	Max. consumption	380mA @ 12V DC
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
Physical specifications	Environmental class	II
	Protection class	IP40
	Casing	ASA
	Dimensions (L x H x D)	225 x 157 x 32mm
	Weight	800g
	Operating temperature	+5°C...+40°C



UTS E		24 VIEWED	8 CAMERAS RECORDING	SD CARD SLOT	CODES	7" COLORS DISPLAY	CAPACITIVE TOUCH SCREEN	VOICE SYNTHESIS	USB PORT	32 PROGRAMS MANAGED
	<b>Compatible systems: TP10-42 - TP8-88 - TP20-440</b> Touch screen video console for the integration of Videoalarm IP into the burglar alarm systems from Tecnoalarm The console permits the connection of up to 24 IP cameras via Ethernet. The cameras can be associated to the zones of the alarm system. The live streams of the cameras can be viewed in sequence (full screen mode) or on mosaics (showing 4 live streams simultaneously), both automatically or manually. The console is able to record video clips of 30s length for 8 of the 24 cameras. SD card slot - USB port - Stylish design - Ultra-thin casing - Surface and flush mounting - White cover plate (exchangeable) <b>Three models are available according to the type of connection and power supply</b>									
	The console is always equipped with the floor plan management function.									
	<div>32 FLOOR PLANS</div> <div>32 ICONS</div>									

UTS E POE		IP PORT POE	RJ45 INTERFACE	UTP CAT5 CONNECTION	POWER SUPPLY POE 48V	MAX CONNECTION DISTANCE 80m
	IP POE (Power over Ethernet) connection for data transmission and power supply - UTP CAT 5 - RJ45 - Max. connection distance 80m <b>Item no. F210UTSEPOE</b>					
UTS E IDC		IP PORT	IDC 110 INTERFACE	UTP CAT5 AND POWER CONNECTION	POWER SUPPLY 12V	MAX CONNECTION DISTANCE 80m
	IP connection for data transmission - Separate power cord - UTP CAT 5 - IDC 110 - Max. connection distance 80m <b>Item no. F210UTSEIDC</b>					
UTS E		IP PORT	RJ45 INTERFACE	UTP CAT5 AND POWER CONNECTION	POWER SUPPLY 12V	MAX CONNECTION DISTANCE 80m
	IP connection for data transmission - Separate power cord - UTP CAT 5 - RJ45 - Max. connection distance 80m <b>Item no. F210UTSE</b>					

## UTS E - Accessories

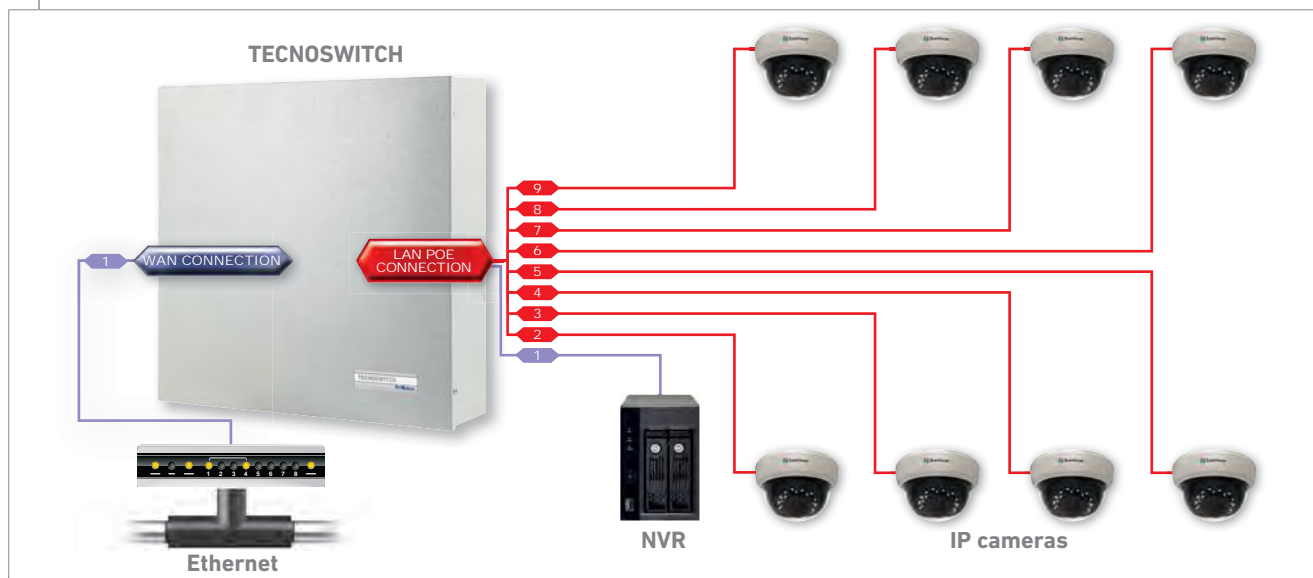
	Item no. F127UTSECGM Silver gray cover plate
	Item no. F127UTSECG Titanium gray cover plate
	Item no. F127UTSECN Black cover plate
	Flush mounting box - Dimensions (L x H x D) 195 x 147 x 35mm
	Item no. C210INCASSOUTS



## Self-powered PoE switches

### TECNOSWITCH

The self-powered PoE switch permits the building of a self-configuring firewalled LAN, guaranteeing both efficiency and high speed in the management of IP devices.



### TECNOSWITCH - Technical and functional specifications

General features	Model	<b>TECNOSWITCH</b>
	Description	<b>PoE switch</b>
	Functioning mode	<b>Stand-alone/ integrated in a system</b>
Hardware	RS485 serial bus	<b>1</b>
	Failure output	<b>Free changeover relay</b>
	Power supply output	<b>1.5A @ 12V DC</b>
	USB port	<b>USB 2.0 for HDD</b>
Device management	LAN devices	<b>Self-configuring</b>
Ethernet	Standard	<b>Fast Ethernet</b>
	RJ45 ports	<b>Standard 10/100Mbps</b>
	WAN ports	<b>1</b>
	LAN ports	<b>1+8 PoE</b>
	Total power PoE ports	<b>80W</b>
	Power per PoE port	<b>Max. 24W</b>
LAN diagnostics	Network address	<b>MAC address</b>
	PoE management	<b>Monitoring/control</b>
	Network statistics	<b>Data flow monitor</b>
	Cable test	<b>✓</b>
	Diagnostics	<b>Functioning monitor</b>
Connection distance	LAN (UTP CAT 5 cable)	<b>Max. 80m</b>
	LAN + PoE (UTP CAT 5 cable)	<b>Max. 80m</b>

Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
Power supply	Type	<b>A - modular Flyback switching</b>
	Operating voltage	<b>230V AC +/- 10% 50Hz</b>
	Max. consumption	<b>700mA AC</b>
	Max. output voltage	<b>5A @ 27.6V DC</b>
	Max. current available	<b>Max. 5A</b>
	Max. Ripple	<b>150mV p-p</b>
	Mains fuse	<b>T-1.6A</b>
Battery	Capacity	<b>2x 12V/17Ah</b>
	Flame class	<b>V-2 or higher</b>
	Autonomy max. charge	<b>4 hours</b>
	Release voltage	<b>&lt;17.6V DC</b>
	Recharge time	<b>100% in 12h</b>
Electrical specifications	CPU board consumption scheda CPU	<b>170mA @ 27.6V DC</b>
	Operating voltage PoE	<b>44V...57V DC</b>
	PoE Plus	<b>57V DC</b>
Physical specifications	Environmental class	<b>II</b>
	Casing	<b>Metal</b>
	Dimensions (L x H x D)	<b>455 x 445 x 115mm</b>
	Weight	<b>7.7kg</b>
	Operating temperature	<b>-10°C...+55°C</b>
	Humidity (w/o condensation)	<b>93%</b>





## TECNOSWITCH

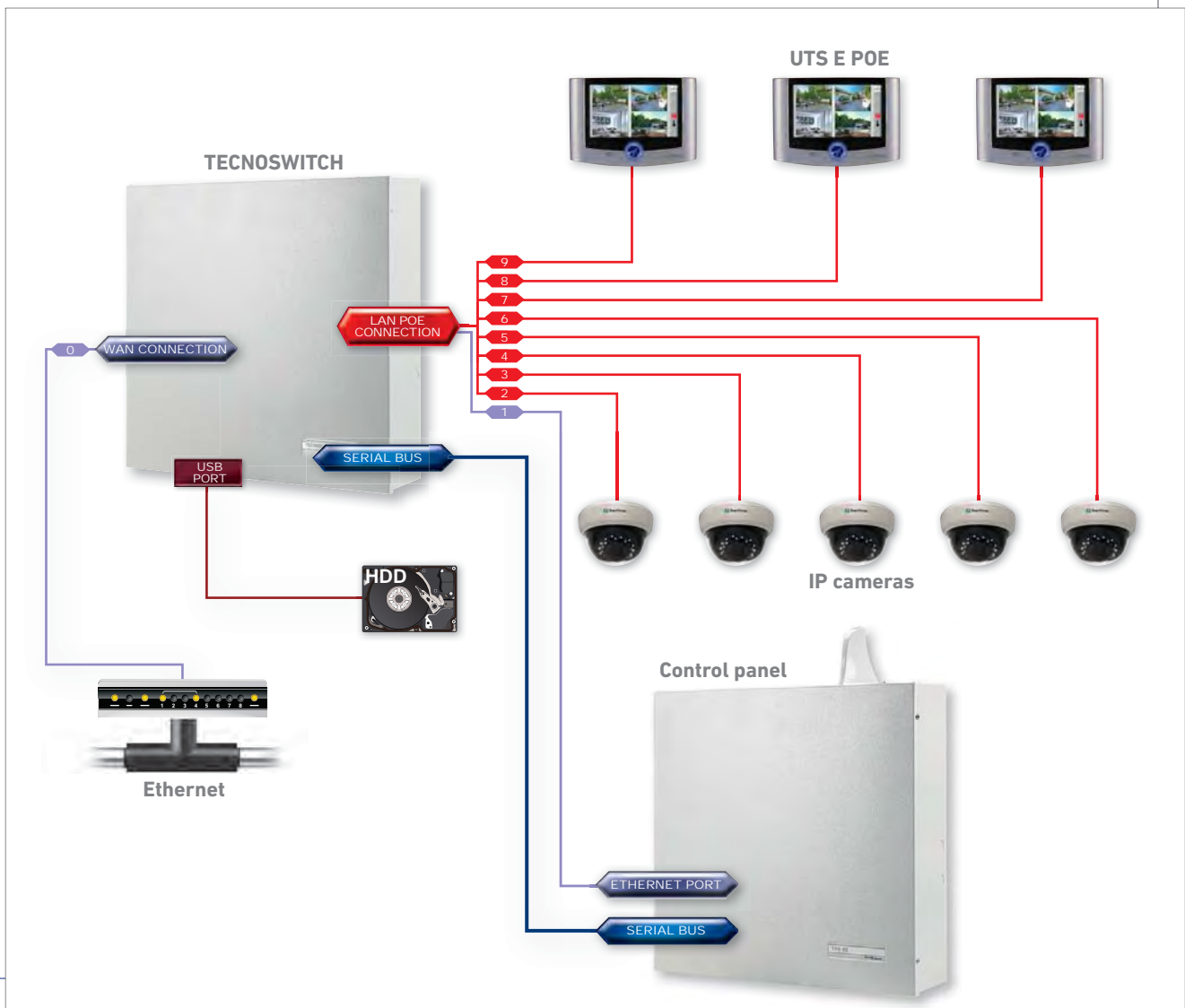


Compatible systems: TP10-42 - TP8-88 - TP20-440



The self-powered and self-protected PoE switch to be used stand-alone or integrated in a burglar alarm system from Tecnoalarm.  
The switch provides self-detection and self-configuration of the LAN nodes. It is equipped with an RS485 port for the connection of the Tecnoalarm systems as well as a USB 2.0 port for the connection of an optional HDD for storing of the video clips recorded by the console UTS E. It offers comprehensive diagnostic features: monitoring of power supply, battery, HDD, PoE and USB ports, tamper and consumption, self-detection of the network topology, cable test (not connected and short circuit), monitoring of data flow, management of PoE ports.  
1 WAN, 9 LAN (8 PoE), RJ45, RS485, USB ports - Failure output - Flyback switching 5A power supply - 2x 12V-17Ah batteries (not included)

Item no. F210TECNOSWITCH



# CONTROL UNITS

A wide range of control units, which meet the highest regulation, quality and safety standards, are able to solve any application and use requirement.

The range comprises consoles with voice synthesis, graphic displays or touch screens which inform and interact with the user in a simple and intuitive manner, as well as transponders, RFID cards and biometric finger print readers.

The user can find the best solution for his needs for practicality, ease of use and security.



#### **Code**

Typing a code is something that we make every day. A personal number code permits the interactive management of our security system through the top-performing consoles from Tecnoalarm.



#### **Transponder**

The electronic key has always been the most classic and practical control device. The modern transponders from Tecnoalarm guarantee inviolability and the highest possible number of combinations of the code.



#### **RFID card**

The RFID card is practical and reliable, with a level of security that can only be guaranteed by a unique code, preprogrammed by Tecnoalarm.



#### **Finger print**

The finger print is the most personal and unique way, encoded in our hands, to authenticate ourselves. The security systems from Tecnoalarm can be controlled with simple gestures by the tip of your fingers.

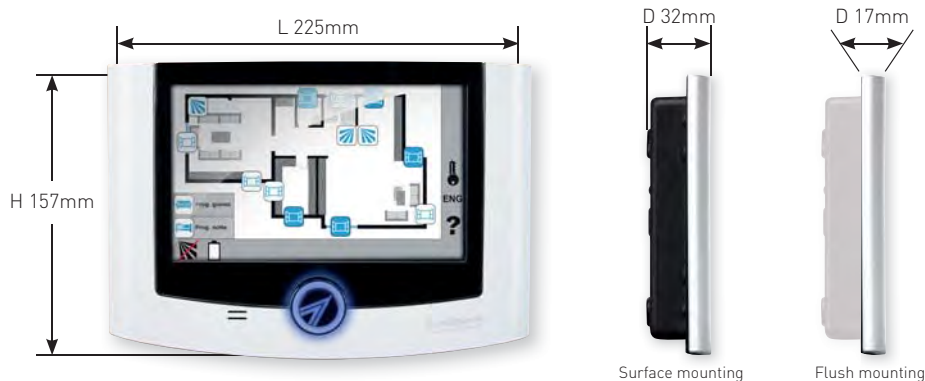


# Consoles and control units

## Touch screen consoles

### UTS C - UTS C A

7" TFT capacitive touch screen consoles are characterized by an intuitive graphical interface with a dynamic system-user interaction through icons. They provide a bilingual voice synthesis and vocal and graphic help function. A software plug-in, preprogrammed on the model UTS C A, permits the management and customization of floor plans and the creation of efficient and customized applications. In case of alarm, the console automatically shows the corresponding floor plan, but the floor plans can also be viewed on-demand.



### UTS C - UTS C A - Technical and functional specifications

General features	Standard model	<b>UTS C</b>
	Model with floor plan management	<b>UTS C A</b>
	Address programming	<b>Digital</b>
	Connection	<b>RS485</b>
User interface	Screen	<b>Color 7" TFT multi-point capacitive touch screen</b>
	Resolution	<b>800 x 480 pixel</b>
	System-user interaction	<b>Icons</b>
	Voice synthesis	<b>Bi-lingual</b>
	Help function	<b>Vocal and graphic</b>
	Programs managed	<b>32</b>
Floor plan management UTS C A	Floor plans managed	<b>Max. 32</b>
	Icons per floor plan	<b>Max. 32</b>
	Viewing mode	<b>Manual/automatic</b>
	Graphic interface	<b>Programmable</b>
Hardware	Flash memory	<b>1 Gbit</b>
	RAM	<b>32 MBit</b>
	USB port	<b>USB type B</b>

Electrical specifications	Rated voltage	<b>12V DC</b>
	Operating voltage	<b>10V...15V DC</b>
	Stand-by consumption	<b>90mA @ 12V DC</b>
	Max. consumption	<b>240mA @ 12V DC</b>
Anti-tamper protection	Anti-opening and anti-detachment	<b>Micro-switch</b>
Physical specifications	Environmental class	<b>II</b>
	Protection class	<b>IP40</b>
	Casing	<b>ASA</b>
	Dimensions (L x H x D)	<b>225 x 157 x 32mm</b>
	Weight	<b>350g</b>
Operating temperature		<b>+5°C...+40°C</b>



# Consoles and control units

## UTS 4.3 PROX

The 4.3" TFT capacitive touch screen console is characterized by an intuitive graphical interface with a dynamic system-user interaction through icons. It provides a bilingual voice synthesis function and an integrated RFID reader.



## UTS 4.3 PROX - Technical and functional specifications

General features	Model	<b>UTS 4.3 PROX</b>
	Address programming	<b>Digital</b>
	Connection	<b>RS485</b>
User interface	Screen	<b>Color 4.3" TFT multi-point capacitive touch screen</b>
	Resolution	<b>480 x 272 pixel</b>
	System-user interaction	<b>Icons</b>
	Voice synthesis	<b>✓</b>
	Help function	<b>Graphic</b>
	Programs managed	<b>15</b>
Anti-tamper protection	Anti-opening and anti-detachment	<b>Micro-switch</b>

Electrical specifications	Rated voltage	<b>12V DC</b>
	Operating voltage	<b>10V...15V DC</b>
	Stand-by consumption	<b>80mA @ 12V DC</b>
	Max. consumption	<b>160mA @ 12V DC</b>
Physical specifications	Environmental class	<b>II</b>
	Protection class	<b>IP40</b>
	Casing	<b>ASA</b>
	Dimensions (L x H x D)	<b>154 x 104.6 x 23mm</b>
	Weight	<b>230g</b>
	Operating temperature	<b>+5°C...+40°C</b>
Conformity	Standards	<b>EN 50131-3</b>
	Notified body	<b>IMQ</b>



## UTS 4.3 PROX



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

4.3" TFT capacitive touch screen console  
The console is equipped with an integrated reader for PROX KEY transponders and a voice synthesis function which uses the vocabulary loaded on the alarm system.  
Stylish design - Ultra-thin casing - Surface mounting - Antistatic ABS casing























Item no. **F127UTS43PROX** White color

Item no. **F127UTS43PROXGR** Charcoal gray color





## Consoles

<b>LCD300/S</b>	 Approved for certified systems	 CODES	 VOICE SYNTHESIS	 15 PROGRAMS MANAGED
	<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440 Console with backlit 2x16 characters LCD and a voice synthesis function which uses the vocabulary loaded on the alarm system Management of 15 programs - Connection via RS485 serial bus - Surface mounting - Design by Pininfarina - Antistatic ABS casing - Dimensions (L x H x D) 120 x 175 x 46mm - White color  <b>Item no. F127LCD300S</b>			
<b>LCDPROX1</b>	 Approved for certified systems	 CODES	 PROX KEY READER	 8 PROGRAMS MANAGED
	<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP8-88 - TP10-42 - TP20-440 Console with backlit graphic LCD and a reader for PROX KEY transponders PROX KEY Management of 8 programs - Connection via RS485 serial bus - Surface mounting - Antistatic ABS casing - Dimensions (L x H x D) 150 x 119 x 35mm - White color  <b>Item no. F127LCDPROX1</b>			
<b>LCD020</b>		 CODES	 4 PROGRAMS MANAGED	 20 ZONES MANAGED
	<b>Compatible systems:</b> TP4-20 - TP4-20 GSM Console with backlit 2x16 characters LCD Management of 4 programs - Viewing of the status of 20 zones - Connection via RS485 serial bus - Surface mounting - Antistatic ABS casing - Dimensions (L x H x D) 150 x 119 x 35mm - White color. <i>N.B. To be used alternatively to LCD012 - LED06</i>  <b>Item no. F127LCD020</b>			
<b>LCD012</b>		 CODES	 4 PROGRAMS MANAGED	 12 ZONES MANAGED
	<b>Compatible systems:</b> TP4-20 - TP4-20 GSM Console with backlit 2x16 characters LCD Management of 4 programs - Viewing of the status of 12 zones - Connection via RS485 serial bus - Surface mounting - Antistatic ABS casing - Dimensions (L x H x D) 150 x 119 x 35mm - White color <i>N.B. To be used alternatively to LCD020</i>  <b>Item no. F127LCD012</b>			
<b>LED06</b>		 CODES	 4 PROGRAMS MANAGED	 6 ZONES MANAGED
	<b>Compatible systems:</b> TP4-20 - TP4-20 GSM Console Management of 4 programs - Viewing of the status of 6 zones - Connection via RS485 serial bus - Surface mounting - Antistatic ABS casing - Dimensions (L x H x D) 140 x 80 x 28mm - White color <i>N.B. To be used alternatively to LCD020</i>  <b>Item no. F127LED06</b>			

# Consoles and control units

## Outdoor keypads

### DIGITEX

Outdoor keypad with touch-sensitive steal membrane

Grazing keypad light generated by LED light strips - Optical and acoustic system status signaling through buzzer and 7 signaling LED - Management of 4 programs - Connection via RS485 serial bus - Surface mounting - Prewired connection cable - Waterproof and vandal-proof aluminum die cast casing - Design by Pininfarina - IP65 - Dimensions (L x H x D) 81 x 121 x 24mm - Varnished aluminum



### DIGITEX - Technical and functional specifications

General features	Model	<b>DIGITEX</b>	Electrical specifications	Rated voltage	<b>12V DC</b>
	Address programming	<b>Digital</b>		Operating voltage	<b>10V...15V DC</b>
	Connection	<b>RS485</b>		Stand-by consumption	<b>10mA @ 12V DC</b>
	Connection cable	<b>6m prewired</b>		Max. consumption	<b>136mA @ 12V DC</b>
	Keypad	<b>Touch-sensitive steal membrane</b>	Physical specifications	Environmental class	<b>IV</b>
	Optical system status signaling	<b>7 LED</b>		Protection class	<b>IP65</b>
	Acoustic system status signaling	<b>Buzzer</b>		Casing	<b>Al</b>
	Keypad light	<b>LED light strips - Grazing light</b>		Dimensions (L x H x D)	<b>81 x 121 x 24mm</b>
	Programs managed	<b>4</b>		Weight	<b>510g</b>
Anti-tamper protection	Anti-opening and anti-detachment	<b>Magnetic - reed switch</b>		Operating temperature	<b>-25°C...+60°C</b>
	Anti-magnete	<b>Magnetic - reed switch</b>		Humidity (w/o condensation)	<b>10%...93%</b>
	Casing	<b>Vandal-proof</b>			



### DIGITEX



Compatible systems: TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Item no. F103DIGITEX



# Consoles and control units

## Transponder readers

### ATPROX

The ATPROX transponder readers from Tecnoalarm guarantee inviolability thanks to transponders with the highest possible number of different codes.

*N.B. The ATPROX transponder readers can only be used in combination with a transponder interface connected to or integrated on the control panel.*



#### ATPROX/I



Approved for certified systems

Reader for PROXKEY transponders - Flush mounting module for Vimar Idea\* switches - Black color

Item no. F103ATPROX/I



#### ATPROX/L



Approved for certified systems

Reader for PROXKEY transponders - Flush mounting module for BTicino Living\* switches - Black color

Item no. F103ATPROX/L



#### ATPROX/LINT



Approved for certified systems

Reader for PROXKEY transponders - Flush mounting module for BTicino Living International\* switches - Black color

Item no. F103ATPROX/LINT



#### ATPROX/LINB



Approved for certified systems

Reader for PROXKEY transponders - Flush mounting module for BTicino Living International\* switches - White color

Item no. F103ATPROX/LINB



#### ATPROX/MN



Approved for certified systems

Reader for PROXKEY transponders - Flush mounting module for BTicino Magic\* switches - Black color

Item no. F103ATPROX/MN



#### ATPROX/M



Approved for certified systems

Reader for PROXKEY transponders - Flush mounting module for BTicino Magic\* switches - White color

Item no. F103ATPROX/M



#### ATPROX/A



Approved for certified systems

Reader for PROXKEY transponders - Flush mounting module for BTicino Axolute\* switches - White color


Item no. F103ATPROX/A

*\* The product and brand names are owned by BTicino and Vimar.*

## Transponders








	<b>PROXKEY</b>	 Approved for certified systems		<b>PROXKEY HS</b>	 Approved for certified systems
	Transponder with preprogrammed code - Reprogrammable and duplicatable with PROX PROGRAMMER - Gray color			Transponder with unique preprogrammed code - Unduplicatable nor reprogrammable - Blue color	
	Item no. F103PROXKEY			Item no. 103PROXKEYHS	

### PROXKEY - Accessories

	<b>PROX PROGRAMMER</b>
	Programmer for reprogramming and duplicating of PROXKEY transponders
	Item no. F103PROXPROGRAM

## Transponder interfaces and stand-alone readers












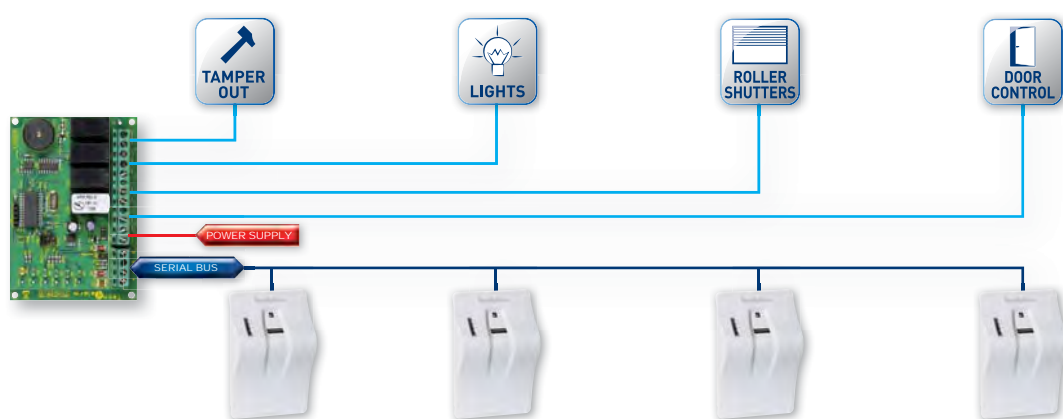
<b>PROX K6N</b>			
	Compatible systems: TP10-42 - TP8-88 - TP20-440		
	Stand-alone transponder reader with function keys - System status signaling by LED - Management of 6 programs - Connection via RS485 serial bus - Surface mounting - Antistatic ABS casing - Dimensions (L x H x D) 140 x 80 x 28mm - White color		
	Item no. F127PROXK6N		
<b>TP SKN</b>	 Approved for certified systems		
	Compatible systems: TP10-42 - TP8-88 - TP20-440		
	Interface for ATPROX transponder readers - Management of 4 readers - Connection via RS485 serial bus - Surface mounting - Antistatic ABS casing - Dimensions (L x H x D) 63 x 101 x 25mm - White color		
	Item no. F127TP-SKN		

# Consoles and control units

## Stand-alone relay control systems

The stand-alone relay control system is composed of one relay board FINGER KEY and up to 4 biometric finger print readers APR FINGER. The system permits the management of 3 independent electrical installations with the tip of a finger. Great practicality is combined with efficient security thanks to the individual uniqueness of the finger prints, ensuring that only the authorized users have access to the system.

<b>FINGER KEY</b>							
	<p>Electronic board with 3 programmable relay outputs for the connection of up to 3 electrical installations</p> <p>The relays can be controlled through max. 4 biometric finger print readers type APR FINGER.</p> <p>Dimensions (L x H x D) 70 x 100 x 20mm, ABS casing (optional).</p> <p><i>N.B. Configuration software APRCONF included.</i></p>						
	<b>Item no. F103APRFINKEY</b>						
<b>APR FINGER</b>							
	<p>Reader for finger prints - System status signaling by LED - Management of 100 finger prints - Management of 3 programs - Connection via RS485 serial bus - Surface mounting - Antistatic ABS casing - Dimensions (L x H x D) 91 x 138 x 54mm</p>						
	<b>Item no. F103APRFIN/G</b> Gray casing						
	<b>Item no. F103APRFIN/N</b> Black casing						
	<b>Item no. F103APRFIN/B</b> White casing						












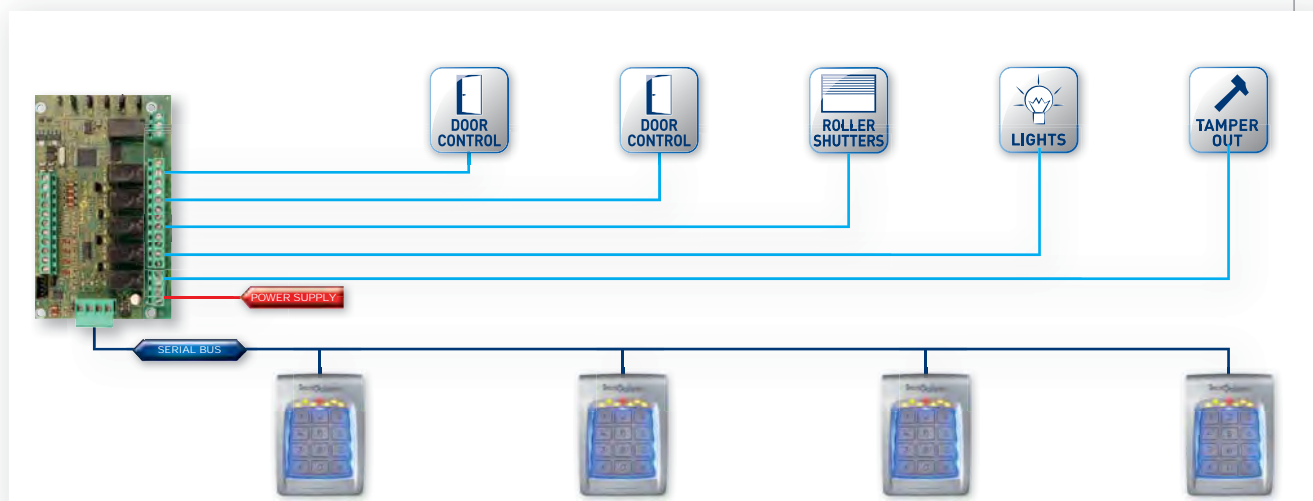
### APR FINGER - Accessories

	<b>APR USB CABLE</b>
	Type A mini USB cable for programming of APR FINGER and APR FINGER-CARD
	Item no. F130CAVOMINIUSB




The stand-alone relay control system is composed of one relay board DIGITEX KEY and up to 4 DIGITEX keypads for outdoor mounting. The system permits the management of 4 independent electrical installations by code, even from the outdoors. The system offers a practical and secure solution for the management of your home automation.

<b>DIGITEX KEY</b>						
	Electronic board with 5 programmable relay outputs for the management of up to 4 electrical installations The relays can be controlled through max. 4 DIGITEX keypads. Dimensions (L x H x D) 127 x 77 x 30mm, ABS casing (optional)					
	<b>Item no. F103DIGITEXKEY</b>					
<b>DIGITEX</b>						
	Outdoor keypad with touch-sensitive steal membrane Grazing keypad light generated by LED light strips - Optical and acoustic system status signaling through buzzer and 7 signaling LED - Management of 4 programs - Connection via RS485 serial bus - Surface mounting - Prewired connection cable - Waterproof and vandal-proof aluminum die cast casing - Design by Pininfarina - IP65 - Dimensions (L x H x D) 81 x 121 x 24mm - Varnished aluminum					
	<b>Item no. F103DIGITEX</b>					



#### DIGITEX KEY - Accessories

	<b>C90</b> ABS casing - Dimensions (L x H x D) 165 x 110 x 41mm - White color
	<b>Item no. C110C90</b>

# MODULES

## EXPANSION MODULES

### INPUTS - OUTPUTS - SERIAL BUS

The versatile and modular structure can be considered an intrinsic characteristic of the Tecnoalarm systems, characteristic which the range of input, output and serial bus expansions fully meet. Tecnoalarm has streamlined the concept of modular architecture, by developing expansion modules that can be used equally by all its systems. The expansion modules connected on the serial bus allow to locate the inputs and the outputs of the system in the most comfortable positions, where actually necessary, favoring a simpler and more economical routing of the connecting cables.



#### **Input expansion modules**

The range of input expansions is composed of five models, equipped with 4 to 8 inputs for conventional or Zone Bus detectors and 1 to 4 programmable alarm outputs.



#### **Output expansion modules**

The range of output expansions includes models which permit the creation of signaling panels with respectively 32 open-collector outputs and signaling LED, and those which provide programmable relay outputs for the control of external devices.



#### **Serial bus extension modules**

The serial bus extensions allow to increase the maximum length of the serial bus and make star connections. The fiber optic converter permits the extension of the serial bus with fiber optic cables.

INPUTS

OUTPUTS

RS485 LINES

LOOPS

RX  
RS485

POWER

RX  
FIBER OPTIC





























TecnAlarm RS485 CONVERTER - FIBER OPT

# Expansion modules

## Input expansions



EXPANSION MODULES







ection		SPEED ALM8 PL									
		<p><b>Compatible systems:</b> TP4-20 - TP4-20 GSM - TP8-28 -TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 8 inputs for the connection of RDV® and Zone Bus detectors from Tecnoalarm as well as conventional detectors - 2 relay outputs - 2 programmable open-collector outputs - 1.8A switching power supply - 12V/7Ah battery - Connection via RS485 serial bus - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 350 x 285 x 93mm</p>									
		Item no. F101SPEEDALM8PL									
SPEED 8		 Approved for certified systems									
		<p><b>Compatible systems:</b> TP4-20 - TP4-20 GSM - TP8-28 -TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 8 inputs for the connection of RDV® and Zone Bus detectors from Tecnoalarm as well as conventional detectors - 2 programmable open-collector outputs - Connection via RS485 serial bus - Dimensions (L x H) 124 x 68mm - ABS casing (optional). N.B. Compatible casings C100P and C90</p>									
		Item no. F101SPEED8									
SPEED 4-140C											
		<p><b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 4 inputs for the connection of RDV® and Zone Bus detectors from Tecnoalarm as well as conventional detectors - 14 programmable open-collector outputs - Connection via RS485 serial bus - Dimensions (L x H) 93 x 59mm - ABS casing (optional) N.B. Compatible casing C80</p>									
		Item no. F101SPEED4140C									
SPEED 4		 Approved for certified systems									
		<p><b>Compatible systems:</b> TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 4 inputs for the connection of RDV® and Zone Bus detectors from Tecnoalarm as well as conventional detectors - 1 programmable open-collector output - Connection via RS485 serial bus - Dimensions (L x H) 98 x 68mm - ABS casing (optional) N.B. Compatible casings C100P and C90</p>									
		Item no. F101SPEED4									
SPEED 8 STD		 Approved for certified systems									
		<p><b>Compatible systems:</b> TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 8 inputs for the connection of conventional detectors - Connection via RS485 serial bus - Dimensions (L x H) 98 x 68mm - ABS casing (optional) N.B. Compatible casings C100P and C90</p>									
		Item no. F101SPEED8STD									

## EXPANSIONS MODULES - Accessories


	<b>C100P</b> ABS casing - Design by Pininfarina - Dimensions (L x H x D) 270 x 156 x 68mm - White color <b>Item no. C110C100P</b>		<b>C90</b> ABS casing - Dimensions (L x H x D) 165 x 110 x 41mm - White color <b>Item no. C110C90</b>
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## Output expansions

<b>ESP 8RP</b>		<b>8</b> OUTPUTS 4A
	<p><b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 8 power relay outputs with potential-free change-over contacts (max. 250V AC @ 4A) - Functions programmable by PC - Address cloning possible - Connection via RS485 serial bus - Dimensions (L x H x D) 137 x 110 x 16mm</p> <p><b>Item no. F127ESP8RP</b></p>	
<b>ESP 8RSP</b>		<b>7+1</b> OUTPUTS 0,3A 4A
	<p><b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 7 signal relay outputs with potential-free change-over contacts (max. 24V DC @ 0.3A) and 1 power relay output (max. 250V AC @ 4A) - Functions programmable by PC - Address cloning possible - Connection via RS485 serial bus - Dimensions (L x H x D) 137 x 91 x 16mm</p> <p><b>Item no. F127ESP8RSP</b></p>	
<b>ESP 4RS</b>		<b>4</b> OUTPUTS 0,3A
	<p><b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 4 signal relay outputs with potential-free change-over contacts (max. 24V DC @ 0.3A) - Functions programmable by PC - Address cloning possible - Connection via RS485 serial bus - Dimensions (L x H x D) 137 x 80 x 16mm</p> <p><b>Item no. F127ESP4RS</b></p>	
<b>ESP32-OCN</b>		<b>32</b> OUTPUTS
	<p> Approved for certified systems</p> <p><b>Compatible systems:</b> TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 32 open-collector outputs for system status signaling - Functions programmable by PC - Connection via RS485 serial bus - Dimensions (L x H) 97 x 85mm - ABS casing (optional) <i>N.B. Compatible casings C100P and C90</i></p> <p><b>Item no. F127ESP32OCN</b></p>	
<b>SINOTTICO 32N</b>		<b>32</b> LEDS 
	<p><b>Compatible systems:</b> TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440</p> <p>Expansion module with 32 LED for system status signaling - Functions programmable by PC - Connection via RS485 serial bus - ABS casing - Dimensions (L x H x D) 150 x 118 x 35mm</p> <p><b>Item no. F127SINOTTICON</b></p>	

### EXPANSIONS MODULES - Accessories

	<p><b>C80</b></p> <p>ABS casing - Dimensions (L x H x D) 140 x 92 x 38mm - White color</p> <p><b>Item no. C110C80</b></p>
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# Expansion modules

## Serial extension modules



EXPANSION MODULES

### FIBER OPTIC CONVERTER



Compatible systems: TP4-20 -TP4-20 GSM - TP8-28 - TP8-28 GSM -TP10-42 - TP8-88 - TP20-440

RS485-fiber optic converter for the long-distance serial data transmission over fiber optic cables. The converter can be used for point-to-point connections, with a 2km maximum length for each track, or loop connections, with 4km maximum loop length. The converter is especially indicated for data transmission in particularly disturbed areas, outdoor applications subject to electrostatic discharges and elimination of ground loops.

Master/slave mode - Functional settings by dip-switch - 3 signaling LED (power supply, data reception via fiber optics, data reception via serial bus) - ABS casing - White color

Item no. F130CONVFIBRA

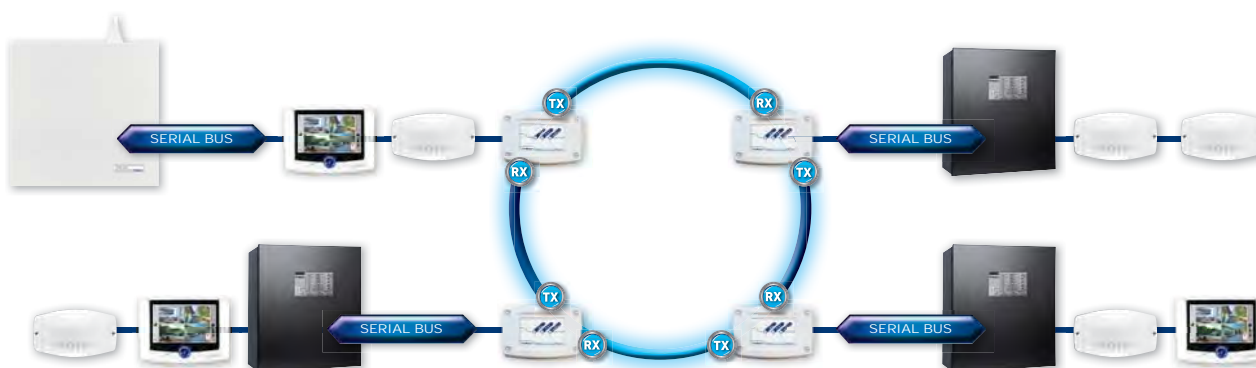


### FIBER OPTIC CONVERTER - Technical and functional specifications

General features	Description	Fiber optic converter
	Data input/output interface	RS485 Fiber optics
Baud rate	Tecnoalarm RS485 serial bus	38,400/9,600bps
	Tecnoalarm Sensor Bus	38,400bps
	Tecnoalarm Sync Bus	300bps (Explorer II) Square wave (Beamtower)
Fiber optics	Fiber optics cable	50/125µm or 6.5/125µm
	Wave length	850nm
	Connection	ST connector
	Connection type	Point-to-point (2km per track) Loop (4km)
	Tecnoalarm Sync Bus (Beamtower)	250m per track

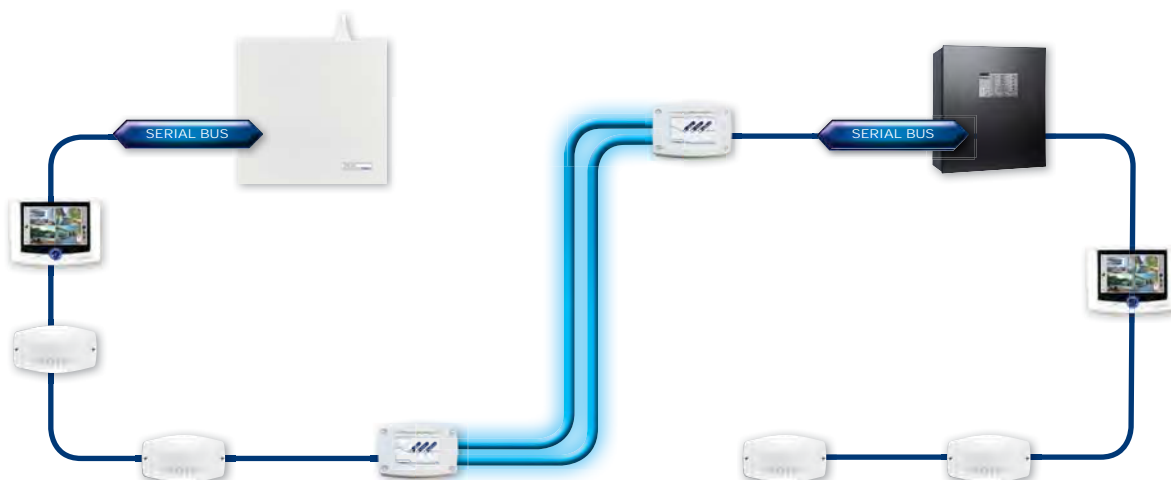
Status signaling	Power supply	✓
	RX RS485	✓
	RX Fiber optic	✓
Electrical specifications	Rated voltage	12V DC
	Operating voltage	8V...31V DC
	Rated onsumption	50mA @ 12V DC
Physical specifications	Environmental class	II
	Protection class	IP42
	Casing	ABS
	Dimensions (L x H x D)	140 x 92 x 38mm
	Weight	130g
	Operating temperature	-20°C...+70°C

### Loop connection





## Point-to-point connection



## SPEED RS485



Compatible systems: TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Extension module with 1 input and 1 protected output for the extension and the branching of the RS485 serial bus - 1 star connection with 1km track length - Programmable baud rate - Dimensions (L x H) 97 x 85mm - ABS casing (optional)  
N.B. Compatible casings C100P and C90

Item no. F127SPEEDRS485

## STAR RS485



Compatible systems: TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Extension module with 1 input and 6 protected outputs for the branching of the RS485 serial bus - 6 star connections with 1km track length per branch - 3 loop connections of 800 meters length per loop - Programmable baud rate - Dimensions (L x H) 176 x 74mm - ABS casing (optional)  
N.B. Compatible casing C100P

Item no. F127STAR485

## EXPANSIONS MODULES - Accessories



## C100P

ABS casing - Design by Pininfarina - Dimensions (L x H x D) 270 x 156 x 68mm - White color

Item no. C110C100P



## C90

ABS casing - Dimensions (L x H x D) 165 x 110 x 41mm - White color

Item no. C110C90

# RSC® TECHNOLOGY

## Remote Sensitivity Control



RSC® (Remote Sensitivity Control) technology is an innovative management platform by which the central monitoring station (CMS) and the installer can program and control the burglar alarm system completely from a distance. The sophisticated technology, developed by the Tecnoalarm research department, provides advanced diagnostic tools which allow to verify and maintain the smooth functioning of each system component as well as adjust and improve the system's performance. RSC® technology is a valid tool for a preventive maintenance of the systems.



### System configuration

Programming of the system's functioning parameters can be made either locally or remotely using the Tecnoalarm programming software.



### Hardware coherence control

The Hardware coherence control tool analyzes the RSC® devices and draws a system overview which contains all the logical and functional parameters.



### Network analysis

The Network analysis tool constantly monitors all the system's communication buses, Serial Bus, Sensor Bus and Siren Bus, and verifies the correctness of the exchanged data.



### Barrier alignment monitor

The alignment monitor tool for the RSC® barriers permits electronic monitoring of the alignment of the beams. For each beam of the barrier, the tool shows the captured signal and compares it with the reference values recorded during setup.



### Functioning monitor

The Functioning monitor tool permits the real time control of the RSC® detectors functioning.



### Alarm graphs

The alarms coming from the RSC® detectors are stored in the system's event buffer together with a graph indicating functioning at the moment the alarm has occurred. By analyzing the graph it is possible to determine and understand the cause of the alarm.



### Event log

The event log contains all the events relating to the system's functioning, i.e. alarms, diagnostics and system status signaling. They are stored in reverse chronological order, with indication of date and time and all details concerning the notifications.



### Device window

The possibility of monitoring the functional parameters of the devices connected to the serial bus allows preventive maintenance and the prevention of failures.

000	461251	2
000	461279	2
000	461621	6
000	461557	2
000	461358	2
000	461159	2
000	461	2

Event log	
Date-Time	Description
21/03/12 09:11:11	Disarming Program 1
21/03/12 09:10:28	End of alarm Zone 2
21/03/12 09:10:28	End of alarm program 1
21/03/12 09:09:29	Alarm Program 1
21/03/12 09:09:29	Alarm Zone 2
21/03/12 09:08:18	Arming Program 1
21/03/12 09:08:15	Exclusion Zone 1
21/03/12 09:08:10	Parameter configuration
21/03/12 09:07:53	Parameter configuration
21/03/12 09:06:17	Parameter configuration
21/03/12 09:05:46	Permanent exclusion Zone 1
21/03/12 09:05:42	Remote access Level 3
21/03/12 09:03:42	Access device by telephone
21/03/12 09:00:55	Disarming Program 1
21/03/12 09:00:50	Remote access Level 3
21/03/12 09:00:40	Remote access Level 3
21/03/12 09:00:40	Remote access Level 3



To deepen the issue refer to the Tecnoalarm publication "Guide to the RSC® Technology".

# RSC® Technology

## Communication buses and security

The Tecnoalarm systems use three separate serial communication buses, dedicated to different kinds of devices: the standard RS485 serial bus called Serial Bus, the bus of the RSC® detectors called Sensor Bus and that of the RSC® sirens called the Siren Bus. They are independent and use specific communication protocols. The data are encrypted to ensure a high level of protection against sabotage attempts.

## Documentation and support

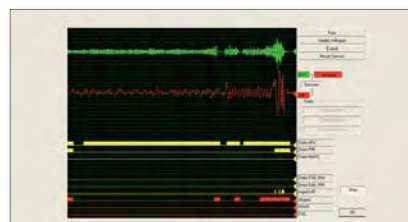
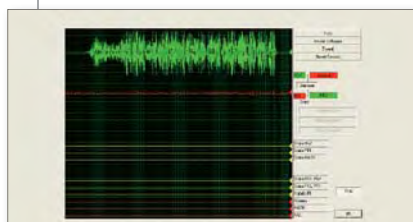
As prescribed by the European standards, on delivery of the installation, the installer must issue a document which summarizes the composition of the system and certifies the efficiency and consistency of the installed devices with the project. The system overview is easier to draw with the Hardware coherence control tool of the Tecnoalarm software. In the event of an alarm, the installer can give the user precise answers supported by data and alarm graph from the event memory.

## Installation

The RSC® technology permits a reduction of the times and costs of installation by up to 70% through simplified wiring. After the setup, the Hardware coherence control tool helps to find possible errors made during installation and programming. This tool verifies the presence of all the components, measures the power supply voltage of the devices and reads the internal temperature of the detectors which base their functioning principle on the temperature delta.

## Maintenance and self test

The technician of the installation company can verify the setting and functioning of each device and adapt programming from its office without being on the site. Accordingly, at least one of the two annual inspections required by the norms can be made remotely. The self test functions of the RSC® devices deserve particular attention. The self-powered siren, for instance, automatically check the status of the battery, horn, flashlight and tamper protections.



## RSC® LICENSE

7

The RSC® license, identified by the key 7 in the software info window, permits programming and management of the RSC® devices. The license is available for the following software: Programming, Remote Management and TCP/IP.



PROGRAMMING



REMOTE  
MANAGEMENT



TCP/IP


























# SPEED PLUS

## Input expansions

The versatile and modular structure can be considered an intrinsic characteristic of the Tecnoalarm systems, characteristic which the RSC® range of the input expansions fully meet. The range includes three models able to satisfy any installation requirement and guarantee an efficient use of the system's RSC® resources.



ection		SPEED ALM8 PLUS									
		<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440									
		Expansion module with 4 Sensor Bus ports for the connection of 8 RSC® detectors from Tecnoalarm - 1 Siren Bus port for the connection of RSC® sirens - 4 programmable outputs - 1.8A switching power supply - 12V/7Ah battery - Connection via RS485 serial bus - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 350 x 285 x 93mm									
		Item no. F101SPEALM8PLUS									
SPEED 8 PLUS		 Approved for certified systems									
		<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440									
		Expansion module with 1 Sensor Bus port for the connection of 8 RSC® detectors from Tecnoalarm - 2 programmable outputs - Connection via RS485 serial bus - Dimensions (L x H) 124 x 68mm - ABS casing (optional) <i>N.B. Compatible casings C100P and C90</i>									
		Item no. F101SPEED8PLUS									
SPEED 4 PLUS		 Approved for certified systems									
		<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440									
		Expansion module with 1 Sensor Bus port for the connection of RSC® detectors from Tecnoalarm and 4 inputs for the connection of RDV® and Zone Bus detectors from Tecnoalarm as well as conventional detectors - 1 programmable output - Connection via RS485 serial bus - Dimensions (L x H) 124 x 68mm - ABS casing (optional) <i>N.B. Compatible casings C100P and C90</i>									
		Item no. F101SPEED4PLUS									

## EXPANSIONS MODULES - Accessories

	<b>C100P</b>		<b>C90</b>
	ABS casing - Design by Pininfarina - Dimensions (L x H x D) 270 x 156 x 68mm - White color Item no. C110C100P		ABS casing - Dimensions (L x H x D) 165 x 110 x 41mm - White color Item no. C110C90

Power supplies

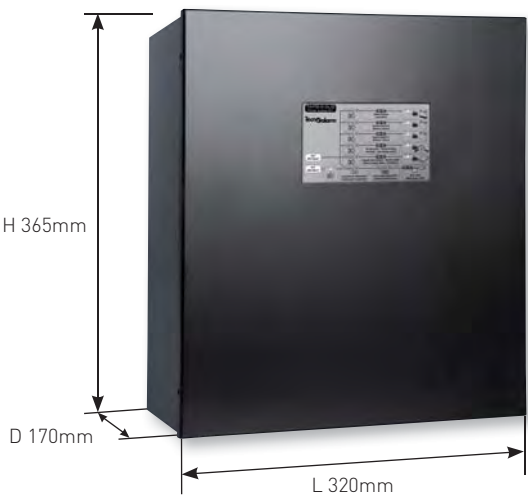
TAPS-8 BUS

The TAPS-8 BUS is a switching Fly-back power supply, which is connected via serial bus to the Tecnoalarm systems.

The power supply supports the RSC® technology and complies with the European Standard EN 50131-6, security grade 2 or 3 (depending on the connected batteries and the degree of remote control used). It provides 1 Siren Bus port for the connection of RSC® sirens and 4 programmable outputs.

The battery test is performed either automatically or manually and provides the automatic disconnection of the batteries in case of deep discharge. Detailed status signaling is available through 6 LED on the front panel.

Max. output current 8A @13.8V DC - 2x 12V/17Ah batteries - Metal casing - Black color



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

TAPS-8 BUS

Item no. F107TAPS-8BUS



## TAPS-8 BUS - Technical and functional specifications

General features	Type	8A/13.8V DC type A
System features	RS485 serial bus	2
	Baud rate	38,400bps
	Outputs	4 programmable
Electrical output specifications	Power supply outputs	4 parallel - 2 serial
	Output voltage	12.5V...13.8V DC
	Max. ripple	<50mV p-p
	Available current	1.1A @13.8V DC per output
	Battery recharge current	Max. 850mA
	Current available for loads	Max. 5.5A
	Overvoltage signal	>16V +/- 10%
	Overcharge signal	1 LED per output
Self test and failure signals	Tamper	✓
	Power supply lost	✓
	Power supply failure	✓
	Fuse failure	✓
	Power supply failure (voltage out of range)	✓
	Power supply overcharge (low voltage)	✓
	Low battery	✓
	Failure battery 1	✓
	Failure battery 2	✓
	Battery disconnection	✓
Signaling LED	Low battery	✓
	Failure battery 1	✓
	Failure battery 2	✓
	Overcharge	✓
	Power supply failure	✓
	Power supply status	✓
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
External power supply	Type	8A/14.4V DC switching Fly-back
	Operating voltage	230V AC +10/-15% 50Hz
	Max. consumption	600mA AC
Batteries (Storage Device)	Capacity	2x 12V/17Ah
	Battery test	Automatic/manual
	Low battery threshold	10.8V DC
	Cut-off voltage	<8.8V DC
	Charging time	80% ca. 19h (2 batteries of 17Ah)
	Autonomy (Grade 2)	12h (2.83Ah*)
	Autonomy (Grade 3)	60h (0.56Ah*)
	Autonomy (Grade 3 remotely controlled)	30h (1.12Ah*)
Physical specifications	Environmental class	II
	Casing	Metal
	Dimensions (L x H x D)	320 x 365 x 170mm
	Weight	5.8kg
	Operating temperature	-10°C...+55°C
Conformity	Standard	EN 50131-6
	Security grade	2 or 3**
	Notified body	IMQ

\* Available current for loads in case of power failure

\*\* Depending on the connected batteries and the degree of remote control used

## Dual technology for indoor use

### TWINTeC BUS - TWINTeC MASK BUS

In the design of these detectors, Tecnoalarm has leveraged all its experience. The sophisticated digital processing of the signals detected by the infrared and microwave sensors permits a sure discrimination of the alarms. The AND and WALK detection logics, combined with the RDV® technology, are only some of the many programmable functioning parameters. The self test and the temperature compensation functions complete a set of sophisticated diagnostic functions. The detector TWINTeC MASK BUS is equipped with an antimasking protection, which, in the event of a masking attempt, induces the detector automatically to adopt the Walk logic.



### TWINTeC BUS - TWINTeC MASK BUS - Technical and functional specifications

Detection features	Microwave frequency	10.525GHz*
	Sensitivity	Programmable (5 settings)
	Response time	Programmable (4 settings)
	Pulse count	Programmable (2 settings)
	Infrared beams	29
	Levels (infrared beams)	4
	Max. range	18m
Detection logics	AND	IR + MW
	OR**	IR or MW
	WALK	IR + MW or MW + MW
	AND + RDV®	IR + MW with Doppler filter
	WALK + RDV®	MW + MW with Doppler filter
Coverage	IR	108°
	MW	72° horiz. - 36° vert.
Signaling	Alarm	✓
	Tamper	✓
	Antimasking	✓
	Failure	✓
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
	Antimasking**	Programmable

Active status	Always active or with armed program	Programmable
Functions	Self test	Automatic
	Temperature compensation	Automatic
Electrical specifications	Rated voltage	12V DC
	Operating voltage	9V DC...15V DC
	Consumption TWINTeC BUS	Stand-by 17mA @ 12V DC Max. 28mA @ 12V DC
	Consumption TWINTeC MASK BUS	Stand-by 20mA @ 12V DC Max. 30mA @ 12V DC
Connection	RS485	Sensor Bus
Physical specifications	Environmental class	II
	Protection class	IP30-IPK02
	Casing	ABS
	Dimensions (L x H x D)	68 x 118 x 51mm
	Weight	160g
	Operating temperature	-10°C...+55°C
Conformity	Standard	EN 50131-2-4
	Security grade TWINTeC BUS	2
	Security grade TWINTeC MASK BUS	3
	Notified body	IMQ

\* Also available with the frequencies 9.9GHz and 9.35GHz (see table of models)

\*\* Only available with TWINTeC MASK BUS

# TWINTec BUS



## TWINTec BUS



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

The detector is compliant with EN 50131-2-4- Security grade 2.

Item no. F102TWINB18/V MW frequency 10.525GHz

Item no. F102TWB18/V-99 MW frequency 9.9GHz

Item no. F102TWB18/V-93 MW frequency 9.35GHz

## TWINTec MASK BUS



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

The detector is compliant with EN 50131-2-4- Security grade 3.

Item no. F102TWINMB18/V MW frequency 9.35GHz

Item no. F102TWMB18/V-99 MW frequency 9.9GHz

Item no. F102TWMB18/V-93 MW frequency 9.35GHz

## TWINTec BUS - TWINTec MASK BUS - Accessories

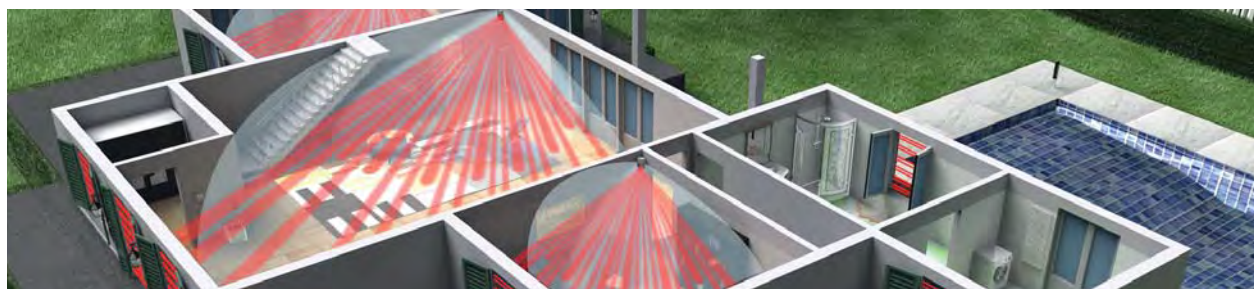
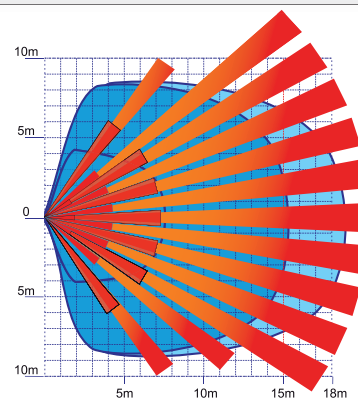
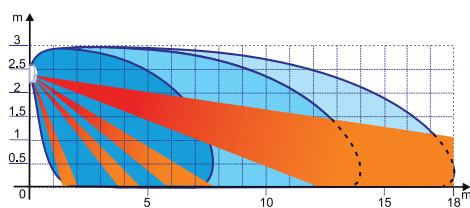


### SNODO 2000

Self-protected swivel mounting bracket for TWINTec, INFROTEK series detectors, TWINBAND WL and IR500 BWL - 90° hor. and 30° vert. orientation (sold in packs of 10)

Item no. F102SNODO2000

### Coverage diagrams



According to the CEPT T/R 70-03 recommendation, the device can operate in the listed countries

9.35GHz*	A	B	BG	CH	CY	CZ	D	DK		EST			FL	GE	GR	H	HR		IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	SK
9.9GHz*	A	B	BG	CH	CY	CZ		DK		EST	F	FIN	FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	
10.525GHz*		B	BG	CH	CY			DK	E				FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO	S	SLO	

\* Center frequency indicated on the data label inside the product

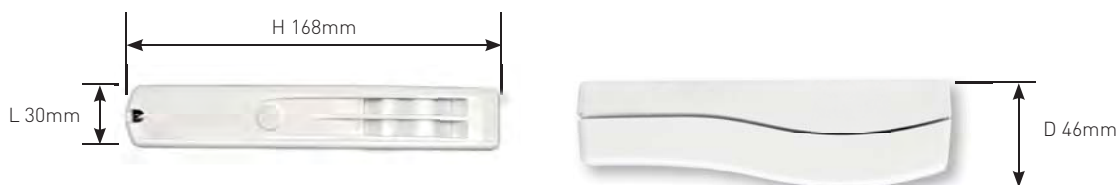
## Passive infrared for indoor use

### DUALRED BUS

The detector DUALRED BUS offers a reliable protection of doors and windows. It is composed of two physical/logical units, a dual PIR sensor and an internal magnetic contact. Alternatively to the internal contact, an external magnetic contact, a rope contact or an inertial detector can be connected.

The two physical/logical units can be programmed so as to function together, with the AND or the OR detection logic, or independently. In the independent mode, the two units are identified by the system as two independent zones. If the magnetic contact is opened during the arming phase, it is automatically excluded. In this case, if the combined functioning has been set with the AND detection logic, the detector automatically adopts the OR logic.

The detector DUALRED BUS can be used indoors or in sheltered outdoor areas, not directly exposed to the weather conditions. It is equipped with a programmable antimasking function and automatic diagnostic functions, such as self test and temperature compensation. Thanks to RSC® technology, all functioning parameters, such as sensitivity, range and pulse count are programmable locally and from a distance. In addition, it is possible to define the privileged sense of beam crossing.



### DUALRED BUS - Technical and functional specifications

Physical/logical unit IR	IR elements	2
	Infrared beams	10
	Levels (infrared beams)	2
	Max. range	5m
	Sensitivity	Programmable (2 settings)
Physical/logical unit contact	Internal magnetic contact	Reed ampulla
	Input	Magnetic contact - rope contact - inertial detector
	Self exclusion	Programmable
Functioning mode	Combined	Occupies 1 zone
	Independent	Occupies 2 zones
Detection logic	AND	IR + contact
	OR	IR or contact
	Sense of beam crossing	3 settings
	Pulse count	1 or 3 pulses
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
	Antimasking	Programmable

Signaling	Alarm	✓
	Tamper	✓
	Antimasking	✓
	Failure	✓
Active status	Always active or with armed program	Programmable
Functions	Self test	Automatic
	Temperature compensation	Automatic
Electrical specifications	Rated voltage	12V DC
	Operating voltage	10V DC...14.5V DC
	Consumption in stand-by	20mA @ 12V DC
	Max. consumption	25mA @ 12V DC
Connection	RS485	Sensor Bus
Physical specifications	Environmental class	II
	Protection class	IP34-IPK02
	Casing	ASA
	Dimensions (L x H x D)	168 x 46 x 30mm
	Weight	80g
	Operating temperature	-20°C...+55°C

# DUALRED BUS



## DUALRED BUS

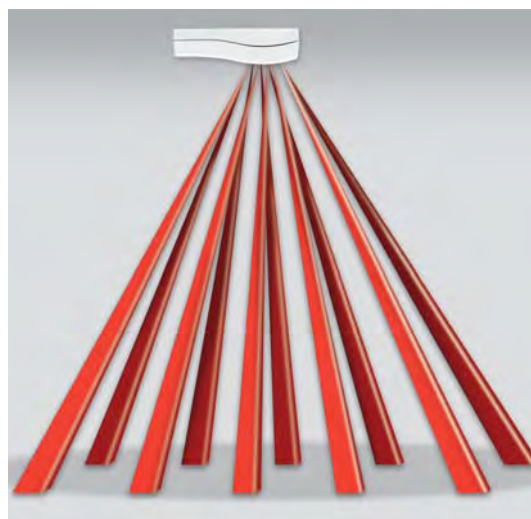
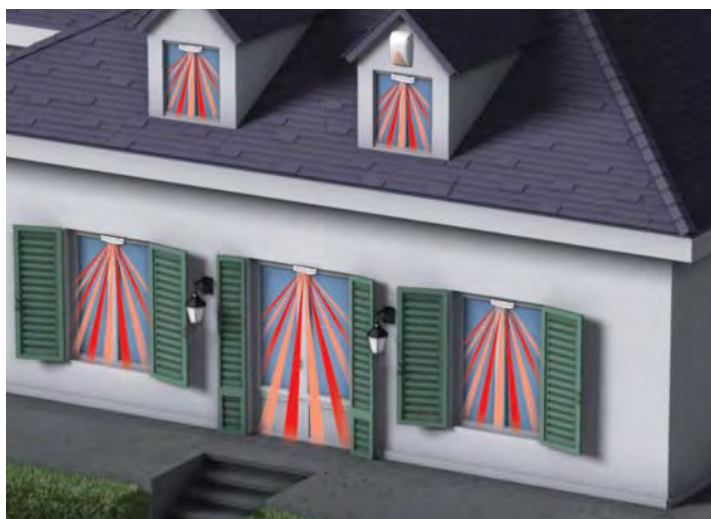
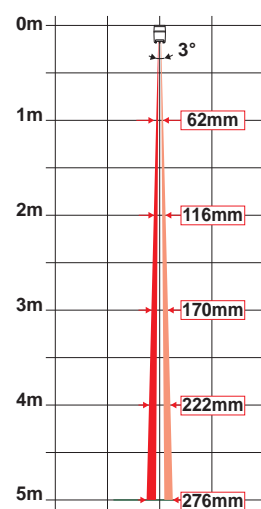
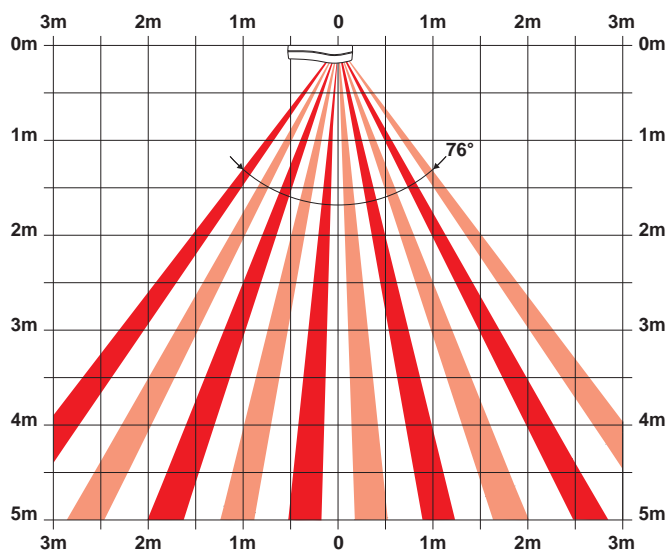


Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Item no. F102DUALREDBUS White color

Item no. F102DUALREDBUSM Brown color

### Coverage diagrams

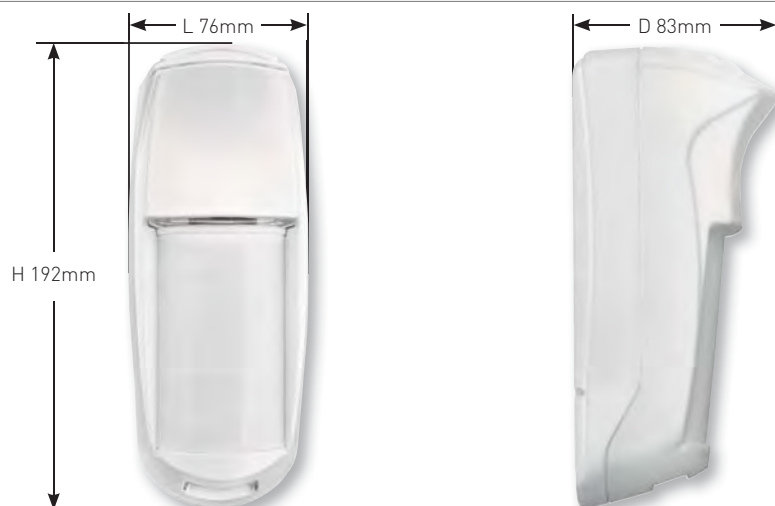




## Dual technology for outdoor use

### GLOBAL SPACE BUS

The GLOBAL SPACE BUS is a dual technology detector for outdoor mounting with a multi-point technology: triple infrared and microwave. The very tight protection, made of 43 infrared beams distributed on 5 levels, combined with the microwave beam, is capable of satisfying any security requirement. The programmable AND detection logic permits the adaptation of the detector's functioning to the characteristics of the area to be protected. The detector is equipped with a programmable antimasking function and automatic diagnostic functions, such as self test and temperature compensation. Thanks to RSC® technology, all functioning parameters, such as sensitivity, range and pulse count are programmable locally and from a distance.



### GLOBAL SPACE BUS - Technical and functional specifications

Detection features	Microwave frequency	10.525GHz*
	Microwave sensitivity	Programmable (6 settings)
	Response time	Programmable (4 settings)
	IR elements	3
	Infrared beams	43
	Levels (infrared beams)	5
	Max. range	15m
	Infrared sensitivity	Programmable (independent for each IR)
	Pulse count	Programmable (independent for each IR)
Detection logics	AND adjacent beams	2 adjacent IR + MW
	AND single beam	1 IR + MW
	AND two beams with priority	2 IR + MW with IR1 prior-ranking
	AND two beams	2 IR + MW
	AND upper beams	IR1 + IR2 + MW
	AND lower beams	IR2 + IR3 + MW
	AND + RDV®	IR + MW + RDV®
	Microwave	Excludable
Coverage	IR	100°
	MW	72° horiz. - 36° vert.
Signaling	Alarm	✓
	Tamper	✓
	Antimasking	✓
	Failure	✓
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
	Antimasking	Programmable
	Active status	Always active or with armed program
Functions	Self test	Automatic
	Temperature compensation	Automatic
Electrical specifications	Rated voltage	12V DC
	Operating voltage	10V DC...14.5V DC
	Consumption in stand-by	28mA @ 12V DC
	Max. consumption	32mA @ 12V DC
Connection	RS485	Sensor Bus
Physical specifications	Environmental class	III
	Protection class	IP55-IP64
	Casing	ASA
	Dimensions (L x H x D)	76 x 192 x 83mm
	Weight	240g
	Operating temperature	-25°C...+55°C
* Also available with the frequencies 9.9GHz and 9.35GHz (see table of models)		





# GLOBAL SPACE BUS

OUTDOOR

## GLOBAL SPACE BUS

3 IR  
+  
1 MW

AND  
LOGIC



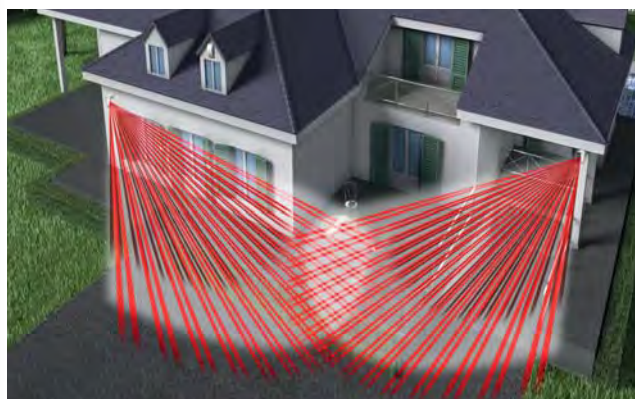
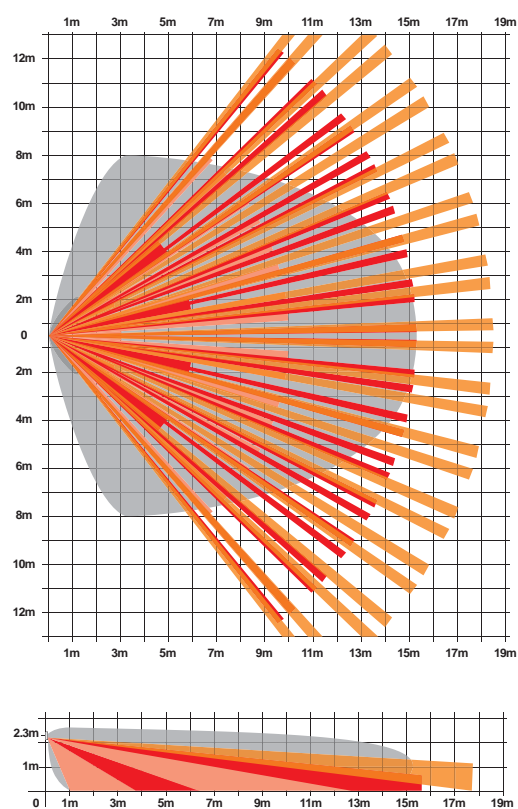
Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Item no. F102GLOSPACEBUS MW frequency 10.525GHz

Item no. F102GLOSPBUS/99 MW frequency 9.9GHz

Item no. F102GLOSPBUS/93 MW frequency 9.35GHz

### Coverage diagrams



RSC® TECHNOLOGY

## GLOBAL SPACE BUS - Accessories



### CORNER MOUNTING BRACKET

Corner mounting bracket -  
22.5° or 45° angle

Item no. F102STAFFAGLOB



### RAIN COVER

Rain cover -  
Dimensions (L x H x D) 136 x 58 x 162mm

Item no. F102GLOCALOTTA

According to the CEPT T/R 70-03 recommendation, the device can operate in the listed countries

9.35GHz*	A	B	BG	CH	CY	CZ	D	DK		EST			FL	GE	GR	H	HR		IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	SK
9.9GHz*	A	B	BG	CH	CY	CZ		DK		EST	F	FIN	FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	
10.525GHz*		B	BG	CH	CY			DK	E				FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO	S	SLO	

\* Center frequency indicated on the data label inside the product

## Passive infrared for outdoor use

### TRIRED BUS

The TRIRED BUS detector features a unique protection technique with a triple passive infrared sensor. Designed for outdoor use, resistant to extreme weather conditions, it is an ideal solution for the protection of the areas close to homes, such as balconies and terraces, with ranges of up to 30 meters. The integrated swivel mounting bracket offers ample opportunities for orientation. The range, adjustable for each beam, 8 AND detection logics and 3 independent alarm counters (1 for each beam) are only some of the many programmable parameters. The detector features a programmable antimasking function, which adapts the detection logic to AND of 2 beams in case of a masking attempt.



### TRIRED BUS - Technical and functional specifications

Detection features	IR elements	3
	Infrared beams	3
	Levels (infrared beams)	3
	Max. range	30m
	Sensitivity	Programmable (16 settings)
Detection logics	AND of 2 undefined beams	1 mode
	AND of 2 defined beams	3 modes
	AND of 3 undefined beams	1 mode
	AND of 3 beams with priority	3 modes
	Pulse count	1 to 4 pulses (independent for each beam)
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
	Antimasking	Programmable (independent for each beam)
Signaling	Alarm	✓
	Tamper	✓
	Antimasking	✓
	Antimasking	✓
Active status	Always active or with armed program	Programmable
Functions	Self test	Automatic (independent for each beam)
	Temperature compensation	Automatic
	Coverage test	Manual with LED and buzzer
Electrical specifications	Rated voltage	12V DC
	Operating voltage	10V DC...14.5V DC
	Consumption in stand-by	13mA @ 12V DC
	Max. consumption	20mA @ 12V DC
Connection	RS485	Sensor Bus
Physical specifications	Environmental class	II
	Protection class	IP55-IK04
	Casing	ASA
	Dimensions (L x H x D)	82 x 400 x 260mm
	Weight	1.2kg
	Operating temperature	-20°C...+65°C



## TRIRED BUS



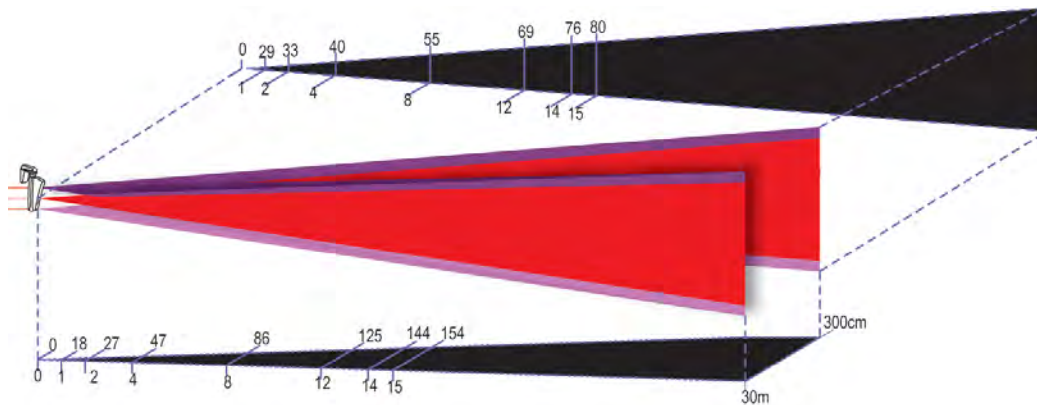
Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Item no. F102TRIREDBUS

OUTDOOR

RSC® TECHNOLOGY

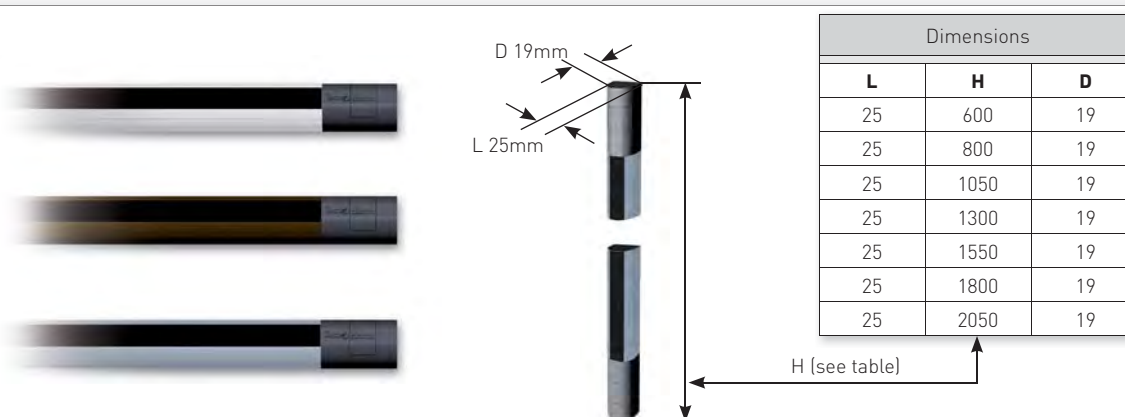
### Coverage diagrams



## Active infrared for outdoor use

### WINBEAM/S - DOORBEAM/S

The barriers WINBEAM/S and DOORBEAM/S represent a smart solution for the protection of the access ways of apartments, homes and buildings in general, both indoors and in protected outdoor areas. They offer considerable resistance to mechanical stress and weather conditions and are distinguished by superior characteristics, operational flexibility and ease of installation. The sophisticated digital synchronism immunizes the barriers from parasite reflections and other disturbing factors. The wide range, composed by several colors and heights, also customizable, is characterized by a functional and elegant design that allows seamless integration in every architectural framework.



### WINBEAM/S - DOORBEAM/S - Technical and functional specifications

Detection features	Range	Max. 16m			
	Beam power (range)	Programmable (3 settings)			
	Cable exit	Programmable (2 settings)			
	Beams	Enabling/disabling of each beam			
	Response time	Programmable (2 settings)			
	Detection logic	Programmable (4 settings)			
Connection	RS485	Zone Bus			
	Connection cable	6m prewired			
	Conductors	3 (2 power supply, 1 signal)			
	Synchronization	Digital automatic			
Electrical specifications	Rated voltage	12V DC			
	Operating voltage	9.5V...14.5V DC			
Physical specifications	Environmental class	III (EN 50130-5)			
	Protection class	IP52			
	Casing	Anodized aluminum			
	Operating temperature	-5°C...+55°C			
Consumption	Model	TX min.	TX max.	RX stand-by	RX alarm
	WINBEAM/S 60	7.2mA	16.5mA	10mA	18mA
	WINBEAM/S 80	7.5mA	19mA	11mA	19mA
	WINBEAM/S 105	7.6mA	21.5mA	12mA	20mA
	WINBEAM/S 130	7.7mA	24mA	13mA	21mA
	DOORBEAM/S 155	7.8mA	26.5mA	14mA	22mA
	DOORBEAM/S 180	8.0mA	29mA	15mA	23mA
	DOORBEAM/S 205	8.2mA	31.5mA	16mA	24mA



# WINBEAM/S - DOORBEAM/S

OUTDOOR

Zone  
BUS

Connection

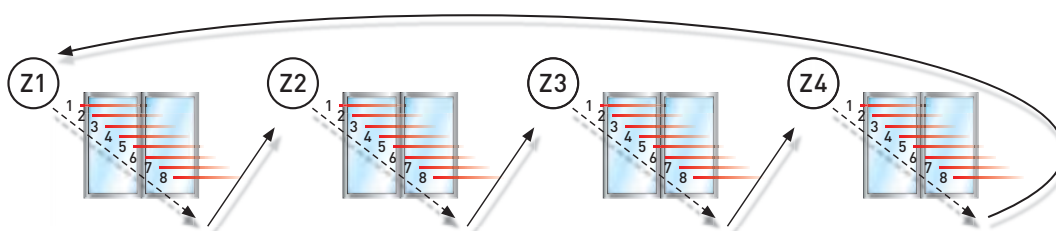
## WINBEAM/S - DOORBEAM/S



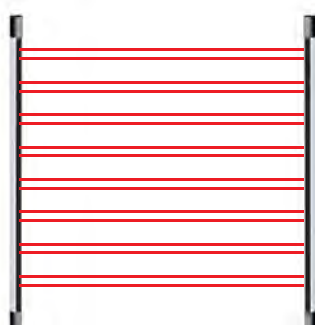
Compatible systems: TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Models	Item no. brown	Item no. white	Item no. gray met.	Height	Beams
WINBEAM/S 60	F102WINBS60	F102WINBS60BI	F102WINBS60GR	60cm	2
WINBEAM/S 60T	F102WBS60T	F102WBS60BIT	F102WBS60GRT	61...79mm	2
WINBEAM/S 80	F102WINBS80	F102WINBS80BI	F102WINBS80GR	80cm	3
WINBEAM/S 80T	F102WBS80T	F102WBS80BIT	F102WBS80GRT	81...104mm	3
WINBEAM/S 105	F102WINBS105	F102WINBS105BI	F102WINBS105GR	105cm	4
WINBEAM/S 105T	F102WBS105T	F102WBS105BIT	F102WBS105GRT	106...129mm	4
WINBEAM/S 130	F102WINBS130	F102WINBS130BI	F102WINBS130GR	130cm	5
WINBEAM/S 130T	F102WBS130T	F102WBS130BIT	F102WBS130GRT	131...154mm	5
DOORBEAM/S 155	F102DOORBS155	F102DOORBS155BI	F102DOORBS155GR	155cm	6
DOORBEAM/S 155T	F102DBS155T	F102DBS155BIT	F102DBS155GRT	156...179mm	6
DOORBEAM/S 180	F102DOORBS180	F102DOORBS180BI	F102DOORBS180GR	180cm	7
DOORBEAM/S 180T	F102DBS180T	F102DBS180BIT	F102DBS180GRT	181...204mm	7
DOORBEAM/S 205	F102DOORBS200	F102DOORBS200BI	F102DOORBS200GR	205cm	8
DOORBEAM/S 205T	F102DBS200T	F102DBS200BIT	F102DBS200GRT	206...300mm	8

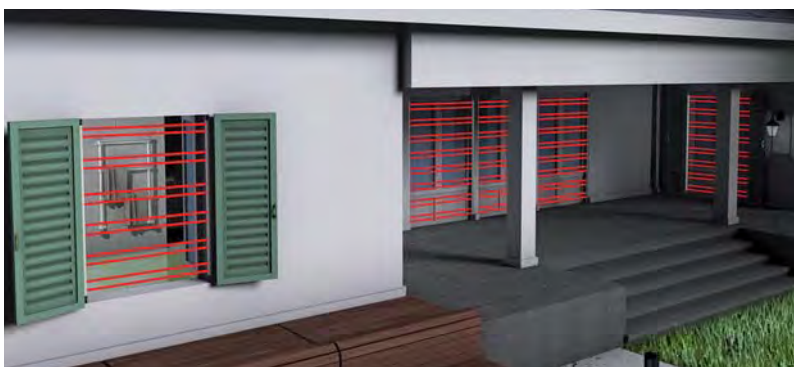
### Synchronization



### Configuration



Barrier configuration

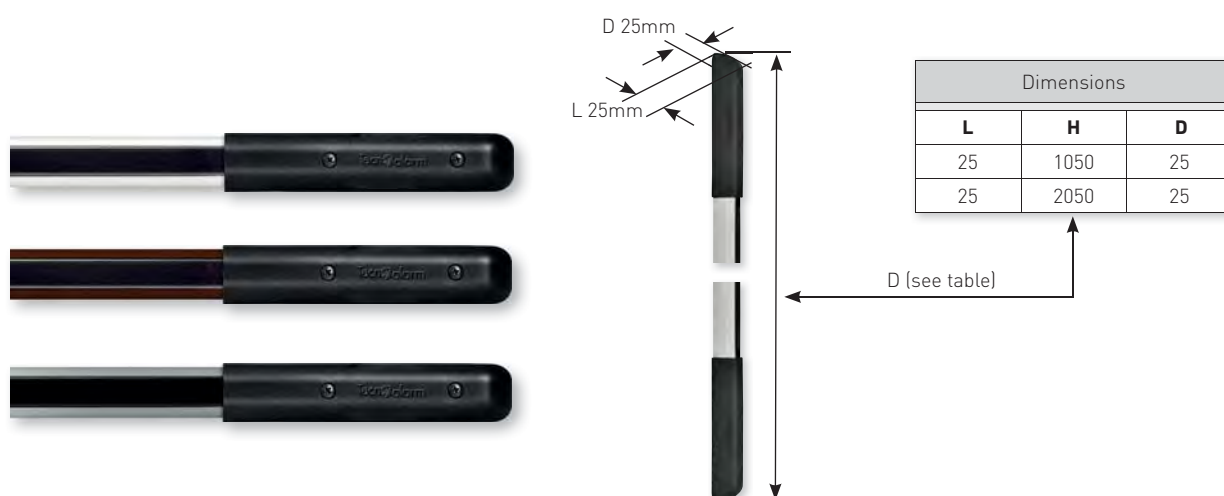


RSC® TECHNOLOGY

## Active infrared for outdoor use

### WINBEAM N - DOORBEAM N

The barriers WINBEAM N and DOORBEAM N are the evolution of the models WINBEAM/S and DOORBEAM/S, from which they adopt the advanced technical features. They can be used indoors and in protected outdoor areas and the new modular design, with the body being hooked into universal and interchangeable brackets, makes installation and maintenance extremely easy. The precise setting of beam power, able to reduce the range to 2 meters, permits the adaptation of the barriers' functioning in case of strong reflections caused by shiny surfaces. The barriers are equipped with a locally excludible anti-tamper protection against opening and detachment.



### WINBEAM N - DOORBEAM N - Technical and functional specifications

Detection features	Range	Max. 16m			
	Beam power (range)	Programmable (3 settings)			
	Cable exit	Programmable (2 settings)			
	Beams	Enabling/disabling of each beam			
	Response time	Programmable (2 settings)			
	Detection logic	Programmable (4 settings)			
Connection	RS485	Zone Bus			
	Connection cable	6m prewired			
	Conductors	3 (2 power supply, 1 signal)			
	Synchronization	Digital automatic			
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch			
Electrical specifications	Rated voltage.	12V DC			
	Operating voltage	9,5V...14,5V DC			
Physical specifications	Environmental class	II (EN 50130-5)			
	Protection class	IP53			
	Casing	Anodized aluminum			
	Operating temperature	-5°C...+55°C			
Consumption	Model	TX min.	TX max.	RX stand-by	RX alarm
	WINBEAM N 105	7.6mA	21.5mA	12mA	20mA
	DOORBEAM N 205	8.2mA	31.5mA	16mA	24mA



# WINBEAM N - DOORBEAM N

OUTDOOR

Zone  
BUS

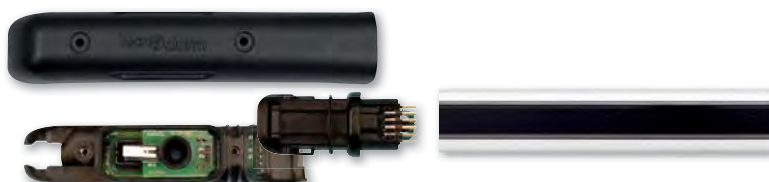
Connection

## WINBEAM N - DOORBEAM N

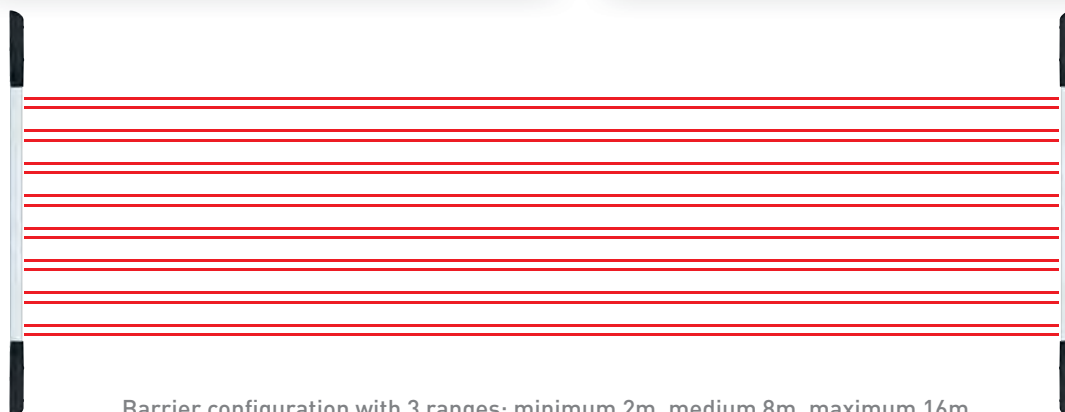
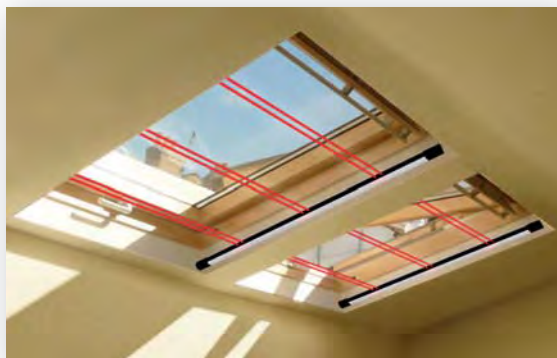


Compatible systems: TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

MODELS	ITEM NO. BROWN	ITEM NO. WHITE	ITEM NO. GRAY MET.	HEIGHT	BEAMS
WINBEAM N 105	F102WINBN105	F102WINBN105BI	F102WINBN105GR	105mm	4
DOORBEAM N 205	F102DOORBN205	F102DOORBN205BI	F102DOORBN205GR	205mm	8



Completely modular design



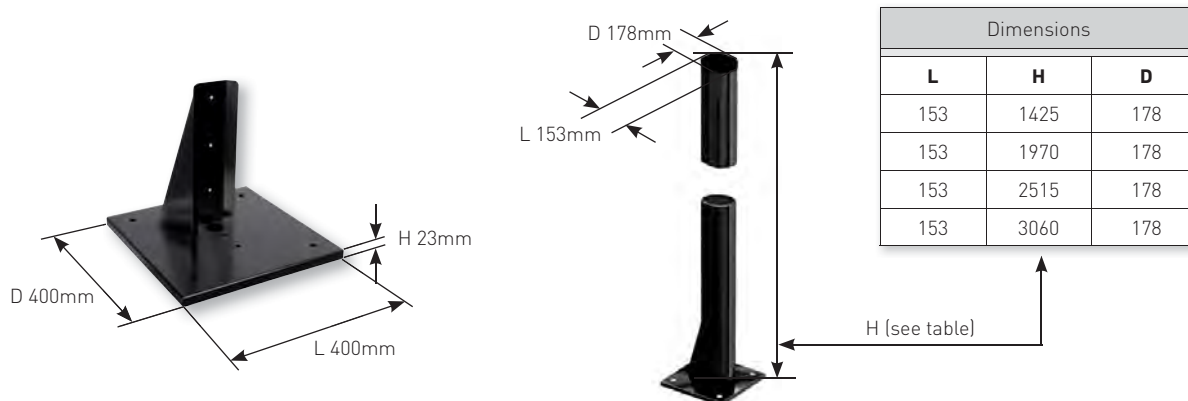
Barrier configuration with 3 ranges: minimum 2m, medium 8m, maximum 16m

RSC® TECHNOLOGY

## Active infrared for outdoor use

### BEAMTOWER

The BEAMTOWER are active infrared barriers for perimeter protection, mounted in self-supporting aluminum columns. The great versatility and the wide variety of models allow to create not only the traditional barrier but also open and closed perimeter configurations for the protection of large outdoor areas composed of up to 8 tracks.



### BEAMTOWER - Technical and functional specifications

Detection features	Range	Max. 150m	
	Beam power	Programmable (5 settings)	
	Beams BEAMTOWER/4	4	
	Beams BEAMTOWER/6	6	
	Beams BEAMTOWER/8	8	
	Beams BEAMTOWER/8 3M	8	
	Detection logic	Programmable (16 settings)	
	Horizontal orientation	180° (+/- 90°)	
	Vertical orientation	20° (+/- 10°)	
Functions	Disqualification	Programmable	
Configurations	Barrier	1 mode	
	Closed perimeter	3 modes	
	Open perimeter	6 modes	
Connection	RS485	Sensor Bus	
	Synchronization	Digital automatic	
Anti-tamper protection	Anti-opening	Micro-switch	
	Anti-climb-over	Micro-switch	
	Antimasking	Programmable	
Electrical specifications	Rated voltage	13V DC	
	Operating voltage	10.5V...14.5V DC	
	AC Powersupply (optional)	230/28V AC	
	Battery	12V/7Ah	
Physical specifications	Environmental class	IV	
	Protection class	IP45 (retrofitable)	
	Casing	Al + PC	
	Operating temperature	-25°C...+55°C	
	Wall mounting	✓	
	Floor mounting	Optional fastening base	
Consumption	Model	TX	RX
	BEAMTOWER/4	197mA	165mA
	BEAMTOWER/6	243mA	180mA
	BEAMTOWER/8	288mA	196mA
	BEAMTOWER/8 3M	288mA	196mA
	Heater modules	770mA @ 28V AC	



# BEAMTOWER

OUTDOOR

RSC® TECHNOLOGY



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

## BEAMTOWER/4

Item no. F102BEAMTW/4

TX + RX  
4 BEAMS

SYNC MODE

RANGE  
150m

HEIGHT  
1425mm

IP45

## BEAMTOWER/4 RX

Item no. F102BEAMTW/4RX

RX  
4 BEAMS

Additional BEAMTOWER/4 receiver column for open perimeters with 2, 4, 6 tracks

## BEAMTOWER/6

Item no. F102BEAMTW/6

TX + RX  
6 BEAMS

SYNC MODE

RANGE  
150m

HEIGHT  
1970mm

IP45

## BEAMTOWER/6 RX

Item no. F102BEAMTW/6RX

RX  
6 BEAMS

Additional BEAMTOWER/6 receiver column for open perimeters with 2, 4, 6 tracks

## BEAMTOWER/8

Item no. F102BEAMTW/8

TX + RX  
8 BEAMS

SYNC MODE

RANGE  
150m

HEIGHT  
2515mm

IP45

## BEAMTOWER/8 RX

Item no. F102BEAMTW/8RX

RX  
8 BEAMS

Additional BEAMTOWER/8 receiver column for open perimeters with 2, 4, 6 tracks

## BEAMTOWER/8 3M

Item no. F102BEAMTW/83M

TX + RX  
8 BEAMS

SYNC MODE

RANGE  
150m

HEIGHT  
3060mm

IP45

## BEAMTOWER/8 3M RX

Item no. F102BEAMTW/8RX3

RX  
8 BEAMS

Additional BEAMTOWER/8 3M receiver column for open perimeters with 2, 4, 6 tracks

## BEAMTOWER - Accessories



### HEATER KIT

Thermostat and heater module for BEAMTOWER

Item no. F102BERISC



### TA16/2 TRANSFORMER KIT

220/28V AC 60VA transformer kit for BEAMTOWER

Item no. C126TRASTA16/2



### TA/BT TRANSFORMER KIT

220/28V AC 150VA transformer kit for BEAMTOWER (to be used for extreme climates)

Item no. C126TRASTA/BT



### FASTENING BASE

Fastening base for floor mounting of BEAMTOWER - steel with cataphoresis treatment

Item no. F102BESTAFFA



### ALIGNMENT KIT

Suitcase with optical viewfinder and shutters for DUALBEAM WL, QUADBEAM and BEAMTOWER

Item no. F102KITMIRINO



### SHUTTERS

Shutters for DUALBEAM WL, QUADBEAM and BEAMTOWER (sold in packs of 10)

Item no. F102KITATTENUA



### FIBER OPTIC CONVERTER

Converter for the 2km extension of the serial bus with fiber optic cables

Item no. F130CONVFIBRA



### MONITOR 868

Wireless receiver for alignment of DUALBEAM WL, QUADBEAM, BEAMTOWER and EXPLORER BUS

Item no. F102MONITOR868

### MODBEAM modules

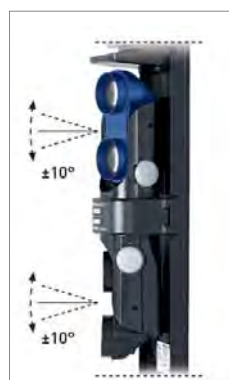
The MODBEAM lens modules are divided into transmitter and receiver modules. The transmitter module emits 2 beams, each of them composed of two parallel rays. The interruption of one beam is only validated if both rays it is composed of are cut: a technique which increases significantly the immunity against false alarms. The beams can be programmed independently, each with a different interruption time, one of the parameters, along with the number and the position of the interrupted beams, which compose the detection logic.

### Orientation

The lenses of the MODBEAM modules can be turned individually on the horizontal and vertical axis. The alignment of the beams is made with the help of two precision control knobs permitting a millimetric adjustment.

The  $\pm 90^\circ$  horizontal orientation of the beams permits the installation of the column in perimeter configurations with 180 degrees orientation of the beams.

The  $\pm 10^\circ$  vertical orientation of the beams permits the compensation of differences of levels if the columns are installed on craggy ground. According to the distance, the compensation varies from 1.7 to 10.5 meters.



### Heater module

Each column can be equipped, depending on the model, with a maximum of two heater modules which compensate the temperature inside the column in case it is particularly low (anti-freeze protection). The thermostatic control of the heaters is guaranteed by the controller.



### Anti-climb-over protection

The tilting top cap of the column contains the electronic board with the anti-opening and anti-climb-over switches. A climb-over attempt is detected as soon as the top cap springs back under the weight of an intruder.



### Controller

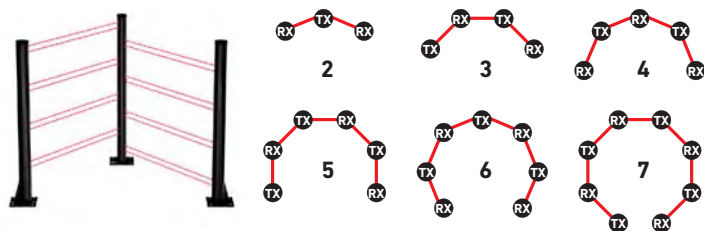
The controller is the centerpiece of the column and all its electronic components are connected to it. The controller of the receiver column is connected to the control panel or the input module and, for synchronization, to the corresponding controller of the transmitter column. The connections between the columns and the control panel are made through two different RS485 serial buses.



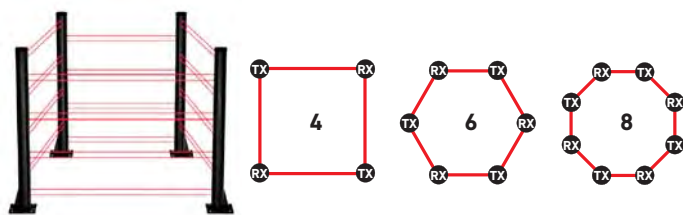
Configurations



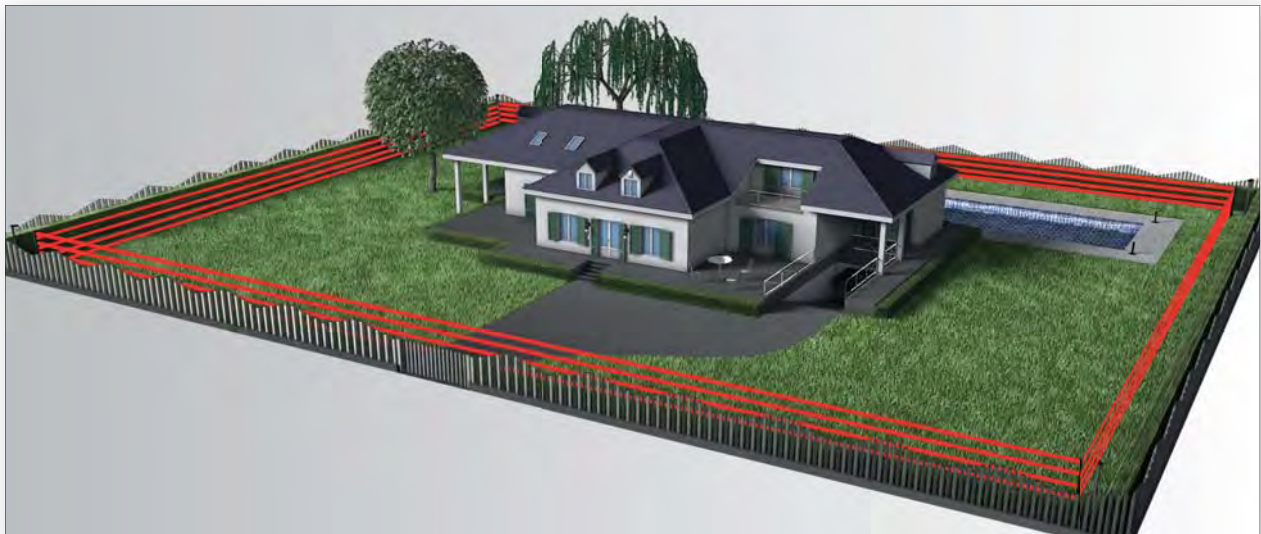
Barrier configuration



Open perimeter configuration



Closed perimeter configuration



## Microwave for outdoor use

### EXPLORER BUS

The EXPLORER BUS is a microwave barrier profiting from the long-term experience and know-how of Tecnoalarm in the design of perimeter protection for sites with high-risk, such as great industrial plants, solar parks, warehouses and airports. The barrier projects a beam of electromagnetic waves along the track to protect, which constitutes a sensitive barrier to intrusion attempts.

The barrier is highly resistant against weathering, light sources and RFI/EMI interferences.

Three models with different ranges and the programmable transmission channel allow to build configurations with practically every track length, including the combination of several barriers per track without causing interferences.



### EXPLORER BUS - Technical and functional specifications

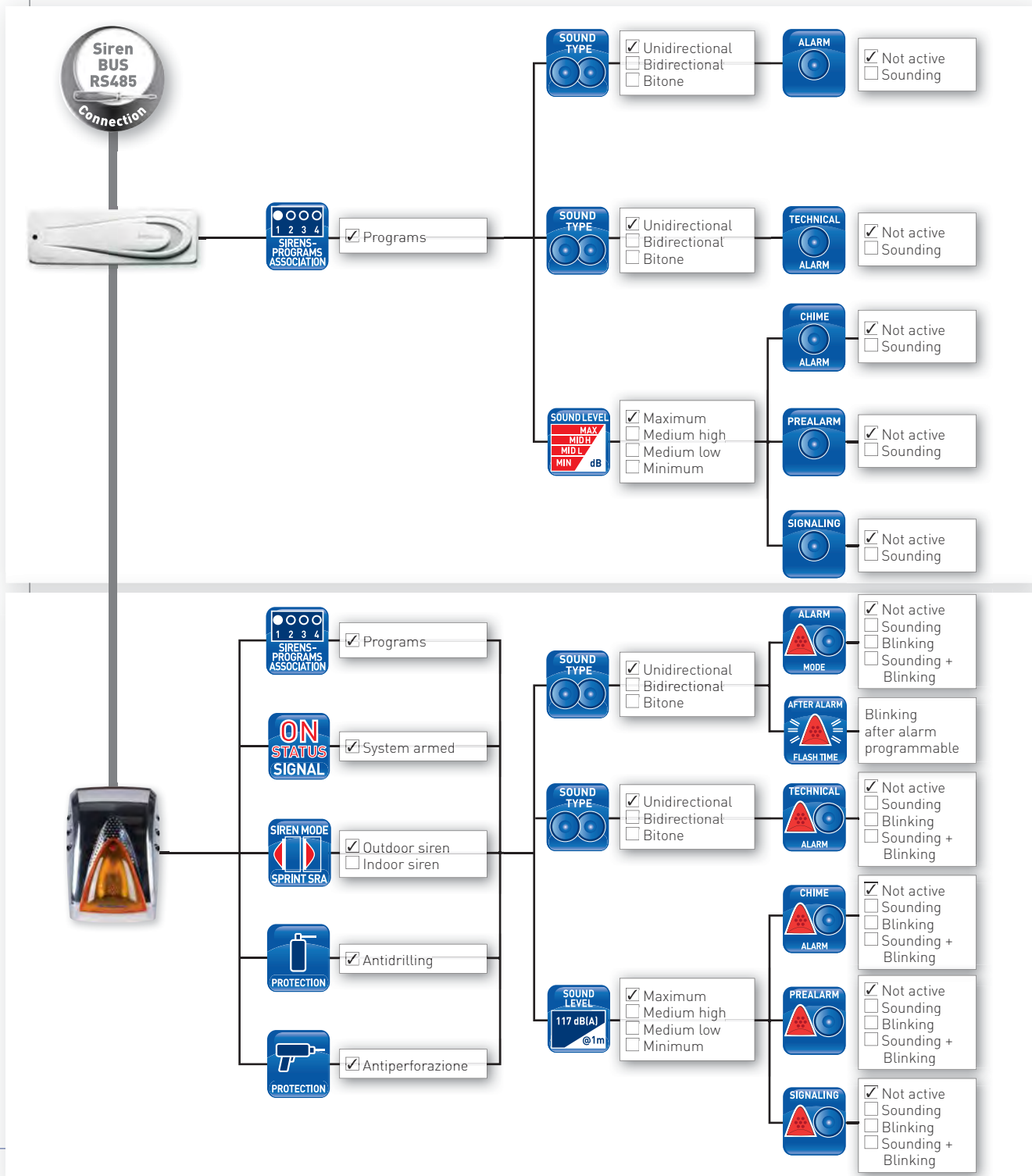
Detection features	Range EXPLORER BUS 600	Max. 60m
	Range EXPLORER BUS 1200	Max. 120m
	Range EXPLORER BUS 2200	Max. 220m
	Operating frequency	10.525GHz (50% impulse)
	Transmission channel	Programmable(5KHz - 6KHz - 7KHz - 8KHz)
	Transmission power	≤500mW
	Response time	Programmable (4 settings)
Functions	Sensitivity	Programmable (5 settings)
	Failure signaling	Excludible
	Supervision	Excludible
Anti-tamper protection	Anti-opening	Micro-switch
	Anti-twist	Mechanical
	Antimasking	Programmable
Connection	RS485	Sensor Bus

Electrical specifications AC power supply	Rated voltage	18V AC
	Max. consumption TX	260mA @ 18V AC
	Max. consumption RX	100mA @ 18V AC
Electrical specifications DC power supply	Rated voltage	13.8V DC
	Operating voltage	9V...15V DC
	Max. consumption TX	115mA @ 13.8V DC
	Max. consumption RX	45mA @ 13.8V DC
	Battery	12V/2.1Ah
	Current available for battery recharge	240mA
Physical specifications	Environmental class	IV
	Protection class	IP65
	Casing	Al + ABS
	Dimensions (L x H x D)	310 x 310 x 239.5mm
	Weight (w/o battery)	5.2kg
	Operating temperature	-25°C...+55°C
	Wall mounting	Optional wall mounting bracket
	Floor mounting	Optional mounting post





The RSC® technology allows to verify many of the sirens' functions with only 4 connecting wires. The signaling of the sirens can be diversified for each of the associated programs. The anti-tamper protections, able to defeat any attempt at sabotage, and the sophisticated self test functions ensure the highest level of security and reliability.



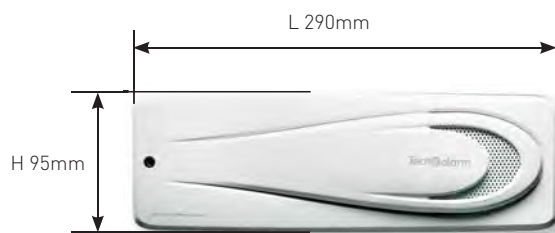


## Self-powered sirens for indoor use

### SIRTEC BUS

The SIRTEC BUS is a self-powered magneto-dynamic siren for indoor mounting. Functioning is completely programmable and can be diversified for each of the associated programs. The signals for alarm, prealarm, technical alarm, chime and system status are programmable as well as the acoustic arming/disarming signal for the associated programs.

Sound level 117dB(A) @ 1m - 12V/2.1Ah battery - Connection via RS485 serial bus - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 290 x 95 x 70mm - Certified to EN 50131-4 - Security grade 3



### SIRTEC BUS - Technical and functional specifications

Acoustic features	Sound level	117dB(A) @ 1m
	Frequency	2400Hz...3500Hz
	Volume for prealarm/ system status signaling	Programmable (4 settings)
	Sound type	Programmable (3 settings)
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
Functions	Functioning mode	Programmable (indoor or outdoor)
	Program association	Programmable (w/o restriction)
	Arming/disarming signal	Acoustic
	Alarm	Programmable
	Technical alarm	Programmable
	Prealarm	Programmable
	System status signaling	Programmable
	Chime	Programmable
Self test	Power supply	Automatic
	Battery	Automatic
	Horn	Automatic
Electrical specifications	Connection	RS485
	Siren Bus	
	Rated voltage	12V DC
	Operating voltage	10.5V...14.5V DC
	Stand-by consumption	8mA @ 12V DC
	Alarm consumption	45mA @ 12V DC
Physical specifications	Battery	12V/2.1Ah
	Battery recharge	Step-up
	Environmental class	II
	Protection class	IP31-IP06
	Casing	ABS
	Dimensions (L x H x D)	290 x 95 x 70mm
Conformity	Weight (w/o battery)	780gr
	Operating temperature	-10°C...+55°C
	Standard	EN 50131-4
	Security grade	3



### SIRTEC BUS



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Item no. F105SIRTECBUS White color

Item no. F105SIRTECBUSGR Gray metallic color



## Self-powered sirens for outdoor use

### SAEL 2010 BUS - SAEL 2010PRO BUS

With the new range of RSC® outdoor sirens, Tecnoalarm redefines the concepts of security, reliability, performance and energy consumption of the sirens. The RSC® technology bus allows to exercise on the sirens a continuous functional control and ensure the full efficiency of the devices. The sirens SAEL 2010 BUS and SAEL 2010PRO BUS are equipped with a complete range of anti-tamper protections capable of defeating any sabotage attempt. Sophisticated self test functions anticipate operating failures. The high-luminosity LED flashlight allows to create new signaling functions with dynamic lighting effects.



### SAEL 2010 BUS - SAEL 2010PRO BUS - Technical and functional specifications

Acoustic features	Sound level	103dB(A) @ 1m
		100dB(A) @ 3m
	Frequency	1400Hz...3600Hz
	Volume for prealarm/ system status signaling	Programmable (4 settings)
	Sound type	Programmable (3 settings)
Flashlight specifications	Type	LED
	Color	Orange
	Flash rate	45/min.
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
	Antifoam	✓
	Antidrilling*	✓
Functions	Functioning mode	Programmable (indoor or outdoor)
	Program association	Programmable (w/o restriction)
	Arming/disarming signal	Programmable
	System status signaling	Programmable
	Alarm	Programmable (3 settings)
	Technical alarm	Programmable (3 settings)
	Prealarm	Programmable (3 settings)
	System status signaling	Programmable (3 settings)
	Chime	Programmable (3 settings)
	After flashing	Programmable

Self test	Power supply	Automatic
	Battery	Automatic
	Horn	Automatic
	Flashlight	Automatic
Connection	RS485	Siren Bus
Electrical specifications	Rated voltage	12V DC
	Operating voltage	10.5V...14.5V DC
	Stand-by consumption	12mA @12V DC
	Alarm consumption	1.8mA @ 12V DC
	Flashlight consumption	70mA @ 12V DC
	Battery	12V/2.1Ah
	Battery charge controller	✓
Physical specifications	Environmental class	IIIA
	Protection class	IP43-IP08
	Casing	ASA/Al
	Dimensions (L x H x D)	211 x 315 x 98mm
	Weight (w/o battery) SAEL 2010 BUS	ASA 2kg - Al 2.7kg
	Weight (w/o battery) SAEL 2010PRO BUS	Al 3.1kg
	Operating temperature	-40°C...+50°C
Conformity	Standard	EN 50131-4
	Security grade SAEL 2010 BUS	3
	Security grade SAEL 2010PRO BUS	4
	Notified body	IMQ
	* Only available with SAEL 2010PRO BUS	



# SAEL 2010 BUS

OUTDOOR

RSC® TECHNOLOGY

SAEL 2010 BUS									
		<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440 Self-powered magneto-dynamic siren for outdoor mounting - Optical antifoam protection - LED flashlight - Sound level 103dB(A) @ 1m - 12V/2.1Ah battery - Connection via RS485 serial bus - Casing: ABS base, ASA cover - Design by Pininfarina - Dimensions (L x H x D) 211 x 315 x 98mm - Certified to EN 50131-4 - Security grade 3 - Environmental class IIIA							
		<b>Item no. F105S2010BUSBI</b> White ASA cover							
		<b>Item no. F105S2010BUSGR</b> Gray metallic ASA cover							
SAEL 2010 BUS									
		<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440 The same as SAEL 2010 BUS but with varnished or chrome-plated aluminum cover							
		<b>Item no. F105S2010BUSAL</b> Varnished aluminum cover							
		<b>Item no. F105S2010BUSCR</b> Chrome-plated aluminum cover							
SAEL 2010PRO BUS									
		<b>Compatible systems:</b> TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440 Self-powered magneto-dynamic siren for outdoor mounting - Optical antifoam protection - Anti-drilling protection - LED flashlight - Sound level 103dB(A) @ 1m - 12V/2.1Ah battery - Connection via RS485 serial bus - Casing: ABS base, aluminum cover - Design by Pininfarina - Dimensions (L x H x D) 211 x 315 x 98mm - Certified to EN 50131-4 - Security grade 4 - Environmental class IIIA							
		<b>Item no. F105S2010PBUSAL</b> Varnished aluminum cover							
		<b>Item no. F105S2010PBUSCR</b> Chrome-plated aluminum cover							

# WIRELESS

The wireless devices of Tecnoalarm can be completely integrated into their burglar alarm systems permitting the creation of efficient solutions which combine simplicity of installation and high standards of protection.

The integration is made through either receiver or receiver-transmitter modules that are connected to the system via serial bus. The range of Tecnoalarm wireless devices comprises detectors as well as alarm and control devices, divided into two families using different proprietary protocols, ASYNC@WL and SYNC@BWL.



#### **ASYNC@WL protocol**

The ASYNC@WL protocol allows to manage wireless devices in the uni or bidirectional mode, with dual-band frequency, 433MHz and 868MHz. Thanks to a sophisticated encryption algorithm, it is capable of ensuring a good reliability of communication and high immunity to disturbances. The efficient energy management of the wireless system guarantees maximum operational autonomy.



#### **SYNC@BWL protocol**

The SYNC@BWL protocol is compatible with the devices of the series "500 BWL". Its outstanding features distinguish it from any other available protocol: dual-band frequency (433MHz and 868MHz), divided into up to 16 channels each, automatic tuning, 5 digital modulation modes, automatically adjustable transmission power, dual encryption algorithm (AES 128bit and XTEA 128bit).

These features allow to reach incomparable levels of immunity to disturbances, even if fraudulent, and extremely low consumptions, guaranteeing great autonomy of service.





# Wireless



## ASYNC@WL protocol



The implementation of the wireless devices using the ASYNC@WL protocol is made through either the receiver RX300/433868 or the receiver-transmitter RTX200/433868, connected to the system via serial bus.

The ASYNC@WL devices offer an adequate level of protection and permit the control and supervision by the Tecnoalarm alarm system so as to be suitable for the use in medium-high security applications.

### ASYNC@WL COMPATIBLE SYSTEMS - MANAGED WIRELESS DEVICES

SYSTEM	RECEIVER RECEIVER-TRANSMITTER	 RECEIVER ASYNC@WL DEVICES	 RECEIVER-TRANSMITTER ASYNC@WL DEVICES		
TP4-20 TP4-20 GSM	RX300/433868 (MAX. 2)	ZONES	20		
		WL KEYS	16		
TP8-28 TP8-28 GSM	RX300/433868 RTX200/433868 (MAX. 2)	ZONES	28	SIRENS/CONSOLES	2/2
		WL KEYS	80	ZONES	28
				WL KEYS	80
TP10-42	RX300/433868 RTX200/433868 (MAX. 2)	ZONES	42	SIRENS/CONSOLES	2/2
		WL KEYS	80	ZONES	42
				WL KEYS	80
TP8-88	RX300/433868 RTX200/433868 (MAX. 2)	ZONES	88	SIRENS/CONSOLES	4/4
		WL KEYS	180	ZONES	88
				WL KEYS	180
TP20-440	RX300/433868 RTX200/433868 (MAX. 3)	ZONES	160	SIRENS/CONSOLES	6/6
		WL KEYS	250	ZONES	160
				WL KEYS	250

#### ASYNC@WL protocol



## Receiver-transmitters



## RTX200/433868



Compatible systems.: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Bidirectional receiver-transmitter module - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - Manages uni and bidirectional communication with wireless devices of Tecnoalarm (number depending on the system) - Connection via RS485 serial bus - ABS casing - Design by Pininfarina - Dimensions (L x H x D) 270 x 156 x 68mm - White color

Item no. F102RTX200



## Receivers

## RX300/433868



Compatible systems: TP4-20 - TP4-20 GSM - TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Receiver module - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - Manages unidirectional communication with wireless devices of Tecnoalarm (number depending on the system) - Connection via RS485 serial bus - ABS casing - Design by Pininfarina - Dimensions (L x H x D) 270 x 156 x 68mm - White color

Item no. F102RX300



## Control units

## LCD300 WL



Bidirectional console - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - Manages max. 8 programs - 2x16 digits backlit LCD - NC input - Lithium battery (included) - Surface mounting - ABS casing - Design by Pininfarina - Dimensions (L x H x D) 120 x 175 x 46mm - White color  
N.B. Compatible with receiver-transmitter RTX200/433868 only

Item no. F102LCD300WL



## TX240



Hand-held transmitter with 3 programmable function keys - Available with either 433MHz or 868MHz frequency band - ASYNC@WL protocol - Lithium battery (included) - ABS casing - Dimensions (L x H x D) 65 x 40 x 15.5mm

TX240-3/433

Item no. F102TX240-3/433 433MHz frequency band

TX240-3/868

Item no. F102TX240-3/868 868MHz frequency band



## TX140 SOS







Emergency call button for home medical emergencies - 433MHz frequency band - Actuation either through push-button, embedded in the front side of the casing, or pull-switch, connected to the cord - ASYNC@WL protocol - Lithium battery (included) - ABS casing - Dimensions (L x H x D) 45 x 75 x 20


Item no. F102TX140







## Magnetic contacts

TX310				
		Magnetic contact for indoor use - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - Dual ID - 2 inputs for external devices: reed contacts, rope contacts or seismic detectors - Lithium battery (included) - Surface mounting - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 114.5 x 38.5 x 30mm		
<b>TX310</b>		Item no. F102TX310 White color		
<b>TX310/M</b>		Item no. F102TX310/M Brown color		


## TX310 - Accessories

	<b>BATTERY TESTER</b>
	Wireless battery tester for TX310 and TX500 BWL
	Item no. F102BATTERYTEST

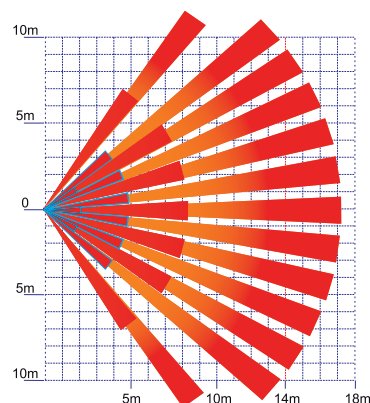
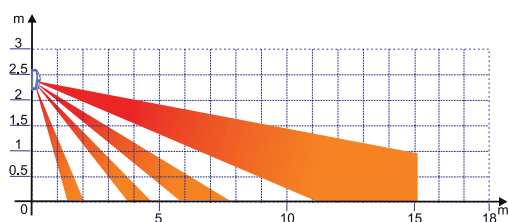
## Smoke detectors

SMOKY				
		Optical smoke detector for indoor use - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - Programmable sensitivity (3 settings) - Lithium battery (included) - Surface mounting - Antistatic ASA casing - IP22 - Dimensions (Ø x H) 100 x 55mm - White color		
Item no. F102SMOKY				

## Passive infrared for indoor use

TWINBAND WL		ASYNC@WL	LITHIUM BATTERY	WIDE ANGLE RANGE 14m	LONG RANGE RANGE 22m	CURTAIN RANGE 22m	PET RANGE 17m
	Passive infrared detector for indoor use - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - Available with 4 different lens patterns: wide angle, long range, curtain and wide angle pet and ranges from 14m to 22m - Lithium battery (included) - ABS casing - Design by Pininfarina - Dimensions (L x H x D) 68 x 118 x 51mm - White color						
	<b>TWINBAND WL/V</b>	Item no. F102TWINBAND/V Wide angle - 14m					
	<b>TWINBAND WL/C</b>	Item no. F102TWINBAND/C Long range - 22m					
	<b>TWINBAND WL/T</b>	Item no. F102TWINBAND/T Curtain - 22m					
	<b>TWINBAND WL/PET</b>	Item no. F102TWINBAND/PE Pet - 17m					

Coverage diagrams



### TWINBAND WL - Accessories






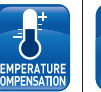

#### SNODO 2000

Self-protected swivel mounting bracket for TWINTEC, INFROTEK series detectors, TWINBAND WL and IR500 BWL - 90° hor. and 30° vert. orientation (sold in packs of 10)

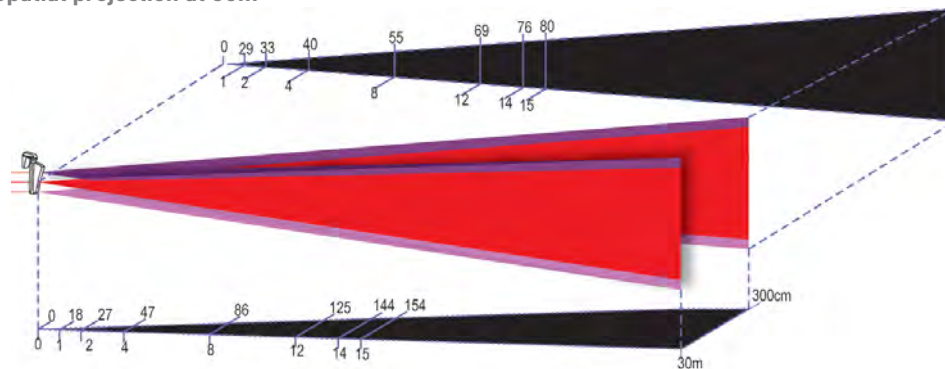
Item no. F102SNODO2000



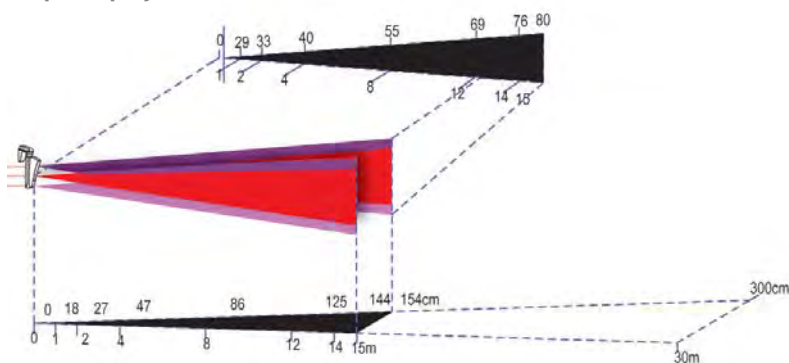
## Passive infrared for outdoor use

<b>TRIRED WL</b>								
	Triple passive infrared detector for the protection of the outdoors close to the building - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - 3 dual infrared elements with curtain lenses provide a perfect protection of doors, windows and terraces - Programmable AND detection logic (3 settings) - Integrated swivel mounting bracket with ample opportunities for orientation - Anti-masking protection - Available with either 15m or 30m maximum range - Lithium battery (included) - ASA casing - IP55 - Dimensions (L x H x D) 82 x 400 x 260mm - White color							
	<b>TRIRED WL</b>	Item no. F102TRIREDWL 30m range						
	<b>TRIRED WL/15</b>	Item no. F102TRIREDWL15 15m range						

TRIRED WL - Spatial projection at 30m
















TRIRED WL/15 - Spatial projection at 15m








## Active infrared for outdoor use

DUALBEAM WL							
	Active infrared barrier - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - 2 infrared beams - 80m max. range - Lithium batteries (included) - PC Makrolon casing - IP45 - Dimensions (L x H x D) 102 x 436 x 106mm - Black color						
	Item no. F102DUALBEAMWL						
DUALBEAM WL HE							
	The same as DUALBEAM WL but with heater module and rechargeable Ni-Cd batteries						
	N.B. Power must be provided by an external power supply. The barrier requires 18V AC 18W or 24V DC 600mA power supply for each device (TX and RX).						
Item no. F102DUALBEAMWLH							

### DUALBEAM WL - DUALBEAM WL HE - Accessories

	<b>POST</b> Galvanized mounting post for DUALBEAM WL and QUADBEAM - Dimensions (Ø x H) 50 x 1500mm		<b>MOUNTING KIT</b> Post mounting kit for DUALBEAM WL and QUADBEAM (kit for one transmitter and receiver pair)
	Item no. F102PALOBEAM		Item no. F102KITPALOBEAM
	<b>MONITOR 868</b> Wireless receiver for alignment of DUALBEAM WL, QUADBEAM, BEAMTOWER and EXPLORER BUS		<b>SHUTTERS</b> Shutters for DUALBEAM WL, QUADBEAM and BEAMTOWER (sold in packs of 10)
	Item no. F102MONITOR868		Item no. F102KITATTENUA
			<b>ALIGNMENT KIT</b> Suitcase with optical viewfinder and shutters for DUALBEAM WL, QUADBEAM and BEAMTOWER
			Item no. F102KITMIRINO

## Outdoor sirens

SAEL 2000 WL							
	Bidirectional self-powered siren for outdoor use - Dual-band frequency 433MHz/868MHz - ASYNC@WL protocol - Xenon flash light - Sound level 103dB(A) @ 1m - Lithium battery (included) - Casing: ABS base, ASA cover - Design by Pininfarina - Dimensions (L x H x D) 211 x 315 x 98mm - White color <i>N.B. Compatible with receiver-transmitter RTX200/433868 only</i>						
	Item no. F105SAEL2000WL						

## SYNC@BWL protocol



The implementation of the wireless devices using the SYNC@BWL protocol is made through the coordinator RTX500 BWL, connected to the system via serial bus.

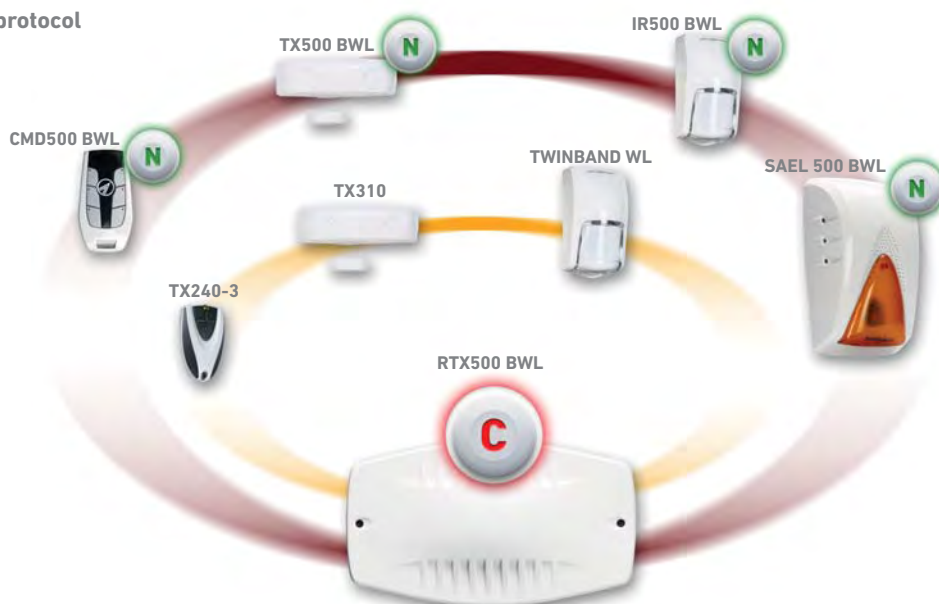
The coordinator has the task to coordinate and synchronize the bidirectional data communication with the SYNC@BWL devices and to receive the signals from the ASYNC@BWL devices.

The intrinsic security of the SYNC@BWL devices, permitting a great number of settings, the automatic tuning of the channel frequency on the 433MHz and 868MHz frequency bands as well as the control and supervision by the Tecnoalarm alarm system, makes them suitable for the use in high security applications.

### SYNC@BWL COMPATIBLE SYSTEMS - MANAGED WIRELESS DEVICES

SYSTEM	COORDINATOR	ASYNC@WL DEVICES	SYNC@BWL DEVICES
TP8-28 TP8-28 GSM	RTX500 BWL (MAX. 1)	SIRENS/CONSOLES 2	SIRENS 0 1 2
		ZONES 28	ZONES / WL KEYS 108 108 108
		WL KEYS 80	
TP10-42	RTX500 BWL (MAX. 1)	SIRENS/CONSOLES 2	SIRENS 0 1 2
		ZONES 42	ZONES / WL KEYS 133 126 119
		WL KEYS 80	
TP8-88	RTX500 BWL (MAX. 1)	SIRENS/CONSOLES 4	SIRENS 0 1 2 3 4
		ZONES 88	ZONES / WL KEYS 133 126 119 112 105
		WL KEYS 180	
TP20-440	RTX500 BWL (MAX. 1)	SIRENS/CONSOLES 6	SIRENS 0 1 2 3 4 5 6
		ZONES 160	ZONES / WL KEYS 133 126 119 112 105 98 91
		WL KEYS 250	

### SYNC@BWL protocol



## Coordinators

Serial  
BUS  
RS485

Connection

## RTX500 BWL



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440

Bidirectional coordinator - Dual-band frequency 433MHz/868MHz - ASYNC@WL and SYNC@BWL protocol - Manages uni and bidirectional communication with wireless devices of Tecnoalarm (number depending on the system) - Programmable RF modulation and emission power - Automatic tuning of the channel frequency (16 channels) - Connection via RS485 serial bus - ABS casing - Design by Pininfarina - Dimensions (L x H x D) 270 x 156 x 68mm - White color

Item no. F102RTX500BWL

## RTX500 BWL - Technical and functional specifications

General features	Model	RTX500 BWL	Hardware	USB port	USB type B
	Address programming	Dip-switch		Signaling LED	12
	Connection	RS485		Buzzer	✓
	Baud rate	38,400bps		Anti-tamper protection	Anti-opening and anti-detachment
RF specifications	Protocol	ASYNC@WL + SYNC@BWL	Electrical specifications	Rated voltage	13V DC
	Encryption	✓		Operating voltage	10V...15V DC
	Frequency band	433MHz/868MHz (divided into 16 channels - automatic tuning)		Consumption	130mA @ 13V
	RF modulation and emission power	Programmable	Physical specifications	Environmental class	II
	Sensitivity	High		Casing	ABS
				Dimensions (L x H x D)	270 x 156 x 68mm
				Weight	480g

Serial  
BUS  
RS485

Connection

## RTX500S BWL



Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440






Bidirectional coordinator - Dual-band frequency 433MHz/868MHz - SYNC@BWL protocol - Manages bidirectional communication with wireless devices of Tecnoalarm (number depending on the system) - Automatic tuning of the channel frequency (4 channels) - Connection via RS485 serial bus - ABS casing - Dimensions (L x H x D) 102 x 63 x 25.5mm - White color

Item no. F102RTX500SBWL

## RTX500S BWL - Technical and functional specifications

General features	Model	RTX500S BWL	Hardware	Signaling LED	7
	Address programming	Dip-switch		Buzzer	✓
	Connection	RS485		Anti-tamper protection	Anti-opening and anti-detachment
	Baud rate	38,400bps		Micro-switch	
RF specifications	Protocol	SYNC@BWL	Electrical specifications	Rated voltage	13V DC
	Encryption	✓		Operating voltage	10V...15V DC
	Frequency band	433MHz/868MHz (divided into 4 channels - automatic tuning)		Consumption	50mA @ 13V
	Sensitivity	High	Physical specifications	Environmental class	II
				Casing	ABS
				Dimensions (L x H x D)	102 x 63 x 25.5mm
				Weight	76g







## Control units

CMD500 BWL						
	<p>Wireless key - Dual-band frequency 433MHz/868MHz - SYNC@BWL protocol - 6 function keys with multiple criteria: single key, combination of keys, analysis of keystroke time - Programmable functions and attributes - Lithium battery (included) - ABS casing - Dimensions (L x H x D) 42 x 80 x 15mm</p>					
Item no. F102CMD500BWL						

## CMD500 BWL - Technical and functional specifications

General features	Model	<b>CMD500 BWL</b>	Self test and failure signals	Low battery	✓
	Function keys	<b>6 (dual function)</b>		Failure	✓
	Signaling LED	<b>6</b>	Electrical specifications	Operating voltage	<b>2.4V...3V DC</b>
	Buzzer	✓		Stand-by consumption	<b>&lt;700nA @ 3V DC</b>
RF specifications	Protocol	<b>SYNC@BWL</b>		Consumption during transmission	<b>36mA @ 3V DC</b>
	Encryption	✓		Battery	<b>3V/0.62Ah Li</b>
	Frequency band	<b>433MHz/868MHz (divided into 16 channels - automatic tuning)</b>		Battery autonomy	<b>&gt;4 years</b>
	RF modulation and emission power	<b>Programmable</b>	Physical specifications	Casing	<b>ABS</b>
	Sensitivity	<b>High</b>		Dimensions (L x H x D)	<b>42 x 80 x 15mm</b>
Functions	Program management	<b>Programmable</b>		Weight	<b>35g</b>
	Remote control management	<b>Programmable</b>			
	Arming attributes	<b>Programmable</b>			


## Magnetic contacts

<b>TX500 BWL</b>					
 	Magnetic contact for indoor use - Dual-band frequency 433MHz/868MHz - SYNC@BWL protocol - Dual ID - 2 inputs for external devices: reed contacts, rope contacts or seismic detectors - Lithium battery (included) - Surface mounting - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 114.5 x 38.5 x 30mm				
<b>TX500 BWL</b>	Item no. F102TX500BWL White color				
<b>TX500 BWL/M</b>	Item no. F102TX500BWL/M Brown color				









### TX500 BWL - Technical and functional specifications

General features	Model	<b>TX500 BWL</b>	Anti-tamper protection	Anti-opening	Micro-switch
	ID used	<b>2 (dual ID)</b>			
	Internal contact	<b>Hall effect</b>	Electrical specifications	Operating voltage	<b>2.4V...3.7V DC</b>
	Inputs	<b>2 (Z1 + Z2)</b>		Stand-by consumption	<b>9µA @ 3.6V DC</b>
	Devices managed	<b>Reed contacts, rope contacts or seismic detectors</b>		Consumption during transmission	<b>30mA @ 3.6V DC</b>
RF specifications	Protocol	<b>SYNC@BWL</b>	Physical specifications	Battery	<b>3V/2.6Ah Li (or higher)</b>
	Encryption	✓		Battery autonomy	<b>&gt;4 years</b>
	Frequency band	<b>433MHz/868MHz (divided into 16 channels - automatic tuning)</b>		Environmental class	<b>II</b>
	RF modulation and emission power	<b>Programmable</b>		Casing	<b>ABS</b>
	Sensitivity	<b>High</b>		Dimensions (L x H x D)	<b>114.5 x 38.5 x 30mm</b>
Signaling	Alarm ID 1	<b>Internal contact/Z1 input</b>			
	Alarm ID 2	<b>Z2 input</b>			
	Tamper	✓			
	Low battery	✓			
			Weight	<b>65g</b>	

### TX500 BWL - Accessories

	<b>BATTERY TESTER</b>
	Wireless battery tester for TX310 and TX500 BWL
	Item no. F102BATTERYTEST

## Passive infrared for indoor use

<b>IR500 BWL</b>								
	Passive infrared detector for indoor use - Dual-band frequency 433MHz/868MHz - SYNC@BWL protocol - Available with 4 different lens patterns: wide angle, long range, curtain and wide angle pet and ranges from 14m to 22m - Lithium battery (included) - ABS casing - Design by Pininfarina - Dimensions (L x H x D) 68 x 118 x 51mm - White color							
	<b>IR500 BWL/V</b>	Item no. F102IR500BWL/V Wide angle - 14m						
	<b>IR500 BWL/C</b>	Item no. F102IR500BWL/C Long range - 22m						
	<b>IR500 BWL/T</b>	Item no. F102IR500BWL/T Curtain - 22m						
	<b>IR500 BWL/PET</b>	Item no. F102IR500BWL/PE Pet - 17m						

## IR500 BWL - Technical and functional specifications









Detection features IR500 BWL/V	IR elements	1 dual element	Signaling	Alarm	✓
	Infrared beams	22		Tamper	✓
	Levels (infrared beams)	4		Low battery	✓
	Coverage	100°		Failure	✓
	Pulse count	Programmable (4 settings)			
RF specifications	Protocol	SYNC@BWL	Anti-tamper protection	Anti-opening	Micro-switch
	Encryption	✓	Electrical specifications	Operating voltage	2.4V...3.7V DC
	Frequency band	433MHz/868MHz (divided into 16 channels - automatic tuning)		Stand-by consumption	11µA @ 3.6V DC
	RF modulation and emission power	Programmable		Consumption during transmission	30mA @ 3.6V DC
	Sensitivity	High		Battery	3V/2.6Ah Li (or higher)
		Battery autonomy		>4 years	
Functions	Self test	Automatic	Physical specifications	Environmental class	II
	Temperature compensation	Automatic		Casing	ABS
				Dimensions (L x H x D)	68 x 118 x 51mm
				Weight	110g

## IR500 BWL - Accessories

	<b>SNODO 2000</b>
	Self-protected swivel mounting bracket for TWINTEC, INFROTEK series detectors, TWINBAND WL and IR500 BWL - 90° hor. and 30° vert. orientation (sold in packs of 10)  <b>Item no. F102SNODO2000</b>



## Outdoor sirens

<b>SAEL 500 BWL</b>	      
	<p>Bidirectional siren for outdoor use - Dual-band frequency 433MHz/868MHz - SYNC@BWL protocol LED flashlight - Sound level 103dB(A) @ 1m - Lithium battery (included) - Casing: ABS base, ASA cover - Design by Pininfarina - Dimensions (L x H x D) 211 x 315 x 98mm - White color</p> <p>Item no. F102SAEL500BWL</p>

## SAEL 500 BWL - Technical and functional specifications

Acoustic features	Sound level	103dB(A) @ 1m	Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
		100dB(A) @ 3m	Self test	Battery	Automatic
	Frequency	1400...3600Hz		Horn	Automatic
Flashlight specifications	Volume for prealarm/ system status signaling	Programmable (4 settings)		Flashlight	Automatic
	Type	LED	Electrical specifications	Operating voltage	4.8V...7.4V DC
	Color	Orange		Stand-by consumption	110µA @ 7.2V DC
RF specifications	Flash rate	50/min.		Alarm consumption	0.48A @ 7.2V DC
	Protocol	SYNC@BWL		Battery	7.2V/13Ah Li
	Encryption	✓		Battery autonomy	>4 years
	Frequency band	433MHz/868MHz (divided into 16 channels - automatic tuning)	Physical specifications	Environmental class	III
	RF modulation and emission power	Programmable		Casing	ASA /ABS
Signaling	Sensitivity	High		Dimensions (L x H x D)	211 x 315 x 98mm
	Tamper	✓		Weight (w/o battery)	2.25kg
	Low battery	✓			
Functions	Failure	✓			
	Functioning mode	Programmable (indoor or outdoor)			
	Alarm	Programmable (3 settings)			
	Technical alarm	Programmable (3 settings)			
	Prealarm	Programmable (3 settings)			
	System status signaling	Programmable (3 settings)			
	Flashing time	Programmable			

# DETECTORS

## FOR INDOOR USE - FOR OUTDOOR USE

Tecnoalarm has achieved over the years a great deal of experience in the design and production of intrusion detectors.

The knowledge and the mastery of the best detection technologies has produced a wide range of detectors, offering the right solution for every type of protection, from the protection of small apartments up to the most complex protections of large outdoor areas.

### INDOOR

#### **Detectors for indoor use**

The range of indoor detectors is composed of two types of products: infrared and dual technology detectors. It comprises different models for different types of coverage, some of which equipped with anti-masking protection.

### OUTDOOR

#### **Detectors for outdoor use**

The range of outdoor detectors provides several models for the protection of the perimeter close to the building, using the active and passive infrared technology. Long range microwave and infrared barriers are able to monitor and protect the perimeter of large outdoor areas.



# Detectors

## Dual technology for indoor use

### TWINTec TWINTec MASK



Both detectors work with the AND and WALK detection logics, which can be combined with the RDV® technology. The self test and the temperature compensation functions complete a set of sophisticated diagnostic functions. The detector TWINTec MASK is equipped with an antimasking protection, which, in the event of a masking attempt, induces the detector automatically to adopt the Walk logic.

#### TWINTec 18



The detector is compliant with EN 50131-2-4- Security grade 2.

**Item no. F102TWIN18/V** MW frequency 10.525GHz

**Item no. F102TW18/V-99** MW frequency 9.9GHz

**Item no. F102TW18/V-93** MW frequency 9.35GHz

#### TWINTec MASK 18



The detector is compliant with EN 50131-2-4- Security grade 3.

**Item no. F102TWINM18/V** MW frequency 10.525GHz

**Item no. F102TWM18/V-99** MW frequency 9.9GHz

**Item no. F102TWM18/V-93** MW frequency 9.35GHz

N.B. For the coverage diagrams see the TWINTec BUS and TWINTec MASK BUS detectors in the RSC® section of this catalogue.

## TWINTec - TWINTec MASK - Technical and functional specifications







Detection features	Microwave frequency	<b>10.525GHz*</b>	Functions	Self test	<b>Automatic</b>
	Sensitivity	<b>Adjustable 3m...18m +/- 20%</b>		Temperature compensation	<b>Automatic</b>
	Infrared beams	<b>29</b>	Electrical specifications	Rated voltage	<b>12V DC</b>
	Levels (infrared beams)	<b>4</b>		Operating voltage	<b>9V...15V DC</b>
	Max. range	<b>18m</b>		Consumption TWINTec	<b>Stand-by 17mA @ 12V DC</b> <b>Max. 25mA @ 12V DC</b>
Detection logics	AND	<b>IR + MW</b>		Consumption TWINTec MASK	<b>Stand-by 27mA @ 12V DC</b> <b>Max. 30mA @ 12V DC</b>
	OR**	<b>IR or MW</b>	Contact type	Programmable	<b>NC - EOL resistor - DEOL resistor</b>
	WALK	<b>IR + MW or MW + MW</b>		Environmental class	<b>II</b>
	AND + RDV®	<b>IR + MW with Doppler filter</b>	Physical specifications	Protection class	<b>IP30-IPK02</b>
	WALK + RDV®	<b>MW + MW with Doppler filter</b>		Casing	<b>ABS</b>
Coverage	IR	<b>108°</b>		Dimensions (L x H x D)	<b>68 x 118 x 51mm</b>
	MW	<b>72° horiz. - 36° vert.</b>		Weight	<b>160g</b>
Outputs	Alarm	<b>NC - electronic relay</b>		Operating temperature	<b>-10°C...+55°C</b>
	Tamper	<b>NC - micro-switch</b>	Conformity	Standards	<b>EN 50131-2-4</b>
	Mask**	<b>NC - electronic relay</b>		Security grade TWINTec	<b>2</b>
Inputs	Stby	<b>Negative stand-by input</b>		Security grade TWINTec MASK	<b>3</b>
	Sync	<b>Synchronization input</b>		Notified body	<b>IMQ</b>
Anti-tamper protection	Anti-opening and anti-detachment	<b>Micro-switch</b>	* Also available with the frequencies 9.9GHz and 9.35GHz (see table of models)		
	Antimasking**	<b>Programmable</b>	** Only available with TWINTec MASK		

According to the CEPT T/R 70-03 recommendation, the device can operate in the listed countries

9.35GHz*	A	B	BG	CH	CY	CZ	D	DK		EST			FL	GE	GR	H	HR		IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	SK
9.9GHz*	A	B	BG	CH	CY	CZ		DK		EST	F	FIN	FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	
10.525GHz*		B	BG	CH	CY			DK	E				FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO	S	SLO	

\* Center frequency indicated on the data label inside the product

## Passive infrared for indoor use

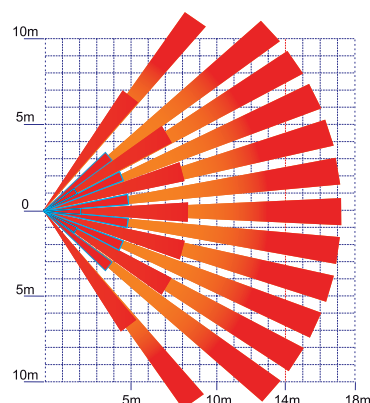
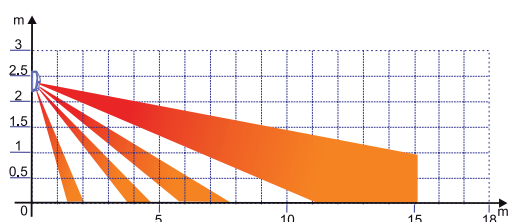
<b>INFROTEK INFROTEK MASK</b> 	    				
	Passive infrared detectors for indoor use - Programmable sensitivity and pulse count - Available with 4 different lens patterns: wide angle, long range, curtain, wide angle pet and ranges from 14m to 22m. <i>N.B. The detector INFROTEK MASK is equipped with an antimasking protection.</i>				
	<b>INFROTEK/V</b>	Item no. F102INFROTEK/V Wide angle - 14m			
	<b>INFROTEK/C</b>	Item no. F102INFROTEK/C Long range - 22m			
	<b>INFROTEK/T</b>	Item no. F102INFROTEK/T Curtain - 22m			
	<b>INFROTEK/PET</b>	Item no. F102INFROTEK/PE Pet - 17m			
	<b>INFROTEK MASK</b>	Item no. F102INFROTEK/VM Wide angle - 18m			

### INFROTEK - INFROTEK MASK - Technical and functional specifications




<b>Detection features INFROTEK/V INFROTEK MASK</b>	Infrared beams INFROTEK/V	<b>22</b>
	Infrared beams INFROTEK MASK	<b>29</b>
	Levels (infrared beams)	<b>4</b>
	Coverage	<b>108°</b>
<b>Outputs</b>	Alarm	<b>NC - electronic relay</b>
	Tamper	<b>NC - micro-switch</b>
	Mask*	<b>NC - electronic relay</b>
<b>Inputs</b>	Stby	<b>Positive/negative stand-by input</b>
<b>Anti-tamper protection</b>	Anti-opening and anti-detachment	<b>Micro-switch</b>
	Antimasking*	<b>Programmable</b>
<b>Functions</b>	Temperature compensation	<b>Automatic</b>

<b>Electrical specifications</b>	Rated voltage	<b>12V DC</b>
	Operating voltage	<b>10.5V...14.5V DC</b>
	Consumption INFROTEK	<b>Stand-by 5mA @ 12V DC</b> <b>Alarm 10mA @ 12V DC</b>
	Consumption INFROTEK MASK	<b>Stand-by 15mA @ 12V DC</b> <b>Alarm 22mA @ 12V DC</b>
	Contact type	<b>NC - EOL resistor - DEOL resistor</b>
<b>Physical specifications</b>	Environmental class	<b>II</b>
	Protection class	<b>IP30-IP02</b>
	Casing	<b>ABS</b>
	Dimensions (L x H x D)	<b>68 x 118 x 51mm</b>
	Weight	<b>150g</b>
	Operating temperature	<b>+5°C...+40°C</b>
* Only available with INFROTEK MASK		

### Coverage diagrams







# Detectors

<b>OMNISPACE</b>			
	Passive infrared detector for indoor use - Ceiling mounting at a maximum height of 8m - Alarm memory - Pulse count		
Item no. F102OMNISPACE			

## OMNISPACE - Technical and functional specifications


Detection features	Infrared beams	40	Electrical specifications	Rated voltage	12V DC
	Coverage	360°		Operating voltage	10V...14V DC
	Coverage (diameter @ 3m height)	10m		Stand-by consumption	13mA @ 12V DC
	Mounting height	2.1m...8m		Alarm consumption	18mA @ 12V DC
Outputs	Alarm	NC - electronic relay	Physical specifications	Environmental class	II
	Tamper	NC - micro-switch		Protection class	IP30-IPK02
Inputs	Stby	Negative stand-by input		Casing	ABS
				Dimensions (Ø x H)	110 x 50mm
Anti-tamper protection	Anti-opening	Micro-switch		Weight	154g
				Operating temperature	+5°C...+40°C

<b>IR2000</b>		  
	Passive infrared detector - Pulse count - Available with 3 different lens patterns: wide angle, long range, curtain, wide angle pet and ranges from 14m to 22m	
	<b>IR2000/V</b>	Item no. F102IR2000/V Wide angle - 14m
	<b>IR2000/C</b>	Item no. F102IR2000/C Long range - 22m
	<b>IR2000/T</b>	Item no. F102IR2000/T Curtain - 22m


## IR2000 - Technical and functional specifications

Detection features IR2000/V	Infrared beams	22	Electrical specifications	Rated voltage	12V DC
	Levels (infrared beams)	4		Operating voltage	10.5V...14.5V DC
	Coverage	100°		Stand-by consumption	5.5mA @ 12V DC
Outputs	Alarm	NC - electronic relay		Alarm consumption	13mA @ 12V DC
	Tamper	NC - micro-switch	Physical specifications	Environmental class	II
Inputs	Stby	Negative stand-by input		Casing	ABS
				Dimensions (L x H x D)	62 x 94 x 41mm
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch		Weight	70g
				Operating temperature	+5°C...+40°C

## TWINTeC - INFROTEK - IR2000 - Accessories

	<b>KEY</b>		<b>SNODO 2000</b>
	Opening instrument for IR2000 detectors		Self-protected swivel mounting bracket for TWINTeC, INFROTEK series detectors, TWINBAND WL and IR500 BWL - 90° hor. and 30° vert. orientation (sold in packs of 10)
	Item no. F102CHIAVEIR		Item no. F102SNODO2000



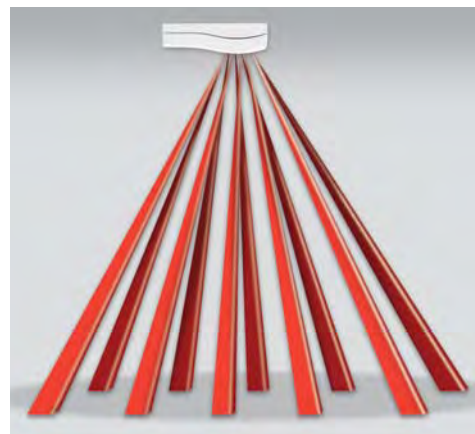
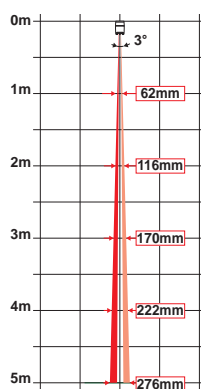
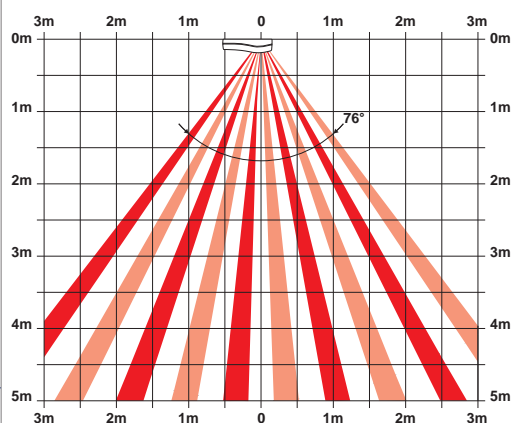
<b>DUALRED</b>						
	<p>The detector DUALRED offers a reliable protection of doors and windows. It is composed of two physical/logical units, a dual PIR sensor and an internal magnetic contact. Alternatively to the internal contact, an external magnetic contact can be connected. The two physical/logical units can be programmed so as to function with the AND or the OR detection logic. If the magnetic contact is opened during the arming phase, it is automatically excluded. In this case, if the combined functioning has been set with the AND detection logic, the detector automatically adopts the OR logic.</p> <p>The detector DUALRED can be used indoors or in sheltered outdoor areas, not directly exposed to the weather conditions. It is equipped with automatic diagnostic functions, such as self test and temperature compensation. Functioning parameters, such as sensitivity, range and pulse count are programmable</p> <p><b>Item no. F102DUALRED</b> White color</p> <p><b>Item no. F102DUALREDM</b> Brown color</p>					

### DUALRED - Technical and functional specifications

Physical/logical unit IR	IR elements	2
	Infrared beams	10
	Levels (infrared beams)	2
	Max. range	5m
	Sensitivity	Programmable (2 settings)
Physical/logical unit contact	Internal magnetic contact	Reed ampulla
	Input	Magnetic contact
	Self exclusion	Programmable
Detection logic	AND	IR + contact
	OR	IR or contact
	Pulse count	1 or 3 pulses
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
Outputs	Alarm	NC - electronic relay
	Tamper	NC - electronic relay

Inputs	Stby	Negative stand-by input
Functions	Self test	Automatic
	Temperature compensation	Automatic
Electrical specifications	Rated voltage	12V DC
	Operating voltage	10V...14.5V DC
	Stand-by consumption	20mA @ 12V DC
	Alarm consumption	25mA @ 12V DC
Contact type	Programmable	NC - EOL resistor - DEOL resistor
Physical specifications	Environmental class	II
	Protection class	IP34-IK02
	Casing	ASA
	Dimensions (L x H x D)	168 x 46 x 30mm
	Weight	80g
	Operating temperature	-20°C...+55°C

#### Coverage diagrams



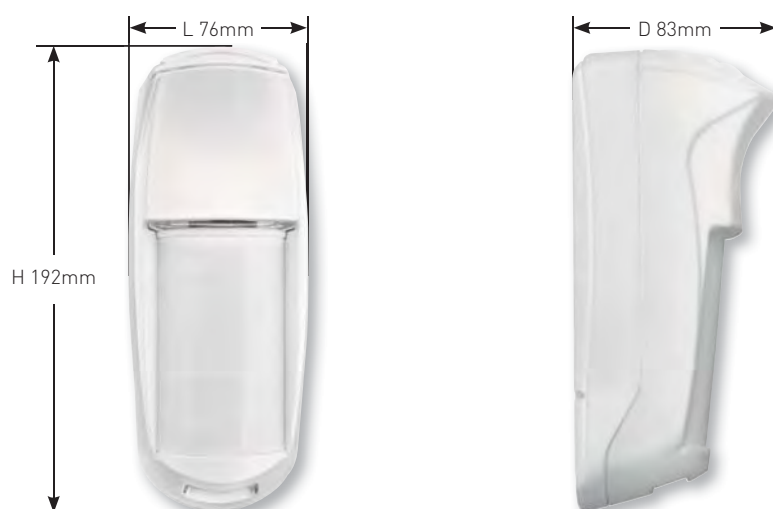
## Dual technology for outdoor use

**GLOBAL SPACE**

The GLOBAL SPACE is a dual technology detector for outdoor mounting with a multi-point technology: triple infrared and microwave. The very tight protection, made of 43 infrared beams distributed on 5 levels, combined with a microwave beam, is capable of satisfying any security requirement.










The programmable AND detection logic permits the adaptation of the detector's functioning to the characteristics of the area to be protected.

The detector is equipped with a programmable antimasking function and automatic diagnostic functions, such as self test and temperature compensation.

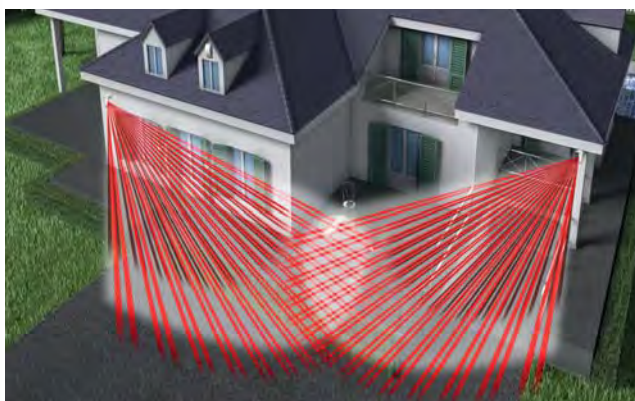
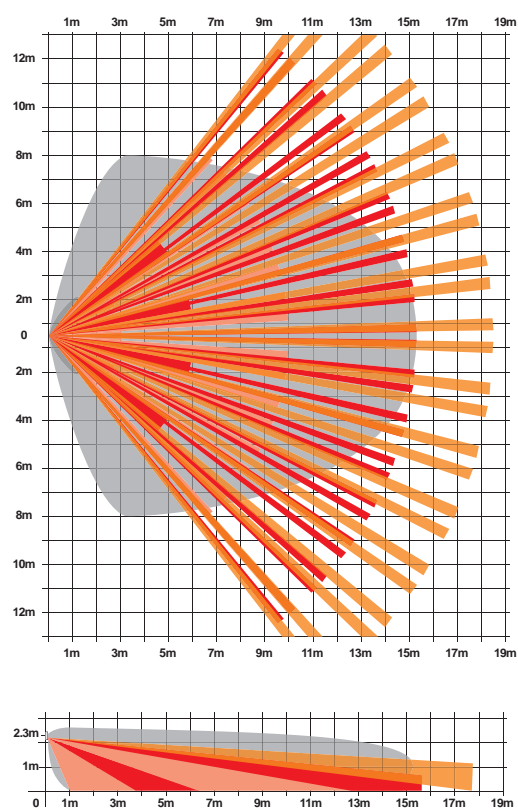
**GLOBAL SPACE - Technical and functional specifications**

Detection features	Microwave frequency	10.525GHz*	Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch
	IR elements	3		Antimasking	Programmable
	Infrared beams	43	Functions	Self test	Automatic
	Levels (infrared beams)	5		Temperature compensation	Automatic
	Max. range	15m	Electrical specifications	Rated voltage	12V DC
	Infrared sensitivity	Adjustable		Operating voltage	10V DC...14.5V DC
	Pulse count	1 or 3 pulses		Consumption in stand-by	30mA @ 12V DC
Detection logics	AND adjacent beams	2 adjacent IR + MW		Max. consumption	34mA @ 12V DC
	AND single beam	1 IR + MW	Contact type	Programmable	NC - EOL resistor - DEOL resistor
	AND two beams with priority	2 IR + MW with IR1 prior-ranking			
	AND two beams	2 IR + MW	Physical specifications	Environmental class	III
	AND + RDV®	IR + MW + RDV®		Protection class	IP55-IK04
	Microwave	Excludable		Casing	ASA
Coverage	IR	100°		Dimensions (L x H x D)	76 x 192 x 83mm
	MW	72° horiz. - 36° vert.		Weight	240g
Outputs	Alarm	NC - electronic relay		Operating temperature	-25°C...+55°C
	Tamper	NC - electronic relay	* Also available with the frequencies 9.9GHz and 9.35GHz (see table of models)		
	Mask/Fail	NC - electronic relay			
Inputs	Stby	Negative stand-by input			



*\* Also available with the frequencies 9.9GHz and 9.35GHz (see table of models)*

	<b>GLOBAL SPACE</b>									
	Compatible systems: TP8-28 - TP8-28 GSM - TP10-42 - TP8-88 - TP20-440									
	Item no. F102GLOSPACE MW frequency 10.525GHz									
	Item no. F102GLOSPACE/99 MW frequency 9.9GHz									
	Item no. F102GLOSPACE/93 MW frequency 9.35GHz									

Coverage diagrams



## GLOBAL SPACE - Accessories








	<b>CORNER MOUNTING BRACKET</b>		<b>RAIN COVER</b>
	Corner mounting bracket - 22.5° or 45° angle		Rain cover - Dimensions (L x H x D) 136 x 58 x 162mm
	Item no. F102STAFFAGLOB		Item no. F102GLOCALOTTA

According to the CEPT T/R 70-03 recommendation, the device can operate in the listed countries

9.35GHz*	A	B	BG	CH	CY	CZ	D	DK		EST			FL	GE	GR	H	HR		IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	SK
9.9GHz*	A	B	BG	CH	CY	CZ		DK		EST	F	FIN	FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO		SLO	
10.525GHz*			B	BG	CH	CY		DK	E				FL	GE	GR	H	HR	I	IRL	IS	L	LT	LV	M	N	NL	PL	P	RO	S	SLO	

\* Center frequency indicated on the data label inside the product

## Passive infrared for outdoor use

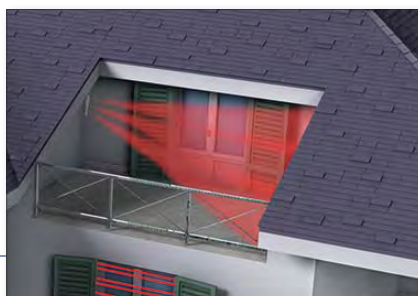
<b>TRIRED</b>	     
	<p>The triple passive infrared detector, designed for outdoor use, is resistant to extreme weather conditions, and is an ideal solution for the protection of the areas close to homes, such as balconies and terraces, with ranges of up to 30 meters. The integrated swivel mounting bracket offers ample opportunities for orientation.</p> <p>The detector features 8 AND detection logics and 3 independent alarm counters (1 for each beam), as well as an antimasking function, which adapts the detection logic to AND of 2 beams in case of a masking attempt.</p>
Item no. F102TRIRED	

N.B. For the coverage diagrams see the TRIRED BUS detector in the RSC® section of this catalogue.








## TRIRED - Technical and functional specifications

Detection features	IR elements	<b>3 dual elements</b>
	Infrared beams	<b>3</b>
	Levels (infrared beams)	<b>3</b>
	Max. range	<b>30m</b>
Detection logics	AND of 2 undefined beams	<b>1 mode</b>
	AND of 2 defined beams	<b>3 modes</b>
	AND of 3 undefined beams	<b>1 mode</b>
	AND of 3 beams with priority	<b>3 modes</b>
	Pulse count	<b>Independent for each beam</b>
Anti-tamper protection	Anti-opening and anti-detachment	<b>Micro-switch</b>
	Antimasking	<b>Programmable (independent for each beam)</b>
Outputs	Alarm	<b>NC - electronic relay</b>
	Tamper	<b>NC - electronic relay</b>
	Antimasking	<b>NC - electronic relay</b>
	Failure	<b>+12V DC</b>

Inputs	Stby	<b>Negative stand-by input</b>
Functions	Self test	<b>Automatic (independent for each beam)</b>
	Temperature compensation	<b>Automatic</b>
Electrical specifications	Rated voltage	<b>12V DC</b>
	Operating voltage	<b>10V...14.5V DC</b>
	Stand-by consumption	<b>27mA @ 12V DC</b>
	Alarm consumption	<b>25mA @ 12V DC</b>
Contact type	Programmable	<b>NC - EOL resistor - DEOL resistor</b>
Physical specifications	Environmental class	<b>II</b>
	Protection class	<b>IP55-IK04</b>
	Casing	<b>ASA</b>
	Dimensions (L x H x D)	<b>82 x 400 x 260mm</b>
	Weight	<b>1.2kg</b>
	Operating temperature	<b>-20°C...+65°C</b>










## Active infrared for outdoor use

	<b>QUADBEAM</b>		Active infrared barrier - 4 infrared beams - Disqualification function - Available with 100 or 200 meters range			
	<b>QUADBEAM 100</b>					
	Item no. F102QUADBEAM100					
	<b>QUADBEAM 200</b>					
	Item no. F102QUADBEAM200					

### QUADBEAM - Technical and functional specifications






Detection features	Infrared beams	4	Electrical specifications	Rated voltage	12V DC	
	Range QUADBEAM 100	100m		Operating voltage	10.5V...14.5V DC	
	Range QUADBEAM 200	200m		Stand-by consumption TX	43mA @ 12V DC	
	Response time	Programmable		Stand-by consumption RX	18mA @ 12V DC	
Outputs	Alarm	NC - electronic relay	Physical specifications	Environmental class	IV	
	Tamper	NC - switch		Protection class	IP45	
	Failure	NC - electronic relay		Casing	PC Makrolon	
Anti-tamper protection	Anti-opening	Micro-switch		Dimensions (L x H x D)	102 x 436 x 106mm	
				Weight	1.36kg	
				Operating temperature	-5°C...+55°C	

### QUADBEAM - Accessories

	<b>HEATER KIT</b> Thermostat and heater module for QUADBEAM (kit for one pair of barriers)		<b>TA1/N3 TRANSFORMER KIT</b> 220/18V AC 60VA transformer kit for QUADBEAM, EXPLORER II and EXPLORER BUS
Item no. F102QUADBRISC		Item no. F102TRASFBARR.	
	<b>POST</b> Galvanized mounting post for DUALBEAM WL and QUADBEAM - Dimensions (Ø x H) 50 x 1500mm		<b>MOUNTING KIT</b> Post mounting kit for DUALBEAM WL and QUADBEAM (kit for one transmitter and receiver pair)
Item no. F102PALOBEAM		Item no. F102KITPALOBEAM	
	<b>ALIGNMENT KIT</b> Suitcase with optical viewfinder and shutters for DUALBEAM WL, QUADBEAM and BEAMTOWER		<b>SHUTTERS</b> Shutters for DUALBEAM WL, QUADBEAM and BEAMTOWER (sold in packs of 10)
Item no. F102KITMIRINO		Item no. F102KITATTENUA	
	<b>MONITOR 868</b> Wireless receiver for alignment of DUALBEAM WL, QUADBEAM, BEAMTOWER and EXPLORER BUS		
		Item no. F102MONITOR868	




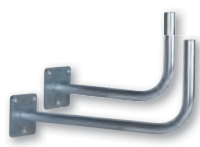
## Microwave for outdoor use

<b>MINIEXPLORER</b>					
	Microwave barrier for outdoor perimeter protection - Highly immune to weather conditions, light reflection and RFI/EMI - Programmable transmission channel allowing to build configurations with a combination of several barriers per track without causing inferences				
	Item no. F102MINIEXPL White color				
	Item no. F102MINIEXPL/V Green color				

## MINIEXPLORER - Technical and functional specifications

Detection features	Max. range	45m	Electrical specifications	Rated voltage	13.8V DC
	Operating frequency	10.525GHz (50% impulse)		Operating voltage	10V...14.5V DC
	TX channels	Programmable (5.5KHz - 7.8KHz)		Max. consumption TX	55mA @ 13.8V DC
	Emission power	≤500mW		Max. consumption RX	40mA @ 13.8V DC
Outputs	Alarm	NC - electronic relay	Physical specifications	Environmental class	IV
	Tamper	NC - switch		Protection class	IP65
	Failure	NC - electronic relay		Casing	ASA
Inputs	Stby	Stand-by input		Dimensions (L x H x D)	173 x 216 x 131mm
Anti-tamper protection	Anti-opening	Micro-switch		Weight	1.90 kg
				Operating temperature	-25°C...+55°C

## MINIEXPLORER - Accessories

	<b>POST</b>		<b>MOUNTING BRACKET</b>
	Mounting post for MINIEXPLORER - Zinc-coated - Height 1200mm		Wall mounting bracket for MINIEXPLORER - Zinc-coated - Length 25cm or 35cm
	Item no. F102PAL0120		Item no. F102STAFFA25 Item no. F102STAFFA35















## Perimeter protection with microwave barrier MINIEXPLORER/EXPLORER II



4-sides perimeter configuration









<b>EXPLORER II</b>		Microwave barrier for the protection of outdoor perimeters with a high security risk - Highly immune to weather conditions, light reflection and RFI/EMI - Programmable transmission channel allowing to build configurations with a combination of several barriers per track without causing inferences - Available with 3 different ranges					
 	<b>EXPLORER II 0600</b>						
	Item no. F102BAR.0600						
	<b>EXPLORER II 1200</b>						
	Item no. F102BAR.1200						
	<b>EXPLORER II 1800</b>						
	Item no. F102BAR.1800						

### EXPLORER II - Technical and functional specifications

Detection features	Range EXPLORER II 0600	60m	Electrical specifications DC power supply	Rated voltage	9V...15V DC
	Range EXPLORER II 1200	120m		Operating voltage	13.8V DC
	Range EXPLORER II 1800	180m		Max. consumption TX	110mA @ 13.8V DC
	Operating frequency	10.525GHz (50% impulse)		Max. consumption RX	60mA @ 13.8V DC
	TX channels	Programmable (5.5KHz - 7.8KHz)		Battery	12V/2.1Ah
	Emission power	≤500mW		Current available for battery recharge	240mA
Outputs	Alarm	NC - electronic relay	Physical specifications	Environmental class	IV
	Tamper	NC - switch		Protection class	IP65
	Failure	NC - electronic relay		Casing	Al + ASA
Inputs	Stby	Stand-by input		Dimensions (Ø x H)	310 x 239.5mm
Anti-tamper protection	Anti-opening	Micro-switch		Weight (w/o battery)	5.2kg
	Anti-twist	Mechanical		Operating temperature	-25°C...+55°C
Electrical specifications AC power supply	Rated voltage	18V AC			
	Max. consumption TX	260mA @ 18V AC			
	Max. consumption RX	100mA @ 18V AC			

### EXPLORER II - Accessories

	<b>POST</b>		<b>TA1/N3 TRANSFORMER KIT</b>
	Mounting post for EXPLORER II and EXPLORER BUS - zinc-coated - Dimensions (Ø x H) 60 x 1500mm		220/18V AC 60VA transformer kit for QUADBEAM, EXPLORER II and EXPLORER BUS
	Item no. F102PALI		Item no. F102TRASF.BARR.
	<b>MOUNTING BRACKET</b>		<b>TECNOTESTER</b>
	Wall mounting bracket for EXPLORER II and EXPLORER BUS - Zinc-coated - Length 22cm or 42cm		Tester for alignment of EXPLORER II
	Item no. F102STAFFAEXPL		
	Item no. F102STAFFAEX42		Item no. F102TESTEREXPL

# SIRENS

## FOR INDOOR USE - FOR OUTDOOR USE

The acoustic warning devices of Tecnoalarm are designed to satisfy the most sophisticated security requirements, in compliance with the current standards and regulations. The sirens of Tecnoalarm provide the highest levels of intrinsic safety and functionality, whether it be a sounder for indoor or outdoor use. The elegant and functional Pininfarina design allows a perfect blending with every architectural framework.

### INDOOR

#### **Sirens for indoor use**

Among the indoor sirens of Tecnoalarm, SIRTEC represents the flagship model. Its characteristics are remarkable: high sound level (117dB) guaranteed by the use of a magneto-dynamic speaker, great autonomy thanks to a 2Ah lead-acid battery, battery recharge guaranteed with 10.5V, programmable alarm time.

These are top range distinctive features which establish a new reference for this family of devices.

### OUTDOOR








#### **Sirens for outdoor use**

With the range of sirens SAEL 2010, Tecnoalarm innovates and reconfigures the concepts of safety, reliability, performance and power consumption of outdoor sirens: greater security, thanks to sophisticated anti-tamper protections, total reliability, guaranteed by self test functions that ensure full operational efficiency, differentiated signaling with dynamic light effects, low power consumption thanks to state-of-the-art LED technology.




























# Sirens

## Sirens for indoor use

SIRTEC						
	Self-powered magneto-dynamic siren for indoor use - Programmable sound type - Programmable alarm time - Sound level 117dB(A) @ 1m - 12V/2.1Ah battery - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 290 x 95 x 70mm - Certified to EN 50131-4 - Security grade 2					
	Item no. <b>F105SIRTEC</b> White color					
	Item no. <b>F105SIRTECGR</b> Gray metallic color					
SIREL 2000B						
	Piezoelectric siren for indoor use - Differentiated sound level for alarm and prealarm - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 105 x 160 x 44mm - White color					
	Item no. <b>F105SIREL2000</b>					
SIREL 2000L						
	Piezoelectric siren for indoor use - LED flashlight - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 105 x 160 x 44mm - White color					
	Item no. <b>F105SIREL2000L</b>					
SIREL 2000F						
	Piezoelectric siren for indoor use - Xenon flashlight - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 105 x 160 x 44mm - White color					
	Item no. <b>F105SIREL2000F</b>					
SIREL 2000AUTO						
	Self-powered piezoelectric siren for indoor use - LED flashlight - 9V alkaline battery - Antistatic ABS casing - Design by Pininfarina - Dimensions (L x H x D) 105 x 160 x 44mm - White color					
	Item no. <b>F105SIREL2000AU</b>					

## Sirens for outdoor use

SAEL 2010 LED								
	Self-powered magneto-dynamic siren for outdoor use - Optical antifoam protection - LED flashlight - Self test function - Sound level 103dB(A) @ 1m - 12V/2.1Ah battery - Casing: ABS base, ASA cover - Design by Pininfarina - Dimensions (L x H x D) 211 x 315 x 98mm - Certified to EN 50131-4 - Security grade 3 - Environmental class IIIA							
	Item no. F105SAEL2010LBI White ASA cover							
	Item no. F105SAEL2010LGR Gray metallic ASA cover							
SAEL 2010 LED								
	The same as SAEL 2010 LED but with varnished or chrome-plated aluminum cover							
	Item no. F105SAEL2010LAL Varnished aluminum cover							
	Item no. F105SAEL2010LCR Chrome-plated aluminum cover							
SAEL 2010PRO LED								
	Self-powered magneto-dynamic siren for outdoor mounting - Optical antifoam protection - Anti-drilling protection - LED flashlight - Self test function - Sound level 103dB(A) @ 1m - 12V/2.1Ah battery - Casing: ABS base, aluminum cover - Design by Pininfarina - Dimensions (L x H x D) 211 x 315 x 98mm - Certified to EN 50131-4 - Security grade 4 - Environmental class IIIA							
	Item no. F105S2010PROL Varnished aluminum cover							

# POWER SUPPLIES

In electronic equipment, especially in the field of security systems, the role of power supplies is of utmost importance. The choice and the correct sizing of the primary (power supply) and secondary (battery) power source determine in large measure the stability and reliability of the security systems. In the design of power supplies, Tecnoalarm pays particular attention to the systems' power requirements, the efficiency and reliability, in full compliance with the electrical safety standards.



## **External power supplies**

The external power supplies of Tecnoalarm comply with the standards that govern the design and construction of professional power supply systems for the security system industry. They are equipped with switching Fly-back power supplies with PFC (Power Factor Correction) circuits mounted in metal casings capable of housing batteries that ensure the capacity required by the standards. The power supply systems provide sophisticated self test functions and detailed information on the functional status of the equipment.



## **Power supplies**

The switching power supplies feature the Fly-back technology. The model ALSW148PFC is equipped with a PFC (Power Factor Correction) circuit, which increases the electric efficiency to a score of more than 90%, reducing significantly the energy consumption and heat radiation. All models comply with the directives EMC (Electromagnetic Compatibility) and LVD (Low Voltage) and are provided with the Certificate with Surveillance (CSV) issued by the Italian Institute for the Quality Mark (IMQ).





### TAPS-8 Power supply 12V

Out EPS LOSS	<input checked="" type="checkbox"/> Flashing	On	Batteria bassa Low battery	
	<input checked="" type="checkbox"/> Flashing	On	Guasto batteria 2 Battery 2 failure	
	<input checked="" type="checkbox"/> Flashing	On	Guasto batteria 1 Battery 1 failure	
	<input checked="" type="checkbox"/> Flashing	On	Sovraccarico Overload	
	<input checked="" type="checkbox"/> Flashing	On	Guasto carica batterie Battery charger failure	
Out APS FAULT	<input type="checkbox"/> Off		Guasto alimentatore Power supply fault	
	<input checked="" type="checkbox"/> Flashing	On	Rete 230V~ Mains power 230V~	

Technoalarm

Power Supply: ALSW148PFC  
Input voltage: 230V~ +10%-15% 50/60Hz  
Max input current: 600mA  
Output: 14,4V — I max: 8A  
Further information on the technical manual









-V -V +V +V OUTPUT

F1, 25A  
+ - L 1200mA L N

# Power supplies

## External power supplies



 	<b>TAPS-8</b>	     
	External power supply - Self test function - Automatic disconnection of the batteries in case of deep discharge - Detailed status signaling is available through 6 LED on the front panel - Max. output current 8A @13.8V DC - 2x 12V/17Ah batteries - Metal casing - Black color - Certified to EN 50131-6 - Security grade 2	
	Item no. F107TAPS-8	





### TAPS-8 - Technical and functional specifications

General features	Type	8A/13.8V DC type A
Electrical output specifications	Power supply outputs	5
	Output voltage	12.5V...13.8V DC
	Max. ripple	≤50mV p-p
	Available current	1.1A @13.8V DC per output
	Battery recharge current	Max. 850mA
	Current available for loads	Max. 5.5A
	Overvoltage signal	>16V +/- 10%
Failure outputs	Power supply lost	NC - electronic relay
	Power supply failure	NC - electronic relay
Signaling LED	Low battery	✓
	Failure battery 1	✓
	Failure battery 2	✓
	Overcharge	1 LED per output
	Power supply failure	✓
	Power supply status	✓
Anti-tamper protection	Anti-opening and anti-detachment	Micro-switch





External power supply	Type	8A/14.4V DC switching Fly-back
External power supply	Operating voltage	230V AC +10% -15% 50Hz
	Max. consumption	600mA AC
Batteries (Storage Device)	Capacity	2x 12V/17Ah
	Battery test	Automatic
	Low battery threshold	10.8V DC
	Charging time	80% ca. 19h (2 batteries of 17Ah)
	Autonomy	12h (2.83Ah*)
Physical specifications	Environmental class	II
	Casing	Metal
	Dimensions (L x H x D)	320 x 365 x 170mm
	Weight	5.8kg
	Operating temperature	-10°C...+ 55°C
Conformity	Standards	EN 50131-6
	Security grade	2
	Notified body	IMQ

\* Available current for loads in case of power failure

	<b>UPS1260</b>	  
	External power supply - Max. output current 6A @13.8V DC - 12V/17Ah battery - Metal casing - Black color	
	Item no. F107UPS1260	

### UPS1260 - Technical and functional specifications










General features	Type	6A/13.8V DC	Electrical specifications	Type	6A/14.4V DC
Electrical output specifications	Power supply outputs	4		Operating voltage	230 V AC +10% -15% 50 Hz
	Rated output voltage	13.8V DC		Max. consumption	625mA AC
	Max. ripple	≤160mV p-p		Battery	12V/17Ah
	Available current	1.1A @13.8V DC per output	Physical specifications	Environmental class	II
	Battery recharge current	Max. 1.2A		Casing	Metal
Signaling LED	Overcharge	1 LED per output		Dimensions (L x H x D)	320 x 365 x 170mm
	Anti-opening	Micro-switch		Weight	4.8kg
Anti-tamper protection	Anti-opening	Micro-switch		Operating temperature	-10°C...+ 55°C

	<b>UPS2435</b>	  
	External power supply - Max. output current 3.5A @ 27.8V DC - 2x 12V/17Ah batteries - Metal casing - Black color	
	Item no. F107UPS2435	

### UPS2435 - Technical and functional specifications

General features	Type	3.5A/27.8V DC	Electrical specifications	Type	3.5A/27.8V DC
Electrical output specifications	Power supply outputs	4		Operating voltage	230 V AC +10% -15% 50 Hz
	Rated output voltage	27.8V DC		Max. Consumption	800mA AC
	Max. ripple	≤180mV p-p		Battery	2x 12V/17Ah
	Available current	700mA @27.8V DC per output	Physical specifications	Environmental class	II
	Battery recharge current	Max. 700mA		Casing	Metal
Signaling LED	Overcharge	1 LED per output		Dimensions (L x H x D)	320 x 365 x 170mm
	Anti-opening	Micro-switch		Weight	4.8kg
Anti-tamper protection	Anti-opening	Micro-switch		Operating temperature	-10°C...+ 55°C

## Power supplies

	<b>ALSW148PFC</b>	   
	Switching Fly-back power supply with PFC circuit - Max. output current 8A @ 14.4V DC - Metal casing - Dimensions (L x H x D) 175 x 53 x 108mm - Certified to EN 60950-1 and EN 50130-4:2011	
	Item no. F107ALSW148PFC	
	<b>ALSW146</b>	  
	Switching Fly-back power supply - Max. output current 6A @14.4V DC - Metal casing - Dimensions (L x H x D) 137 x 53 x 108mm - Certified to EN 60950-1 and EN 50130-4:2011	
	Item no. F107ALSW146	

# SOFTWARE

Whatever your professional mission, you will find in the Tecnoalarm software the most suitable solution to apply your business model. Keep your customers loyal and expand your business by activating exclusive after-sales services. Four levels of access to the Tecnoalarm software, a world of constantly updated services with differentiated functions, all of which can be personalized with license plug-ins, allow to set up interesting management services for your customers.



PROGRAMMING

#### **Programming**

The programming software permits the configuration of the Tecnoalarm systems, either through the PROG USB interface or via the LAN network.



REMOTE  
MANAGEMENT

#### **Remote management via telephone network**

The remote management software, combined with a digital receiver/modem TECNOMODEM PSTN-GSM, permits the remote programming and control of the Tecnoalarm systems, via the PSTN and GSM-GPRS network.



TCP/IP

#### **Remote management via Ethernet/WAN**

The TCP/IP software allows to remotely program and control the Tecnoalarm systems, using a personal computer connected to the Ethernet or WAN network.



MONITORING

#### **Monitoring**

The Tecnomonitor software permits monitoring of one Tecnoalarm system either locally, through the PROG USB interface, or via the LAN network.

The Tecnoalarm software includes the Programming Data Check, which automatically compares the version of the configuration of the connected control panel with that saved in the archive and signals a possible discrepancy.











# Software








## Programming



	<b>PROGRAMMING SOFTWARE</b>  <b>Programming software for Windows</b> The programming software permits the configuration of the Tecnoalarm systems, either through the PROG USB interface or via the LAN network.				
<b>PROG USB</b>					
	<b>Programming interface</b> The interface, paired with the programming software, allows to configure the Tecnoalarm systems locally. The connection with the system is made through the ports RS232, RS485 or TTL. The connection with the PC is made using the included USB cable.				
	<b>Item no. F130SOFTWARE/RW</b>				

## Remote management









	<h2>REMOTE MANAGEMENT SOFTWARE</h2> <p><b>Management software for Windows</b> The remote management software, combined with a digital receiver/modem TECNOMODEM PSTN-GSM, permits the remote programming and control of the Tecnoalarm systems, via the PSTN and GSM-GPRS network.</p>						
<b>Item no. F130SOFTWARE/TW</b>							
<b>TECNOMODEM PSTN-GSM</b>							
	<p><b>PSTN/GSM-GPRS modem</b> The modem, combined with the remote management software, allows to receive and manage the alarm notifications and remotely program and control the Tecnoalarm systems. Communication interfaces: PSTN, GSM-GPRS - Connection ports: USB, RS232, TCP/IP</p>						
<b>Item no. F104MODPSTNGSM</b>							









## Remote management with TCP/IP



	<b>TCP/IP</b>			
	<b>Management software for Windows</b> The TCP/IP software allows to receive and manage the alarm notifications and remotely program and control the Tecnoalarm systems, using a PC connected to the Ethernet or WAN network. The software is protected by a hardware key (dongle). The software is available in several configurations for the management of 10 to 1000 systems.			
	<b>Included option</b>			<b>14</b>
	<b>TCP/IP 10</b>	Item no. F130SWTCPIP/10		
	<b>TCP/IP 30</b>	Item no. F130SWTCPIP/30		
<b>PROG USB</b>	<b>TCP/IP 50</b>	Item no. F130SWTCPIP/50		
	<b>TCP/IP 1000</b>	Item no. F130SWTCPIP		
	   			
	<b>Programming interface</b> The interface, paired with the TCP/IP software, functions as a hardware key (dongle). The connection with the PC is made using the included USB cable.			
				
Item no. F130PROGUSB				

## Monitoring



	<b>TECNOMONITOR</b>		
	<b>Monitoring software for Windows</b> The Tecnomonitor software permits monitoring of one Tecnoalarm system either locally, through the PROG USB interface, or via the LAN network. The software is protected by a hardware key (dongle).		
	<b>Included option</b>		<b>2</b>
<b>PROG USB</b>	Item no. F130TECNOMONIT		
	<div>     </div>		
	<b>Programming interface</b> The interface, paired with the Tecnomonitor software, permits monitoring of one Tecnoalarm system locally. It also functions as a hardware key (dongle). The connection with the system is made through the ports RS232, RS485 or TTL. The connection with the PC is made using the included USB cable.		
	Item no. F130PROGUSB		

# Software

## License options

<b>FLOOR PLANS</b>	License option for floor plan management. Permits the import, creation and management of 30 floor plans per system.				
Item no. F130PLANIMETRIE	Option <b>2</b>	PROGRAMMING	REMOTE MANAGEMENT	TCP/IP	MONITORING
<b>ARMING/DISARMING CONTROL</b>	License option for arming/disarming control. Permits the arming status check during a determined period of time.				
Item no. F130CONINSDIS	Option <b>3</b>		REMOTE MANAGEMENT	TCP/IP	
<b>NETWORK</b>	License option for LAN connection of a total of 8 PC using the same user license.				
Item no. F130RETE	Option <b>4</b>		REMOTE MANAGEMENT	TCP/IP	
<b>OUTPROT</b>	License option for Out Prot protocol management. Permits the recording and the transmission of events via serial bus to non-Tecnoalarm monitoring stations.				
Item no. F130OUTPROT	Option <b>5</b>		REMOTE MANAGEMENT	TCP/IP	
<b>RSC®</b>	License option for management of the RSC® devices.				
	Option <b>7</b>	PROGRAMMING	REMOTE MANAGEMENT	TCP/IP	
<b>SMS</b>	License option for SMS management. Permits signaling of determined events via SMS.				
Item no. F130GESTIONESMS	Option <b>8</b>		REMOTE MANAGEMENT		
<b>REMOTE IP</b>	License option for remote management via LAN and WAN through a virtual modem.				
Item no. F130REMOTEIP	Option <b>9</b>		REMOTE MANAGEMENT	TCP/IP	
<b>ADVANCED PROGRAMMING LEVEL 1</b>	License option for the first advanced programming level of the compatible control panels.				
	Option <b>10</b>	PROGRAMMING	REMOTE MANAGEMENT	TCP/IP	
<b>ADVANCED PROGRAMMING LEVEL 2</b>	License option for the second advanced programming level of the compatible control panels.				
Item no. F130AVANZATA	Option <b>11</b>	PROGRAMMING	REMOTE MANAGEMENT	TCP/IP	
<b>SINOTTICO</b>	License option for the management of a virtual signaling panel. Permits the import, creation and management of an interactive signaling panel with a total of 512 elements providing 5 system status signals each. N.B. Only in combination with the REMOTE IP license.				
Item no. F130SINOTTICO	Option <b>14</b>		REMOTE MANAGEMENT	TCP/IP	
<b>TECNOMSG</b>	License option for the customization of the vocabulary of control panels with voice synthesis				
Item no. F130TECNOMSG	Option <b>15</b>		REMOTE MANAGEMENT	TCP/IP	
<b>DEVICE IP</b>	License option for management of the Videoalarm IP systems				
	Option <b>19</b>	PROGRAMMING	REMOTE MANAGEMENT	TCP/IP	
<b>TECNOFIRE</b>	License option for management of the Tecnofire fire alarm systems				
Item no. F130FIRE	Option <b>23</b>	PROGRAMMING	REMOTE MANAGEMENT	TCP/IP	

## Services

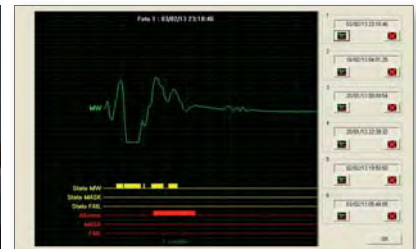
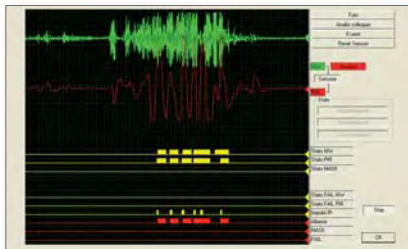
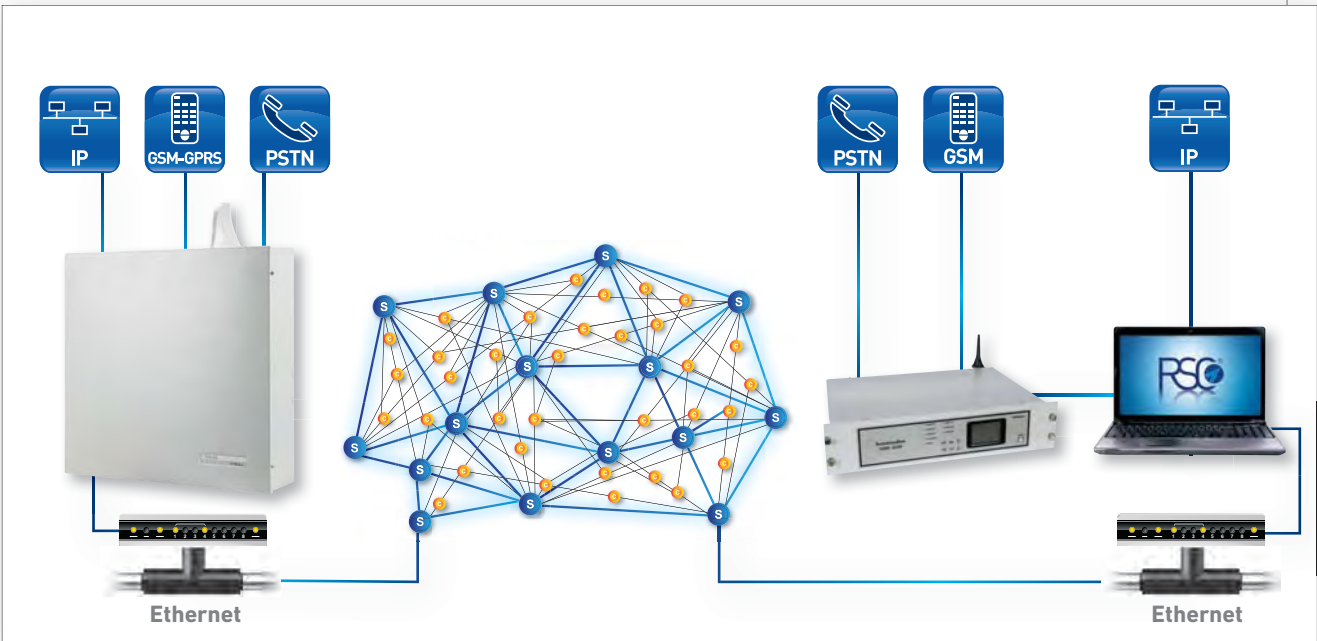
<b>LICENSE COPY</b>	Copy of the user license for any Tecnoalarm software
Item no. F130LICSOFTWARE	

## Remote management

The remote management software is an investment which increases the professional value of your activity and reduces the costs of the management of the systems.

It allows to remotely assess the need for technical measures and to define the ordinary and preventive maintenance operations.

Remote management minimizes the need for travelling the territory, and thus the connected costs. It allows to offer more and better services in less time.



# ACCESSORIES

Tecnoalarm presents its customers a wide and accurate selection of system accessories, which complement and complete the range of products of its catalogue. The accessories meet stringent quality requirements and comply with the applicable product standards. Their interaction with the Tecnoalarm systems has been tested and evaluated in order to obtain an excellent functional synergy and the maximum technical satisfaction



## **Batteries**

The range offers high quality rechargeable batteries produced by market-leading companies, standard size 12V lead-acid batteries with different capacity.



## **Cables**

A whole range of multicore shielded electrical cables is available for the connection of burglar alarm equipment, flame-retardant, with different insulation classes and various configurations of diameter and sections, including twisted-pair cables.



## **Contacts**

The range of contacts includes models of various sizes, materials and types, suitable for surface or flush mounting, specific models for any kind of frame material and structure and for any type of protection requirement, as well as models compliant with EN 50131-2-6.



# Accessories

## Batteries

YUASA	
	<b>NP 1,2-12</b>
	YUASA 12V/1.2Ah rechargeable lead-acid battery - Dimensions (L x H x D) 97 x 52.5 x 48mm
	Item no. F108YUASA 1,2
	<b>NP 2-12</b>
	YUASA 12V/2.3Ah rechargeable lead-acid battery - Dimensions (L x H x D) 178 x 64 x 34mm
	Item no. F108021 YU
	<b>NP 7-12</b>
	YUASA 12V/7Ah rechargeable lead-acid battery - Dimensions (L x H x D) 151 x 97.5 x 65mm
	Item no. F108YUASA 7
	<b>NP 12-12</b>
	YUASA 12V/12Ah rechargeable lead-acid battery - Dimensions (L x H x D) 151 x 97.5 x 98mm
	Item no. F108YUASA 12
	<b>NP 17-12</b>
	YUASA 12V/17Ah rechargeable lead-acid battery - Dimensions (L x H x D) 181 x 167 x 76mm
	Item no. F108017 YU
	<b>NP 24-12</b>
	YUASA 12V/24Ah rechargeable lead-acid battery - Dimensions (L x H x D) 166 x 125 x 175mm
	Item no. F108240 YU
FIAMM	
	<b>FG 2-12</b>
	FIAMM 12V/2Ah rechargeable lead-acid battery - Dimensions (L x H x D) 178 x 67 x 34.5mm
	Item no. F10802 FI
	<b>FG 7-12</b>
	FIAMM 12V/7.2Ah rechargeable lead-acid battery - Dimensions (L x H x D) 151 x 99 x 65mm
	Item no. F108FIAMM 7
	<b>FG 12-12</b>
	FIAMM 12V/12Ah rechargeable lead-acid battery - Dimensions (L x H x D) 151 x 99 x 98mm
	Item no. F108FIAMM 12
	<b>FG 18-12</b>
	FIAMM 12V/18Ah rechargeable lead-acid battery - Dimensions (L x H x D) 181 x 165.5 x 76mm
	Item no. F108018 FI



## Flame-retardant cables



In the setup of a system, the installer must use cables compliant to the standard IEC 60332-3C.

### CLASS 2

INSULATION  
300/500V

## Class 2 cables - Insulation 300/500V

ITEM	DESCRIPTION	EXTERNAL DIAMETER	HANKS	ITEM NO.
2x022	Shielded 2 x 0.22	3.4mm	100m*	F11200000180
4x022	Shielded 4 x 0.22	3.7mm	100m*	F11200000200
5x022	Shielded 5 x 0.22	3.9mm	100m*	F11200000170
6x022	Shielded 6 x 0.22	4.5mm	100m*	F11200000301
8x022	Shielded 8 x 0.22	4.6mm	100m*	F11200000202
10x022	Shielded 10 x 0.22	5.2mm	100m*	F11200000203
14x022	Shielded 14 x 0.22	5.6mm	100m*	F11200000213
20x022	Shielded 20 x 0.22	6.6mm	100m*	F11200000214
2x050+2x022	Shielded 2 x 0.50 + 2 x 0.22	4.3mm	100m*	F11200000204
2x050+3x022	Shielded 2 x 0.50 + 3 x 0.22	4.7mm	100m*	F11200000205
2x050+4x022	Shielded 2 x 0.50 + 4 x 0.22	4.9mm	100m*	F11200000206
2x050+5x022	Shielded 2 x 0.50 + 5 x 0.22	4.9mm	100m*	F11200000220
2x050+6x022	Shielded 2 x 0.50 + 6 x 0.22	5.2mm	100m*	F11200000207
2x050+8x022	Shielded 2 x 0.50 + 8 x 0.22	5.8mm	100m*	F11200000208
2x050+10x022	Shielded 2 x 0.50 + 10 x 0.22	5.8mm	100m*	F11200000216
4x075	Shielded 4 x 0.75	5.3mm	100m*	F11200000230
2x075+4x022	Shielded 2 x 0.75 + 4 x 0.22	5.0mm	100m*	F11200000209
2x075+6x022	Cavo schermato 2 x 0.75 + 6 x 0.22	5.7mm	100m*	F11200000303
2x075+8x022	Cavo schermato 2 x 0.75 + 8 x 0.22	5.9mm	100m*	F11200000211
2x075+10x022	Cavo schermato 2 x 0.75 + 10 x 0.22	6.2mm	100m*	F11200000212

\* 500m spools upon request

# Accessories

## CLASS 4

INSULATION  
600/1000V

## Class 4 cables - Insulation 600/1000V

ITEM	DESCRIPTION	EXTERNAL DIAMETER	HANKS	ITEM NO.
4x022	Shielded 4 x 0.22	3.7mm	200m*	F11200000305
6x022	Shielded 6 x 0.22	5mm	200m*	F11200000302
2x075+6x022	Shielded 2 x 0.75 + 6 x 0.22	5.7mm	200m*	F11200000304

## TWISTED CABLE

## CLASS 2

INSULATION  
300/500V

## Class 2 twisted-pair cables - Insulation 300/500V

ITEM	DESCRIPTION	EXTERNAL DIAMETER	HANKS	ITEM NO.
2x1+2x050	Shielded twisted-pair 2x 1 + 2x 0.50mm - White coating	5.6mm	100m*	F11200000223
2x1+2x(2x050)	Shielded twisted-pair 2x 1 + 2x (2x 0.50mm) - White coating	6.6mm	100m*	F11200000226
2x1+2x(2x050)	Shielded twisted-pair 2x 1 + 2x (2x 0.50mm) - Black coating	6.6mm	200m*	F11200000224
2x050+(1x1+1x050)+1x1	Shielded twisted-pair 2x 0.50 + (1x 1 + 1x 0.50) + 1x 1mm - For LCD 300/S	6.5mm	100m*	F11200000228
2x035+(2x022)+1x022	Shielded twisted-pair 2x 0.35 + (2x 0.22) + 1x 0.22mm	5mm	200m*	F11200000229

## TWISTED CABLE

## CLASS 4

INSULATION  
600/1000V

## Class 4 twisted-pair cables - Insulation 600/1000V

ITEM	DESCRIPTION	EXTERNAL DIAMETER	HANKS	ITEM NO.
2x1+2x050	Shielded twisted-pair 2x 1 + 2x 0.50mm - White coating	6.2mm	200m*	F11200000225
2x1+2x(2x050)	Shielded twisted-pair 2x 1 + 2x (2x 0.50mm) - White coating	7mm	200m*	F11200000309
2x1+2x(2x050)	Shielded twisted-pair 2x 1 + 2x (2x 0.50mm) - Black coating	7.2mm	200m*	F11200000227

## LSZH

## CLASS 2

INSULATION  
300/500V

## Class 2 halogen-free cables - Insulation 300/500V

ITEM	DESCRIPTION	EXTERNAL DIAMETER	HANKS	ITEM NO.
4x022	Shielded 4x 0.22mm	4mm	200m*	F11200000240
6x022	Shielded 6x 0.22mm	4.9mm	200m*	F11200000241
2x050+4x022	Shielded 2x 0.50 + 4x 0.22mm	5.4mm	200m*	F11200000242
2x075+4x022	Shielded 2x 0.75 + 4x 0.22mm	5.6mm	200m*	F11200000243

The use of LSZH cables with low emission of smoke and toxic gases is mandatory in public buildings (reference standard IEC 60332-3C).

## LSZH TWISTED CABLE

## CLASS 4

INSULATION  
600/1000V

## Class 4 halogen-free twisted-pair cables - Insulation 600/1000V

ITEM	DESCRIPTION	EXTERNAL DIAMETER	HANKS	ITEM NO.
2x1+2x(2x050)	Twisted-pair 2x 1 + 2x (2x 0.50mm)	6.6mm	200m*	F11200000244
2x035+(2x022)+1x022	Twisted-pair 2x 0.35 + (2x 0.22) + 1x 0.22mm	4.9mm	200m*	F11200000245

The use of LSZH cables with low emission of smoke and toxic gases is mandatory in public buildings (reference standard IEC 60332-3C).

\*500m spools upon request




## Additional relay boards

	<b>BIRELE</b>		<b>BIRELE BOX</b>
	Relay board with 2 independent 12V relays with potential-free control winding and outputs with free change-over contact		ABS casing for BIRELE - Dimensions (L x H x D) 70 x 117 x 52mm
	<b>Item no. F127BIRELEN</b>		<b>Item no. F127BIRELENBOX</b>



## Reed contacts - Security grade 3



	<b>1001N</b> 		<b>1021N</b> 
	Metal die cast - Triple balancing - Surface mounting - White - EN 50131-2-6 - Security grade 3		As 1001N but with anti-detachment protection
	<b>Item no. F1061001N</b>		<b>Item no. F1061021N</b>



## Reed contacts - Security grade 2



	<b>1003N</b> 		<b>1005N</b> 
	Metal die cast - Double balancing - Surface mounting - White - EN 50131-2-6 - Security grade 2		Metal die cast - For long-distance detection - Surface mounting - White - EN 50131-2-6 - Security grade 2
	<b>Item no. F1061003N</b>		<b>Item no. F1061005N</b>
	<b>CTC 002</b>		<b>403 TF</b> 
	Aluminum - For metal doors - Surface mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 2)		Plastic - Surface mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 10)
	<b>Item no. F106CTC 002</b>		<b>Item no. F106403 TF</b>
	<b>460 NS</b> 		<b>460 N</b> 
	As 460 N but with change-over contact		Aluminum - For iron frames - Surface mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 2)
	<b>Item no. F106460NS</b>		<b>Item no. F106460N</b>
	<b>CTC 013</b> 		<b>CTC 051</b>
	Aluminum - 60cm cable - Surface mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 5)		Aluminum - Miniaturized - Surface mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 10)
	<b>Item no. F106CTC 013</b>		<b>Item no. F106CTC 051</b>
	<b>355</b> 		<b>455</b> 
	Aluminum - Surface mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 10)		Metal - For roller shutters - EN 50131-2-6 - Security grade 2 (sold in packs of 2)
	<b>Item no. F106355</b>		<b>Item no. F106455</b>
	<b>462 N</b> 		<b>450 N</b> 
	Aluminum - For iron frames - Surface mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 2)		Aluminum - For swing doors - Surface mounting (on the ground) - EN 50131-2-6 - Security grade 2
	<b>Item no. F106462N</b>		<b>Item no. F106450N</b>
	<b>CTI 102</b> 		<b>CTI 130</b> 
	Brass - For metal frames - Flush mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 5)		Brass - For metal frames - Flush mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 2)
	<b>Item no. F106CTI 102</b>		<b>Item no. F106CTI130</b>

# Accessories



	<b>CTI 002</b> 
	Brass - Flush mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 10)
	<b>Item no. F106CTI 002</b>



	<b>414 CTF</b> 
	Galvanized brass - 30cm cable - Flush mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 10)
	<b>Item no. F106414CTF</b>



	<b>414 CTF2</b> 
	Galvanized brass - 2m cable - Flush mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 10)
	<b>Item no. F106414CTF2</b>

	<b>423 TF</b> 
	Plastic - Flush mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 2)
	<b>Item no. F106423TF</b>



	<b>415 TF - 415 TFM</b> 
	Plastic - Flush mounting - White or brown - EN 50131-2-6 - Security grade 2 (sold in packs of 10)
	<b>Item no. F106415 TF</b> <b>Item no. F106415 TFM</b>



	<b>415 TF2</b> 
	As 415 TF but with 2m cable
	<b>Item no. F106415TF2</b>

	<b>CTE 045</b> 
	Plastic - Surface mounting - White - EN 50131-2-6 - Security grade 2 (sold in packs of 5)
	<b>Item no. F106CTE 045</b>


	<b>314</b> 
	Brass - Flush mounting - EN 50131-2-6 - Security grade 2 (sold in packs of 10)
	<b>Item no. F106314</b>


## Reed contacts - Security grade 1


	<b>405 M</b> 
	Plastic - Surface mounting - White - EN 50131-2-6 - Security grade 1 (sold in packs of 10)
	<b>Item no. F106405M</b>

	<b>405 MM</b> 
	As 405 M but brown
	<b>Item no. F106405MM</b>

## Mechanical rod and rope contacts

	<b>470</b>
	Rod contact for roller shutters (sold in packs of 5)
	<b>Item no. F106470</b>


	<b>474</b>
	Rope slide
	<b>Item no. F106474</b>

	<b>SW 912</b>
	Rope contact (sold in packs of 3)
	<b>Item no. F106SW 912</b>


## Flood detectors

	<b>1450</b>
	Flood detector - Programmable sensitivity - 12V or 24V power supply - Relay output with change-over contact - Max. 10 probes (sold in packs of 2)
	<b>Item no. F1061450</b>








	<b>1450S</b>
	Probe for long-distance detection for 1450 (sold in packs of 2)
	<b>Item no. F1061450S</b>

	<b>RPL108</b>
	Flood detector - Especially suitable for monitoring flooding of ditches and interspaces - Signaling LED for operating status - Free changeover relay with 1A 30V DC contacts - Operating voltage 10V...30V DC - 1m cable - IP68 - Casing ABS - Dimensions (L x H x D) 72 x 91 x 39mm
	<b>Item no. F106RPL108</b>

## Vibration detectors

	<b>CINEM5</b>		<b>444</b>
	Plastic - Timed alarm - Surface mounting (sold in packs of 2)		Plastic 360° rotation (sold in packs of 5)
<b>Item no. F106CINEM5</b>		<b>Item no. F106444</b>	
	<b>CINS DIP65</b>		<b>CINS DIP122</b>
	Aluminum - For window grills and lattice windows - 5m cable - Upright surface mounting (sold in packs of 2)		Plastic - Vibration detector with magnetic contact (independent functioning) - For metal frames - Flush mounting (sold in packs of 2)
<b>Item no. F106CINS DIP65</b>		<b>Item no. F106CINS DIP122</b>	


## Panic buttons

	<b>4841</b> 		<b>484ME</b> 
	Panic button - Anti-tamper protection - NC signaling and tamper outputs - Reset with a key		Panic button - Anti-tamper protection - NC signaling and tamper outputs - Memory LED - Memory reset with power off - 12V power supply
<b>Item no. F1064841</b>		<b>Item no. F106484ME</b>	
	<b>485ME</b>		<b>476</b> 
	Metal foot-operated panic button - NC signaling output - Memory LED - Memory reset with power off - 12V power supply		Panic button - Anti-tamper protection - Change-over micro-switch - Sealable protection lid
<b>Item no. F106485ME</b>		<b>Item no. F106476</b>	


## Optical repeaters

	<b>RIP R</b>		<b>RIP V</b>
	Fix red light - Operating voltage 9V...30V		Fix green light - Operating voltage 9V...30V
<b>Item no. F106RIPOTT R</b>		<b>Item no. F106RIPOTT V</b>	
	<b>RIP G</b>	<b>RIP G</b>	
	Fix yellow light - Operating voltage 9V...30V	Fix yellow light - Operating voltage 9V...30V	
<b>Item no. F106RIPOTT G</b>		<b>Item no. F106RIPOTT G</b>	

## Interfaces

	<b>PROG32</b>
	Serial printer interface - RS232 and RJ45 connection cables included
<b>Item no. F130PROG32</b>	

## Junction boxes

	<b>1465</b>
	Junction box Anti-tamper protection - 20 terminals (cable section max. 2.5mm <sup>2</sup> - Operating temperature -25°C...+70°C - Aluminum casing - IP54 - White
<b>Item no. F1061465</b>	