TP8-88

Expandable serial alarm system

The right combination of
technology and functionality for a
comprehensive protection of high level.

Tecnoalarm
Hi-Tech Security Systems

Tecnoalarm RSC® Technology

The Tecnoalarm systems which are equipped with the RSC® (Remote Sensitivity Control) technology communicate with the monitoring station and transmit specific and detailed information.
The Tecnoalarm monitoring station can program and constantly monitor the system from a distance and, using sophisticated diagnostic tools, verify the smooth functioning and obtain the necessary information to maintain and improve its performance.

SYSTEM CONFIGURATION

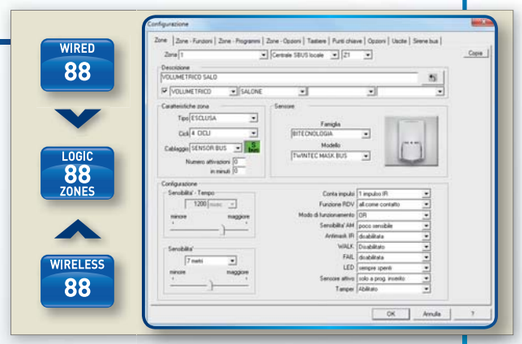
Programming

Programming of the system's functioning parameters can be made locally or remotely, via telephone line, using the Tecnoalarm software.
The software provides numerous programming tools which permit customization of the installation selecting the most appropriate among the options available

ZONE CONFIGURATION

Zones

The system configuration is entirely modular thanks to the input expansion modules. The 8 conventional zone inputs and the 8 bus inputs of the CPU constitute the basic version of the system.
They are expandable to a total of 88 logic zones which can be freely associated to the hard-wired (conventional or bus) or wireless inputs.
The zone programming facilities allow to obtain excellent performances even from traditional detectors but the best results are obtained with the Tecnoalarm RDV® and RSC® detectors. These detectors permit the verification and analysis of the alarms at the very moment they are released, through the specific diagnostic tools of the Tecnoalarm software. In this way, the limitations of traditional remote management have been overcome and a new concept of interaction has been proposed.
(RDV® and RSC® are registered trademarks and protected by international patents).



8 PROGRAMS

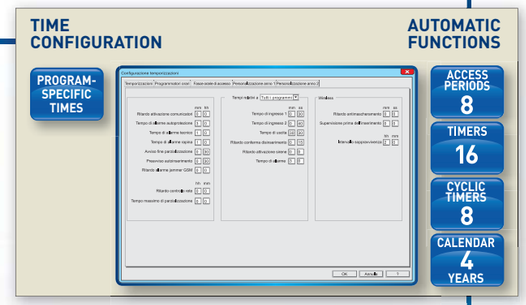
Programs and control units

The TP8-88 system manages 8 programs. A wide range of control units is able to satisfy any application requirements. The top of the range device is the new Universal Touch Screen console, available in a basic version or with a plug-in for the loading and management of 32 floor plans or images of your home and the customization of system status viewing, all this thanks to a user-friendly graphical interface, supported by a very intuitive menu. The range also includes the LCD300/S and LCDPROX1 consoles, RFID and biometric finger print readers of the APR series as well as the new DIGITEX keypad with a waterproof casing designed for outdoor mounting. The users have access to the system's functions through 202 codes, 120 transponders/RFID cards, 100 wireless keys and 100 finger prints.

TIME CONFIGURATION

Time configuration

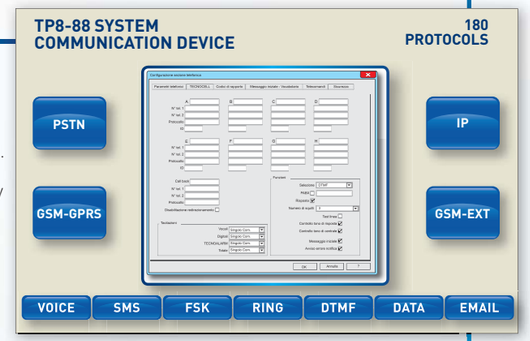
In order to offer the maximum versatility it is possible to program all the time parameters independently for each of the 8 programs.
The automatic functions can be programmed using 8 access periods, 16 timers and 8 cyclic timers. In addition, the calendar can be either quadrennial or perpetual.



TELEPHONE COMMUNICATION

Telephone notification vectors

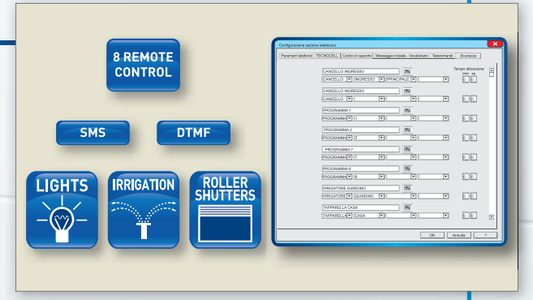
The telephone section provides 8 telephone channels. By default, the TP8-88 system uses the PSTN line as communication vector and optionally the GSM-GPRS and TCP/IP networks. The system uses several communication modes: vocal, SMS, data transmission in FSK, DTMF and TCP/IP format. With the integrated vocabulary, it automatically composes the alarm and system status messages with indication of the zones involved. The telephone vectors, depending on their characteristics, use several protocols, also encrypted, to communicate in an appropriate and safe way with the user.



REMOTE CONTROLS

Interaction

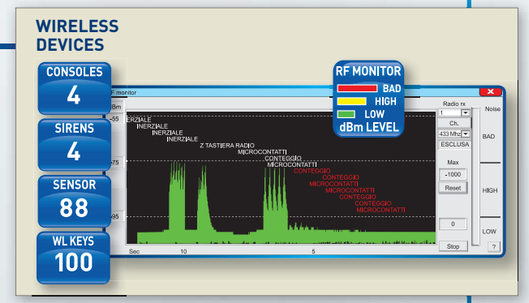
The TP8-88 system provides 8 remote controls which allow the user to interact with the system through telephone calls or SMS messages.
The remote controls are customizable and permit the management of the system's functions as well as the interaction with external devices such as the heating, air-conditioning, lighting installation etc.



WIRELESS

Wireless expansion

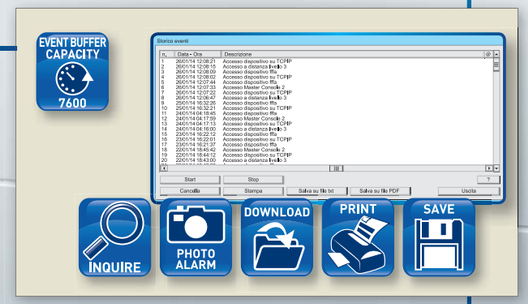
A total of 2 wireless receivers or receiver-transmitters can manage up to 100 wireless keys and 88 detectors as well as 4 wireless consoles and 4 wireless sirens. The wide range of Tecnoalarm wireless detectors, including indoor and outdoor detectors as well as perimeter protections, offers the ideal solution for all kinds of protection requirements.
The system constantly verifies and analyzes smooth functioning of the wireless devices.



EVENT LOG

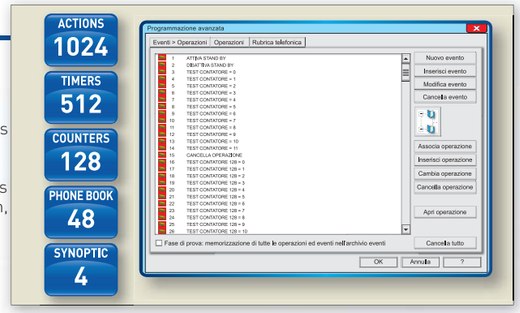
Event log

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 7.600 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.



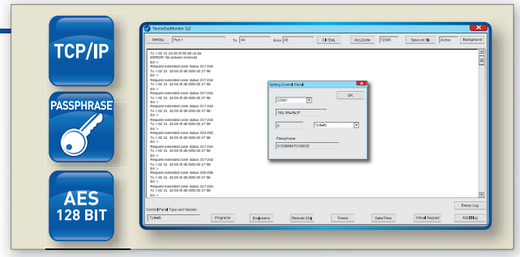
Advanced programming

The advanced programming is a plug-in of the firmware of the control panel which, together with the additional license of the Tecnoalarm software permits a large extent of customization extending the system's resources and integrating some 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. This allows to offer functional solutions to particular application requirements. The ESP XR expansion modules simplify the realization of networks thanks to the unrestricted physical positioning, facilitated by the serial connection, the modularity of the range and the possibility of cloning.



Tecno Out

The optional Tecno Out communication protocol is a software tool which permits to interface the TP8-88 system with home automation installations and technological systems of third parties.
With the Tecno Out protocol the TP8-88 system is able to use all its potential to interact in real time, easily and efficiently, with other installations.



myTecnoalarm

The application for iPhone and Android allows to interact with the security system in a natural and secure way. The user is guided by interactive icons which permit a rapid and easy identification of the commands. Thanks to these icons, the user can check the status and arm and disarm the programs as well as activate and deactivate the remote controls of the system. The event menu provides all the information about the operating states and the history of the executed operations.

AVAILABLE MODELS

		APPROVAL EN 50131-1 EN 50131-3	PSTN INTERFACE	GSM-GPRS MODULE	TCP/IP MANAGEMENT	ADVANCED CONFIGURATION	TECNO OUT	POWER SUPPLY	METAL BOX
TP8-88	F101T88-UK		✓	Optional	Optional	Optional	Optional	6A	✓
TP8-88 EN Not available		Grade 3	✓	Optional	Optional			6A	✓

Conformity of EN models Not available	Security grade	3
	Norms	EN 50131-1 - EN 50131-3 - EN 50136-2-1
	Certifying body	IMQ

TELEPHONE SECTION

Vectors		ATE class	DDNS	MAIL	APP	RDV®	SMS	Remote controls	Remote management	Remote monitoring
PSTN		ATE2				✓		✓	✓	✓
GSM-GPRS*	(ESP GSM-GPRS)	ATE2 or ATE4				✓	✓	✓	✓	✓
IP*	(ESP LAN)	ATE2 or ATE4	✓	✓	✓	✓			✓	✓
GSM-EXT*	(TECNOCELL)	ATE2					✓	✓	✓	✓

*** The vectors GSM-EXT and IP are optional.**

ATE class - The ATE class defines the performance criteria of the means of alarm notification (alarm transmission equipment).
In compliance with the valid norms, the means of notification are classified according to the criteria of performance progressively from ATE1 to ATE6.

Class ATE2 or ATE4 - The class ATE2 or ATE4 is defined by the communication protocols the vector uses for the alarm notification. The vector is ATE4 if it uses encrypted protocols. The IP protocol is certified class ATE4 on the basis of internal tests executed by Tecnoalarm.

Warning devices complying with the EN 50131 series standards - The EN 50131-1 norm defines the type of warning devices (sirens and telephone communicators) according to the security grade of the system as well as the required quantity and the class of the means of notification.
To deepen the issue refer to the Tecnoalarm publication **Burglar alarm systems - Guide to the European Norms**.

Tecnoalarm telematic services

Tecnoalarm server

Tecnoalarm offers to its customers two exclusive telematic services, both **free-of charge**, with the aim to simplify and protect the management of the connection of its systems to the Ethernet.
The **TP8-88** system is the first product which integrates the automatic management of new services.

DDNS

The DDNS 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 DDNS Server. Whenever the TP8-88 control panel (Client) 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.

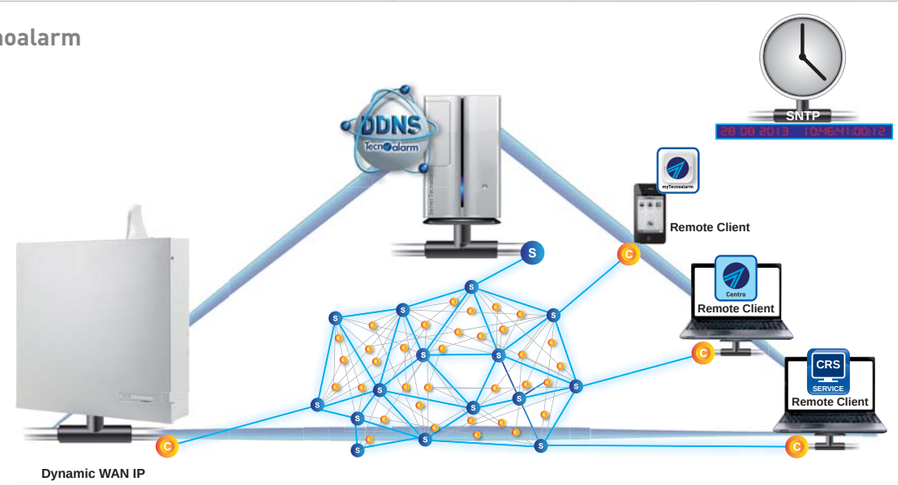
SNTP

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

E-MAIL

The integrated Mailer Client allows the control panel to send emails with alarm and system status signalling to the Tecnoalarm MAIL Server.
The Tecnoalarm MAIL Server transmits the emails received from the system to a total of 8 programmed recipients.

DDNS Tecnoalarm

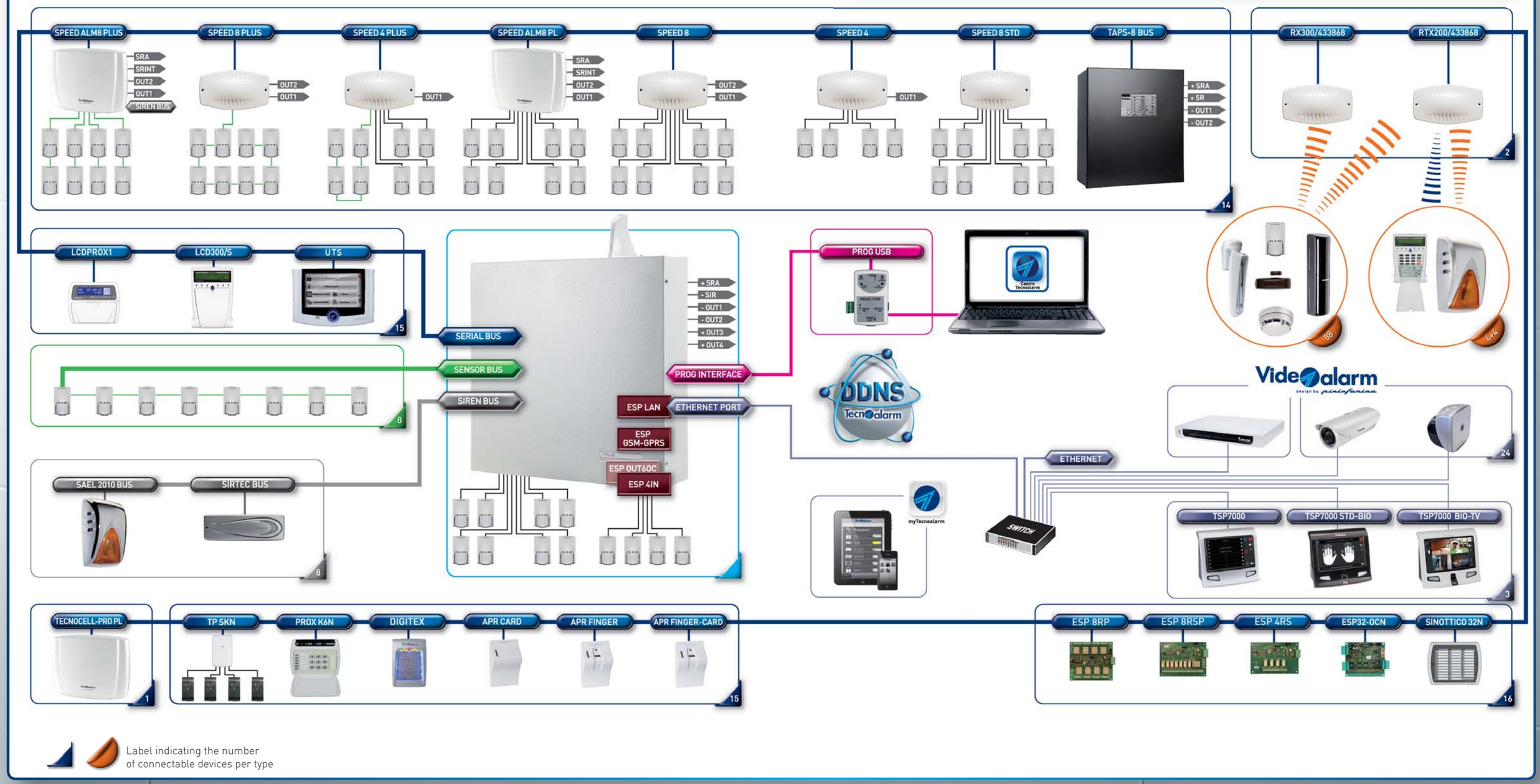


MAIL Server Tecnoalarm

TP8-88 - System configuration

Inputs	CPU	ESP 4IN	SPEED 8 STD	SPEED 4	SPEED 8	SPEED ALM8	SPEED 4 PLUS	SPEED 8 PLUS	SPEED ALM8 PLUS
CONVENTIONAL*	8	4	8	4	8	8	4	No	No
ZONE BUS	No		No						
SENSOR BUS	8	No	No	No	No	No	4	8	8

** 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.*



Label indicating the number of connectable devices per type

Internal expansion modules

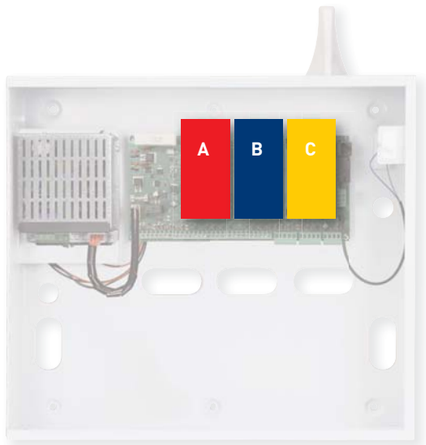
	Expansion module with 4 parallel inputs which allow the connection of conventional and Zone Bus detectors.	ZONE BUS DETECTORS	4 CONVENTIONAL DETECTORS
ESP 4IN			A
Item no.	F127ESP4IN		

	Expansion module with 6 programmable logic open-collector outputs which can be freely associated to the logic outputs managed by the system.	6 OUTPUTS
ESP OUT60C		A
Item no.	F127ESPOUT60C	

	Interface for the connection of the control panel to the Ethernet network. The interface allows the remote management and remote programming directly by the TCP/IP software	ETHERNET INTERFACE
ESP LAN		B
Item no.	F127ESPLAN	

	GSM-GPRS interface which allows to use also the GSM-GPRS mobile telephone network as a communication vector.	GSM-GPRS EXTERNAL
ESP GSM-GPRS		C
Item no.	F127ESPGSMGPRS	

Mounting position



TP8-88

RSC® detectors

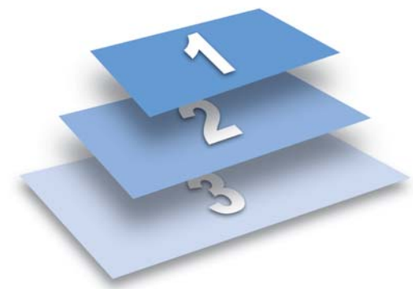
Protection level

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 values to be protected
- The security requirements of the customer

During the drafting of the project of a burglar alarm system, the installer should visit the building or area to be protected with the aim to execute a thorough risk analysis and identify all the possibilities of intrusion by intruders with different skill levels.
The European Norm EN 50131-1 and the application guide CLC/TS 50131-7 define up to 4 protection 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 Norms.**

The standard also introduces the concept of the three concentric zones of protection which compose a burglar alarm system:
First zone protection of the sensible areas in the indoors (bedroom, living room etc.)
Second zone outdoor protection of the outside of the building (doors and windows)
Third zone perimeter protection of the estate (boundary wall or fence)

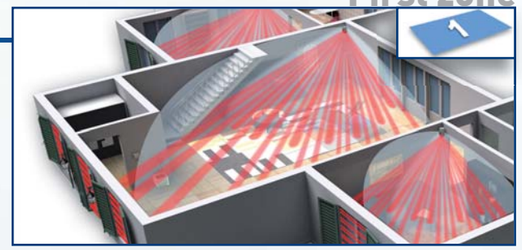
The three concentric zones of protection



TWINTEC BUS

It represents the best indoor protection offered by the dual technology (MW+IR). A sophisticated digital processing of the signals detected by the infrared and microwave section allows a positive verification of the alarm. The programmable parameters are numerous, among those the detection logic, AND/OR and WALK, which can be combined with the RDV® function.
The TWINTEC MASK BUS model also provides an antimasking control.

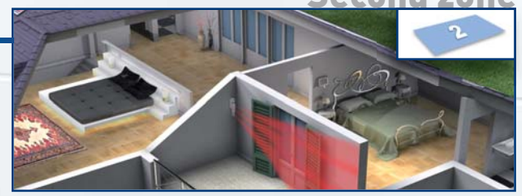
First zone



TRIRED BUS

Protection of the outside of the building. The TRIRED BUS detector provides an exclusive type of protection based on 3 stacked infrared elements.
The detector has been developped for outdoor mounting, it is weather-resistant and equipped with a swivel mounting bracket with great possibilities of orientation. It can be mounted on walls or similar surfaces to protect doors, windows, terraces or areas close to the houses and buildings in general. Functioning of the detector is based on the AND detection logic.

Second zone



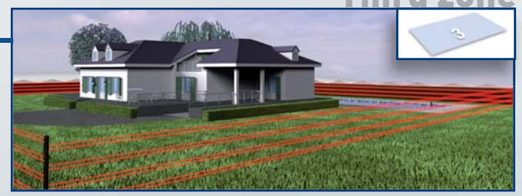
WINBEAM/S - DOORBEAM/S

Protection of the outside of the building. The WINBEAM/S and DOORBEAM/S active infrared barriers represent the best solution for the protection of the in-and-out-openings such as doors and windows of houses and buildings in general. It is suitable for an installation in protected outdoor areas or in the indoors as they are resistant to mechanical stress and weather and a sophisticated digital synchronism protects them against undesidered reflections and other interferences.

BEAMTOWER

Perimeter protection. The BEAMTOWER is an active infrared barrier, mounted in self-supporting self-protected aluminium columns.
The surprising versatility of the barrier allows to build, in addition to the classic barrier protection with a single side, complex protections of large areas, with several sides and open and closed perimeter configurations.

Third zone



EXPLORER BUS

Perimeter protection. The EXPLORER BUS is a barrier for the perimeter protection of high security facilities. The barrier, made with microwave technology, projects a beam of electromagnetic waves along the side to protect, which constitutes a sensitive barrier to intrusion attempts. Thanks to the excellent features of the casing, the barrier is highly immune against light sources and RFI/EMI interferences.

Serial Bus expansions

CONSOLES				
	UTS	UTS A	LCD300/S	LCDPROX1
CODES	✓	✓	✓	✓
RFID CARDS				✓
PROGRAMS	8	8	8	8
VOICE SYNTHESIS	✓	✓	✓	
SCREEN	TFT 7'' Touch screen	TFT 7'' Touch screen	LCD 2x16 characters	Graphic LCD
FLOOR PLANS		32		
ICONS		32 per floor plan		
USB PORT	✓	✓		
Item no.	F127TSP7L	F127TSP7LAVA	F127LCD300S	F127LCDPROX1

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

WIRELESS EXPANSIONS		
	RTX200/433868	RX300/433868
FUNCTION	Receiver-transmitter	Receiver
FREQUENCY	TX 868MHz RX 433MHz/868MHz	RX 433MHz/868MHz
Item no.	F102RTX200	F102RX300

INPUT EXPANSIONS								
	SPEED ALM8 PLUS	SPEED 8 PLUS	SPEED 4 PLUS	SPEED ALM8 PL	SPEED 8	SPEED 4	SPEED 8 STD	TAPS-8 BUS
POWER SUPPLY	1.8A			1.8A				8A
ZONES	8 SENSOR BUS	8 SENSOR BUS	4 conventional or ZONE BUS + 4 SENSOR BUS	8 conventional or ZONE BUS	8 conventional or ZONE BUS	4 conventional or ZONE BUS	8 conventional	
OUTPUTS	4	2	1	4	2	1		4
SENSOR BUS	4 ports	1 port	1 port					
SIREN BUS	1 port							
CASING	✓	Optional	Optional	✓	Optional	Optional	Optional	✓
Item no.	F101SPEALM8PLUS	F101SPEED8PLUS	F101SPEED4PLUS	F101SPEEDALM8PL	F101SPEED8	F101SPEED4	F101SPEED8STD	F107TAPS-8BUS

GSM	
	TECNOCELL-PRO PL
FUNCTION	Secondary/backup
PROTOCOLS	17 + 21 of backup
Item no.	F104TECNOC/PPL

BUS SIRENS			
	SIRTEC BUS	SAEL 2010 BUS	SAEL 2010PRO BUS
PROGRAMS	1 to 8	1 to 8	1 to 8
ALARM MODES	Multiple	Multiple	Multiple
ANTI-FOAM		✓	✓
ANTI-DRILLING			✓
CASING	ABS	ASA	ASA + Aluminum
Item no.	F105SIRTECBUS	F105S2010BUSBI	F105S2010PBUSAL

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

TP8-88 - Technical and functional specifications

Zones	Total logic zones	**88**
	CPU hard-wired zones	**8 + 8 Sensor Bus**
	Total hard-wired zones	**88**
	Total wireless zones	**88**
Outputs	CPU outputs	**5 programmable + 1 relay**
	Logic outputs	**8**
System Features	RS485 serial bus	**3**
	Voice synthesis	✓
	Storage capacity	**7.600 events**
Programs and access control	Programs	**8**
	Codes	**202**
	Finger prints	**100**
	Transponders/RFID	**120**
	Wireless keys	**100**
Automation	Timers	**16**
	Access periods	**8**
	Calendar	**quadrennial or perpetual**
	Memos	**3**
	Remote controls	**8**
	Test call	**2**
	Test call with TCP/IP	✓
	Cyclic timers	**8**
Telephone section	Channels	**8**
	Primary vector	**PSTN**
	Optional vector	**GSM-GPRS**
	Optional vector	**TCP/IP**
	Optional vector	**GSM-EXT**
	Transmittable events	**263**
	Telephone number length	**24 digits**
	Call event queue	**32**
	Communication protocols	**180**

Serial Bus 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**
Videoalarm expansions	Touch screen video consoles	**3**
	IP cameras	**24**
	NVR	✓
	PC	✓
Advanced programming	Actions	**1024**
	Timers	**512**
	Counters	**128**
	Telephone numbers	**48**
	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/17Ah**
Physical specifications	Casing	**Metal**
	Dimensions (L x H x D)	**455 x 445 x 115mm**
	Antenna height	**90mm**
	Weight (without battery)	**7kg**
Conformity	Directive	**R&TTE 1999/05/EC**

The product features can be subject to change without notice.

21ISTR09036

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