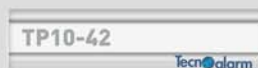


TP10-42

Expandable serial alarm system



Great versatility and cutting-edge technology for a comprehensive protection of a high level

Tecnalarm
Hi-Tech Security Systems



Tecnoalarm RSC® Technology

RSC® (Remote Sensitivity Control) is an exclusive technology developed by Tecnoalarm, thanks to which the central monitoring station (CMS) and the installer can program and control the system completely from a distance. Sophisticated diagnostic tools allow verify and maintain the smooth functioning of each system component as well as adjust and improve the system's performance.



Programming

Programming of the system's functioning parameters can be made either locally or remotely using the Tecnoalarm programming software. The sophisticated software permits easy setting of the numerous functioning parameters of the system as well as saving of the system configurations for future modifications. It facilitates even the compliance with a maintenance plan, as recommended by the application guide CLC/TS 50131-7. The technician of the installer company can check the settings and functioning of each device from his office and adjust programming. So, at least one of the two annual inspections prescribed by the standards can be carried out remotely. The diagnostic tools permit easy analysis of the system's functioning and the automatic saving of the corresponding reports.

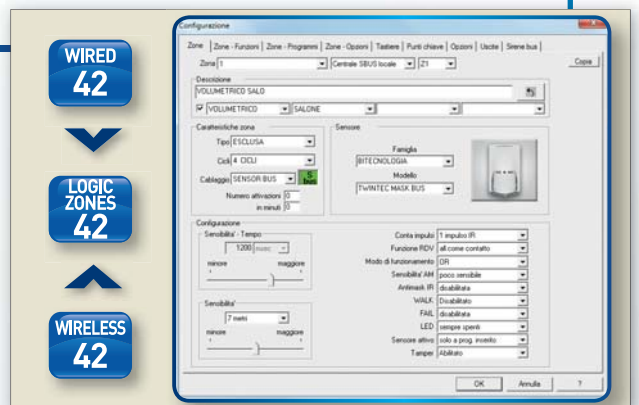


Zones

The 4 conventional and the 6 bus inputs of the CPU constitute the basic version of the system. The modular structure as well as the great variety of input expansions permit the expansion to a total of 42 zones which can be freely associated to the hard-wired (conventional or bus) or wireless inputs of the hardware.

The zone programming facilities allow to obtain excellent performances even from traditional detectors but only with the Tecnoalarm RDV® and RSC® detectors the system's potential is tapped. These detectors permit the verification and analysis of the alarms at the very moment they are released, through the specific diagnostic tools.

The limitations of traditional remote management have been overcome and a new concept of interaction has been proposed. RDV® and RSC® are registered trademarks, RDV® is an international patent.



Programs and control units

The system manages 8 programs for a perfect management of multiuser systems. A wide range of control units is able to satisfy any application requirements. The exclusive consoles of the series UTS (Universal Touch Screen) are available with a 4.3" touch screen and transponder reader or with a 7" touch screen, standard or video version and, on demand, with a plug-in for the management of floor plans and images of your home. The Tecnoalarm control units manage the access to the system's functions through codes, transponders/RFID cards, wireless keys and finger prints.



OPERATING CODES

CODES 122

KEYS 100

FINGER PRINTS 100

32 FLOOR PLANS

32 ICONS



Time configuration

In order to offer the maximum versatility it is possible to program all the time parameters independently for each of the programs. Access to the functions can be limited through 6 access periods and their activation can be triggered by 8 timers and 8 cyclic timers. The calendar for the management of the automatic functions of the system can be either quadrennial or perpetual.

PROGRAM-SPECIFIC TIME SETTINGS

AUTOMATIC FUNCTIONS

- ACCESS PERIOD **6**
- TIMERS **8**
- CYCLIC TIMERS **8**
- CALENDAR **4Y/∞**



Alarm transmission equipment (ATE)

The integrated telephone interface provides 8 telephone channels to notify the 157 transmittable events to the users and the CMS. The on board PSTN telephone interface can be integrated by an internal GSM-GPRS interface and/or an internal Ethernet interface. The telephone vectors, depending on their characteristics, use several protocols, also encrypted, to communicate in an appropriate and safe way with the user.

COMMUNICATION DEVICE

- PSTN
- GSM-GPRS
- IP

PROTOCOLS

- PSTN **136**
- GSM-GPRS **24**
- IP **18**

VOICE
SMS
FSK
RING
DTMF
DATA
EMAIL



Interaction

The system provides 8 remote controls which allow the user to interact with the system through telephone calls or SMS messages. The remote controls are customizable and permit the management of the system's functions as well as the interaction with external devices such as the heating, air-conditioning, lighting installation etc.

REMOTE CONTROLS

8

- SMS
- DTMF
- LIGHTS
- IRRIGATION
- ROLLER SHUTTERS



ASYNC@WL wireless expansion

The wireless expansion modules using the protocol ASYNC@WL manage a total of 80 wireless keys and 42 detectors. The modules are connected to the serial bus which permits the installation in positions guaranteeing a good signal transmission. The wide product range comprises indoor and outdoor detectors as well as barriers capable of offering the ideal solution for all kinds of protection requirements.

DETECTORS

42

WL KEYS

80

RF MONITOR



SYNC@BWL wireless expansion

The wireless coordinators using the protocol SYNC@BWL permit the management of bidirectional devices. They coordinate and synchronize the bidirectional data communication with the sirens, wireless keys and detectors. The number of siren nodes connected determines the number of key and detector nodes managed by the system. The protocol SYNC@BWL guarantees a high level of security and minimizes the risk of collisions.

TX TWO WAY RX

433MHz FOUR CHANNELS

868MHz FOUR CHANNELS

AUTOMATIC FREQUENCY CHANNEL TUNING

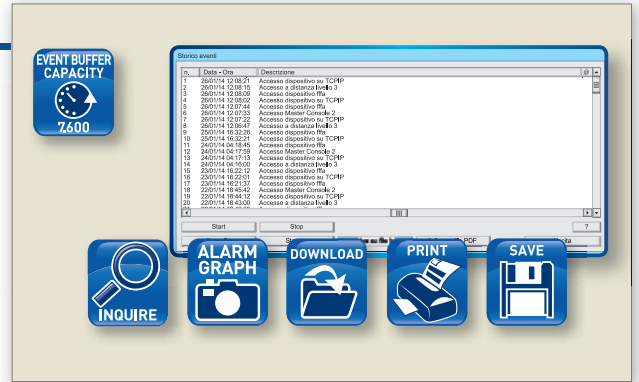
AES XTEA ENCRYPTION

COORDINATOR	1		
SIREN NODE	0	1	2
DETECTOR AND KEY NODE	133	126	119



Event log

The event log contains all the events concerning the system's functioning, i.e. the alarms, the diagnostics and the changes of status. A total of 7600 events can be recorded, in reverse chronological order, with indication of date and time. For each event, detailed information is given on the zones, programs and remote controls involved, identified by a number or a description, as well as the telephone calls made. The installer can download the event log at any time using the Tecnoalarm software and extract the necessary information to verify the system's smooth functioning.



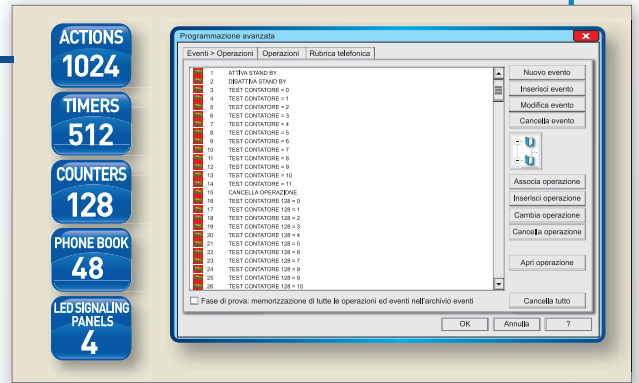
Video surveillance

The UTS V consoles implement video surveillance by means of analogue surveillance cameras connected through active or passive Baluns and standard UTP cables. Viewing of the live streams transmitted by the surveillance cameras can be subjected to the activation of an alarm, a program or a remote control. The live streams can be viewed either in the tiled display mode showing four surveillance cameras simultaneously or in the full screen mode. According to the model, the console manages 4 or 8 surveillance cameras. A software plug-in permits the management of up to 32 floor plans.



Advanced programming and relays

The advanced programming is a plug-in of the firmware of the systems which permits a large extent of customization of the system's resources as well as the integration of home automation functions. The conventional functionality of the inputs, outputs, channels, remote controls etc. is redefined through a series of actions, associated to the events. Expansion modules with relay outputs can be connected via serial bus to the system. The relay modules of the series ESP XR provide potential-free changeover contacts. The possibility of cloning their address allows to control different devices installed throughout the installation by excitation of only one relay.



myTecnoalarm

The application for iPhone and Android allows to interact with the burglar alarm system in a natural and intuitive way. The user can manage the programs and remote controls of the system as well as query their status and the stored events by a few simple operations on his iPhone or smartphone. The communication between the app and the system is established in real time on demand.



Tecnoalarm telematic services

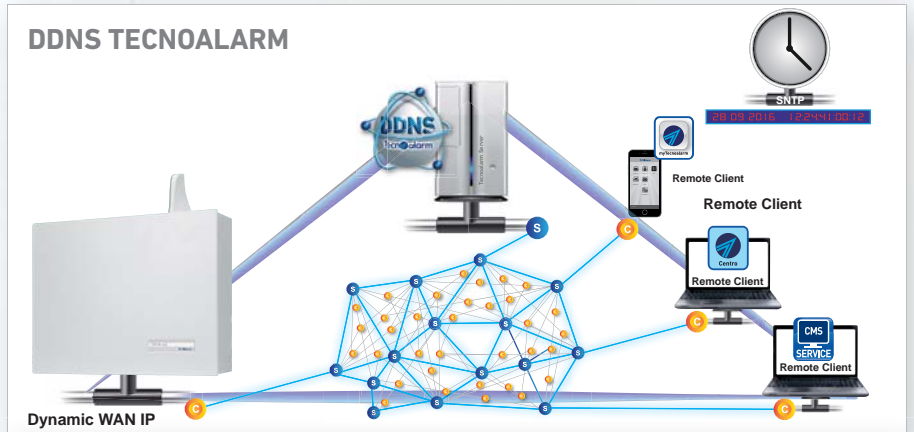
The TP10-42 system integrates the necessary functions for the automatic management of the Tecnoalarm telematic services: DDNS TECNOALARM, SNTP and MAIL SERVER TENOALARM.

These services are managed automatically by a dedicated server and have the aim to simplify and protect the management of the connection of the systems to the Ethernet.



DDNS TECNOALARM

The DDNS TECNOALARM service, in order to be able to reach the control panel at any time, automatically records the name and the IP address of the control panel on the Tecnoalarm server. Whenever the control panel (Client) registers that its IP address has changed, it automatically communicates the new address to the server which updates the registered IP address and transmits the information to the DNS servers on the internet.



SNTP

The SNTP service allows the control panel to synchronize the internal clock with an NTP server which uses the universal coordinated time (UTC).



MAIL SERVER TECNOALARM

The system is equipped with a Mailer Client for the transmission of emails. The Mail Server Tecnoalarm provides a hard-programmed account for the burglar alarm system, by 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.

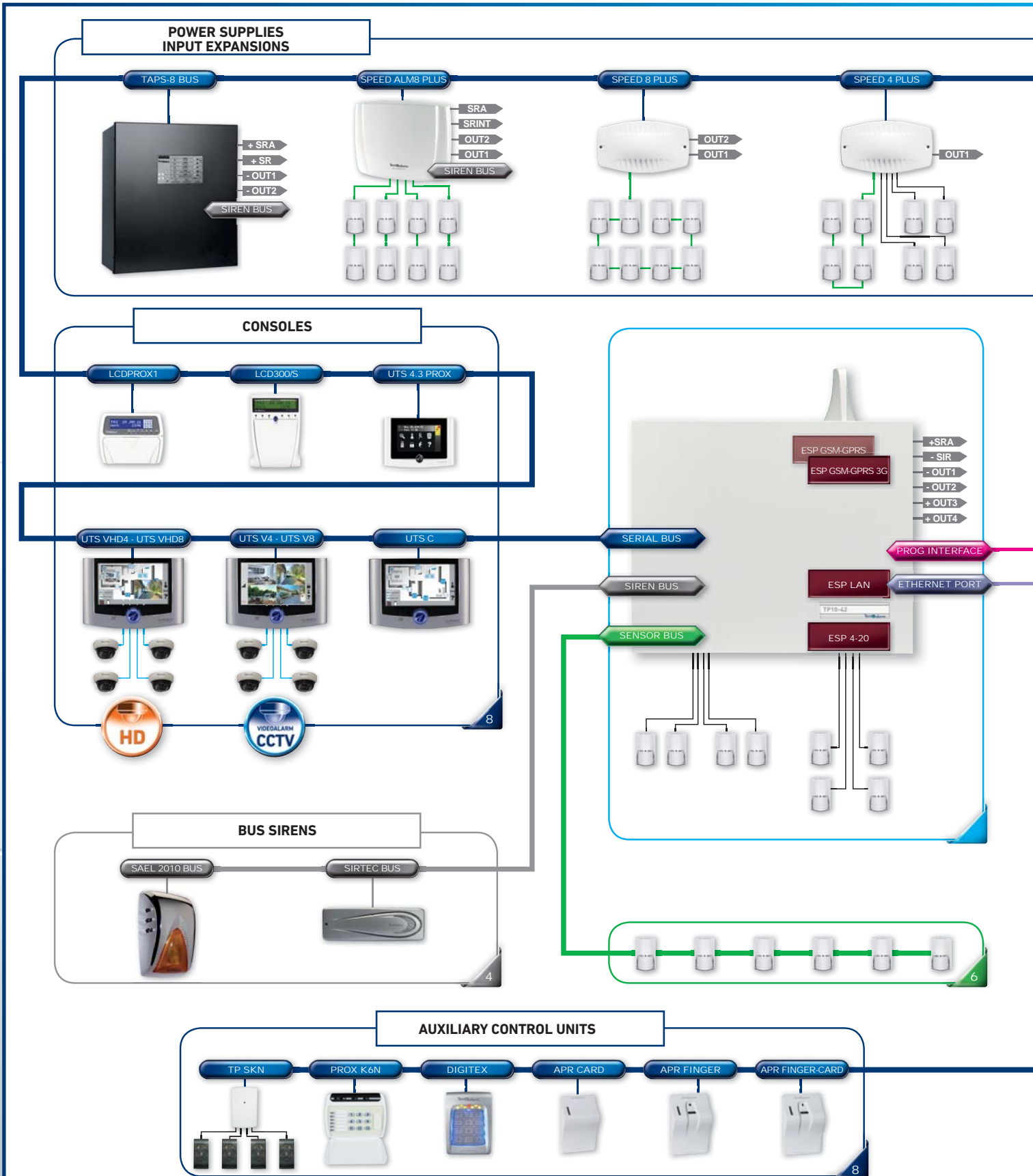
MODELS		PSTN	GSM-GPRS	IP	ADVANCED CONFIGURATION	POWER SUPPLY	METAL BOX
TP10-42	F101T42-UK	✓	Optional	Optional	Optional	3A	✓

VECTORS		DDNS	MAIL	APP	RDV*	SMS	Remote controls	Remote management	Monitoring
Vectors	Device								
PSTN	On board				✓		✓	✓	✓
GSM 2G*	ESP GSM-GPRS			✓	✓	✓	✓	✓	✓
GSM 3G*	ESP GSM-GPRS 3G			✓	✓	✓	✓	✓	✓
IP*	ESP LAN	✓	✓	✓				✓	✓

* The vectors GSM 2G, GSM 3G and IP are optional . The modules ESP GSM-GPRS and ESP GSM-GPRS cannot be used simultaneously.

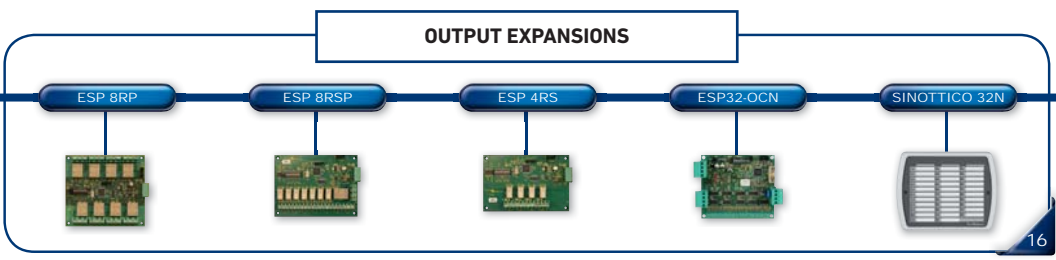
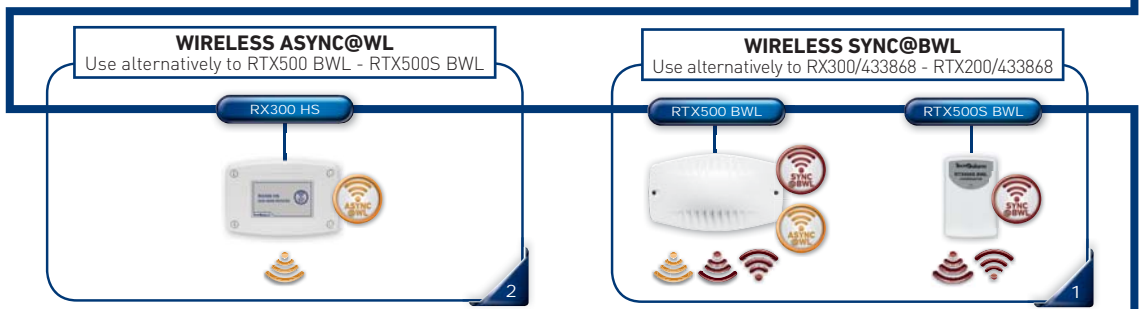
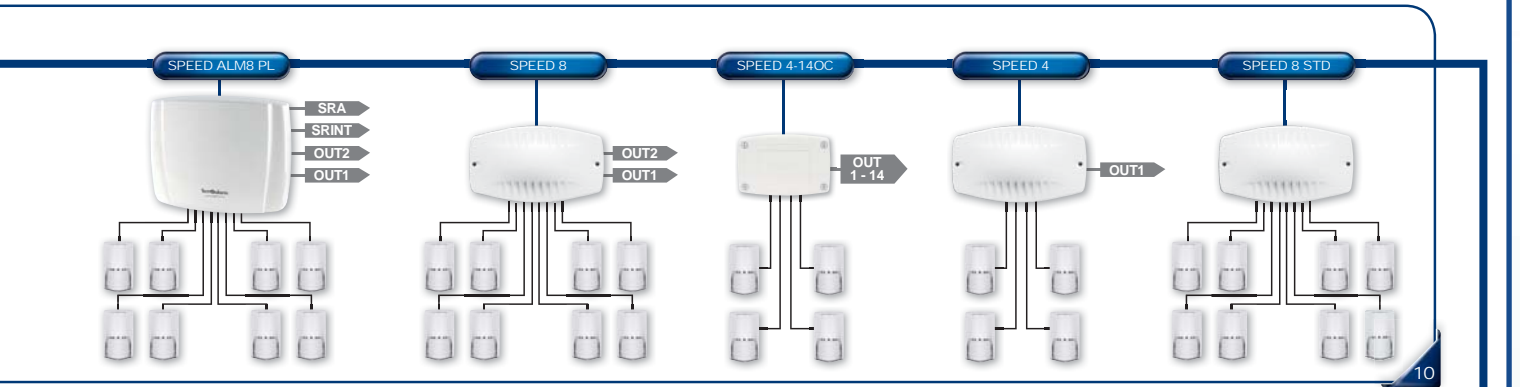
	Cameras			Cameras		Viewing			
	UTS VHD4	4		UTS V4	4	1	1 2 3 4	1	1 2 3 4
	UTS VHD8	8		UTS V8	8	1	1 2 3 4	1	1 2 3 4

	Cameras		Recording		Viewing			
	UTS E	24	8		1	1 2 3 4	1	1 2 3 4














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

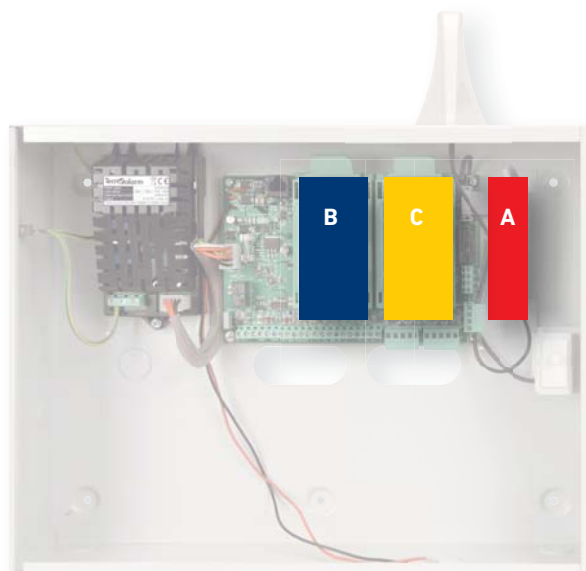
* The contact type of the conventional inputs can be programmed as follows: NC (normally closed), NO (normally open), BIL (end-of-line resistor), B24 (double end-of-line resistor). The filter can be programmed as: time, pulse count or inertia.



Internal expansions and interfaces

<p>ESP4-20</p>					
	<p>Mounting position</p>	<p>A</p>	<p>B</p>	<p>C</p>	<p>Expansion module with 4 parallel inputs for the connection of conventional detectors and Zone Bus detectors (only the first two inputs)</p>
<p>Item no. F127TP420ESP</p>					
<p>ESP LAN</p>					
	<p>Mounting position</p>	<p>A</p>	<p>B</p>	<p>C</p>	<p>Interface for the connection of the control panel to the Ethernet network The interface integrates the IP communication vector and permits remote management and programming with TCP/IP.</p>
<p>Item no. F127ESPLAN</p>					
<p>ESP GSM-GPRS</p>					
	<p>Mounting position</p>	<p>A</p>	<p>B</p>	<p>C</p>	<p>Interface for the connection of the control panel to the GSM or GSM-GPRS network The interface allows to use the GSM or GSM-GPRS mobile telephone network as a communication vector.</p>
<p>Item no. F127ESPGSMGPRS</p>					
<p>ESP GSM-GPRS 3G</p>					
	<p>Mounting position</p>	<p>A</p>	<p>B</p>	<p>C</p>	<p>Interface for the connection of the control panel to the GSM or GSM-GPRS network The interface allows to use the GSM or GSM-GPRS 3G mobile telephone network as a communication vector. It is fit for the use with the remote management and TCP/IP software.</p>
<p>Item no. F127ESPGSMGPRS3</p>					

Mounting positions





Performance level

During the drafting of the project of a burglar alarm system, it is necessary to thoroughly analyze the risks such as the location of the installation, the environmental risk, the possible interferences, the values to be protected and the security requirements of the customer.

According to the assessed risks, the European standards define up to 4 performance levels, and for each of them the compulsory protection facilities.

To deepen the issue refer to the Tecnoalarm publication "Burglar alarm systems - Guide to the European Standards".

Protection level

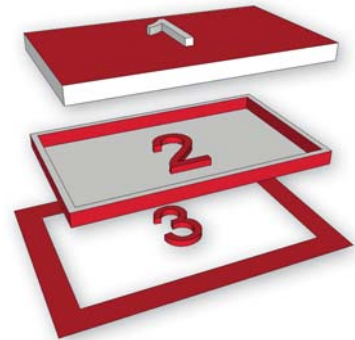
The standards also define **three protection levels**:

First level Protection of the sensible areas in the indoors (bedroom, living room etc.)

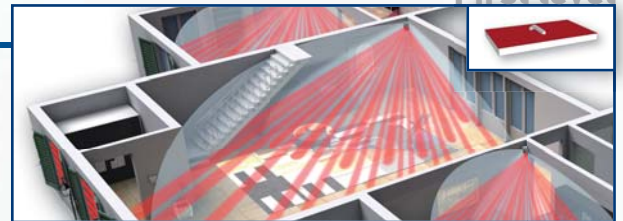
Second level Outdoor protection of the outside of the building (doors and windows)

Third level Perimeter protection of the estate (boundary wall or fence)

The three protection levels



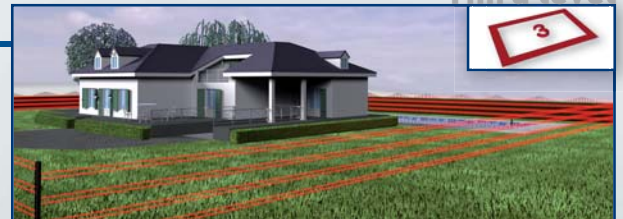
First level



Second level



Third level



TWINTEC BUS

Indoor protection through dual technology (passive infrared + microwave)

A sophisticated digital processing of the detected signals and the programmable detection logic (AD/OR/WALK), which can be combined with the RDV® function, allows a positive verification of the alarm. The TWINTEC MASK BUS model also provides an antimasking control.



DUALRED BUS

Protection of the in-and-out-openings

The detector is composed of a double passive infrared element and an integrated magnetic contact. The technologies can be analyzed in combination or singularly (detection logic AND/OR). The detector also provides an antimasking control.



WINBEAM N - DOORBEAM N

Protection of the in-and-out-openings through active infrared barriers

The barriers have been developed for the installation in protected outdoor areas and are resistant to mechanical stress and weather. A sophisticated digital synchronism protects them against undesired reflections and other interferences.



GLOBAL SPACE BUS

Wide angle protection for outdoor use

The detector features a multi-point technology: triple infrared and microwave, providing a very tight protection, made of 43 infrared beams distributed on 5 levels, combined with the microwave beam. The programmable AND detection logic permits the adaptation of the detector's functioning to the characteristics of the area to be protected.



BEAMTOWER

Perimeter protection through active infrared barriers

The surprising versatility of the barrier, mounted in self-supporting self-protected aluminum columns, allows to build, in addition to the classic barrier protection with a single side, complex protections of large areas, such as solar parks, with several sides and open and closed perimeter configurations.









EXPLORER BUS




Perimeter protection through microwave barriers





The barrier projects a beam of electromagnetic waves along the side to protect, which constitutes a sensitive barrier to intrusion attempts. It is perfect for the protection of high security facilities such as industrial plants, solar parks, warehouses, airports. The barrier is highly immune against light sources and RFI/EMI interferences.







Serial expansions




CONSOLES						
	UTS 4.3 PROX	UTS V4	UTS V8	UTS C	LCDPROX1	LCD300/S
CODES	✓	✓	✓	✓	✓	✓
TRANSPONDERS	✓				✓	
PROGRAMS	8	8	8	8	8	8
VOICE SYNTHESIS	✓	✓	✓	✓		✓
SCREEN	TFT 4,3" capacitive touch screen	TFT 7" capacitive touch screen	TFT 7" capacitive touch screen	TFT 7" capacitive touch screen	LCD graphic display	LCD 2x16 characters
FLOOR PLANS		Optional*	Optional*	Optional*		
USB PORT		✓	✓	✓		
VIDEO INPUTS		4	8			
ITEM NO.	F127UTS43P	F127UTSV4	F127UTSV8	F127UTSC	F127LCDPROX1	F127LCD300S






* Optional software plug-in for the management of 32 floor plans






BUS SIRENS			
	SIRTEC BUS	SAEL 2010 BUS	SAEL 2010PRO BUS
PROGRAMS	1 to 8	1 to 8	1 to 8
ALARM MODES	Programmable	Programmable	Programmable
ANTI-FOAM		✓	✓
ANTI-DRILLING			✓
CASING	ABS	ASA	ASA + AI
ITEM NO.	F105SIRTECBUS	F105S2010BUSBI	F105S2010PBUSAL

INPUT EXPANSIONS				
	SPEED ALM8 PLUS	SPEED 8 PLUS	SPEED 4 PLUS	SPEED ALM8 PL
POWER SUPPLY	1.8A			1.8A
INPUTS	8 Bus	8 Bus	4 conventional/ Zone Bus + 4 Bus	8 conventional/ Zone Bus
OUTPUTS	4	2	1	4
SENSOR BUS	4 ports	1 port	1 port	
SIREN BUS	1 port			
CASING	✓	Optional	Optional	✓
ITEM NO.	F101SPEALM8PLUS	F101SPEED8PLUS	F101SPEED4PLUS	F101SPEEDALM8PL

AUXILIARY CONTROL UNITS						
	APR FINGER-CARD	APR FINGER	APR CARD	DIGITEX	PROX K6N	TP SKN
FINGER PRINTS	✓	✓				
RFID	✓		✓			
TRANSPONDERS					✓	✓
CODE				✓		
PROGRAMS	3	3	3	4	6	3
MEMORY	On board (100 finger prints)	On board (100 finger prints)				
ITEM NO.	F103APRFINCAR	F103APRFIN	F103APRCARD	F103DIGITEX	F127PROXK6N	F127TP-SKN

WIRELESS EXPANSIONS			
	RX300 HS	RTX500 BWL	RTX500S BWL
FUNCTION	Receiver	Coordinator	Coordinator
PROTOCOLS	Async@wl	Sync@bwl + Async@wl	Sync@bwl
FREQUENCY	433MHz/868MHz 1 channel	433MHz/868MHz 16 channels	433MHz/868MHz 4 channels
ITEM NO.	F102RX300HS	F102RTX500	F102RTX500S

OUTPUT EXPANSIONS					
	ESP 8RP	ESP 8RSP	ESP 4RS	ESP32-OCN	SINOTTICO 32N
OUTPUTS	8 programmable 4A relays	7 programmable 0.3A relays + 1 4A relay	4 programmable 0.3A relays	32 programmable open collectors	32 programmable LED
CASING	Optional	Optional	Optional	Optional	✓
ITEM NO.	F127ESP8RP	F127ESP8RSP	F127ESP4RS	F127ESP32OCN	F127SINOTTICON

				
SPEED 8	SPEED 4	SPEED 4-140C	SPEED 8 STD	TAPS-8 BUS
				8A
8 conventional/ Zone Bus	4 conventional/ Zone Bus	4 conventional	8 conventional	
2	1	14		4
				1 port
Optional	Optional	Optional	Optional	✓
F101SPEED8	F101SPEED4	F101SPEED4140C	F101SPEED8STD	F107TAPS-8BUS

TP10-42 - Technical and functional specifications

211STR10237

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	7600 events
Programs 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	✓
	GSM 2G vector (optional)	ESP GSM-GPRS
	GSM 3G vector (optional)	ESP GSM-GPRS 3G
	IP vector (optional)	ESP LAN
	Transmittable events	157
	Telephone numbers/ IP addresses	2 per channel (max. 24 digits)
	Call event queue	32
	Communication protocols	178
Telematic services	DDNS TECNOALARM	✓
	SNTIP	✓
	MAIL SERVER TECNOALARM	✓

Videoalarm	CCTV	✓
	HD	✓
	IP	✓
Serial expansions	Hard-wired input expansions	10
	ASYN@WL wireless expansions	2
	SYN@BWL wireless expansions	1
	Consoles	8
	Auxiliary control units	8
	Output expansions	16
	GSM telephone communicator	1
Bus sirens	4	
Advanced programming	Actions	1024
	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	Metal
	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
	Relative humidity (non condensing)	93%
Conformity	Directive	R&TTE 1999/05/EC

The product features can be subject to change without notice.