Guide of the RSC® technology

Remote Sensitivity Control

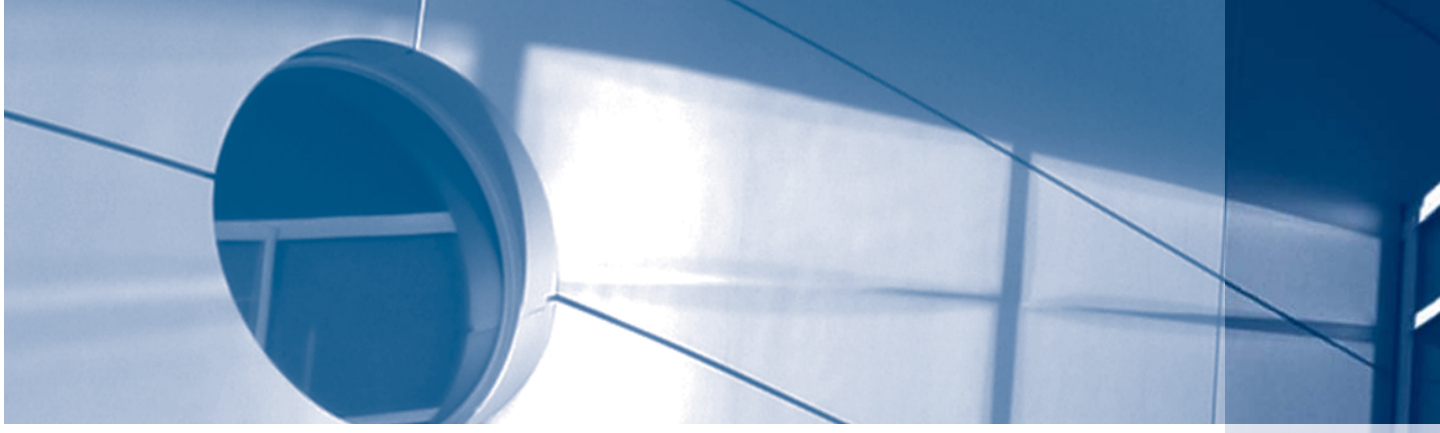
Tecnoalarm

Hi-Tech Security Systems

Tecnoalarm

HI-TECHNOLOGY & DESIGN

WORLDWIDE FROM ITALY



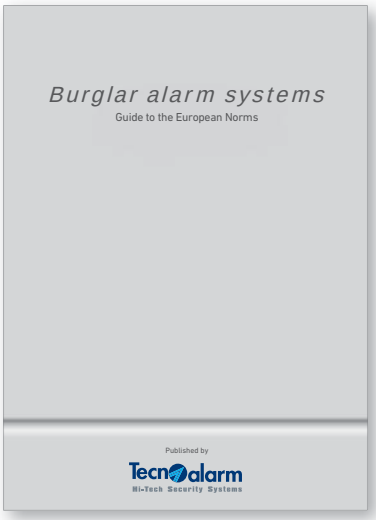
TECNOALARM INTERNATIONAL LEADER OF SECURITY

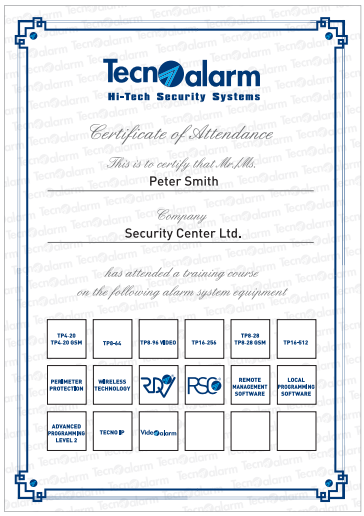
An Italian story

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.





The security professionals

It is only thanks to an appropriate project and a correct installation, that you make full use of a Tecnoalarm security systems. For this reason, the systems are installed by professionals who are ble 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 norms. Concerning this issue, Tecnoalarm has published the **Guide to the European Norms** 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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RSC® TECHNOLOGY

Remote Sensitivity Control

The RSC® technology is an innovative remote communication system between the alarm system and the monitoring station operated from the installer which is based on a specific owner protocol.
A sophisticated software developed by the Tecnoalarm research department checks functioning of each device and prevents possible operating failures.

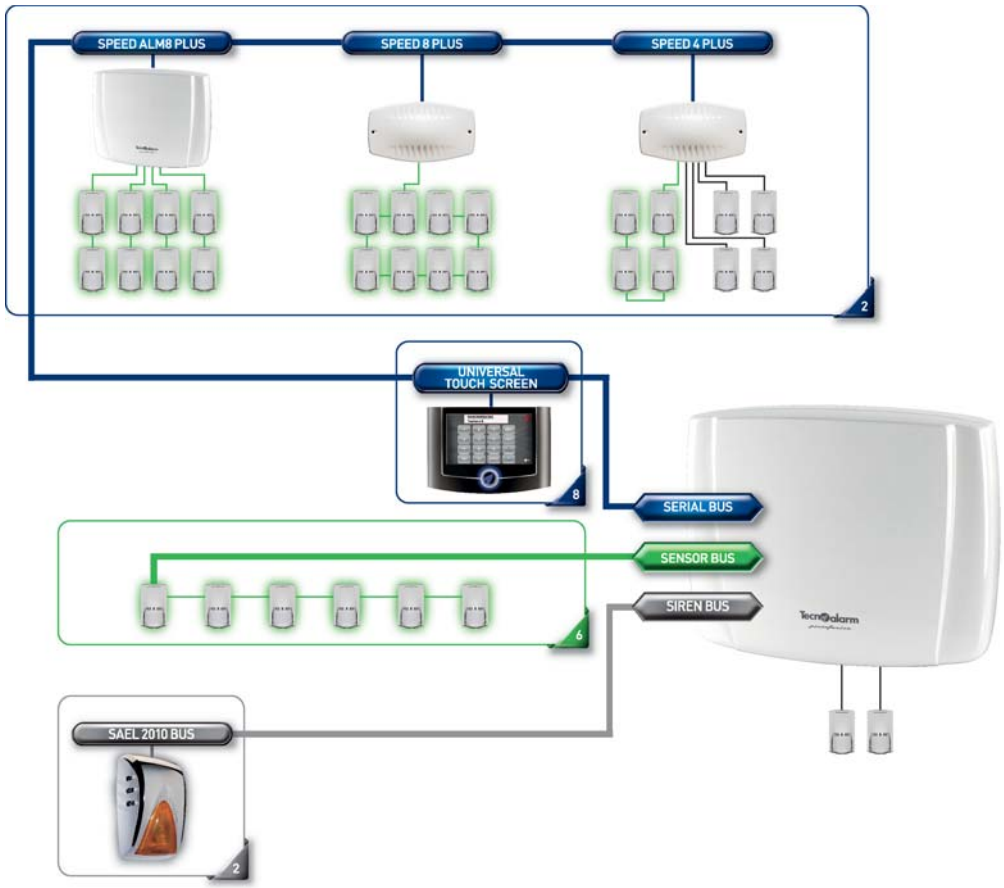
WHY CHOOSE **RSC®**

Communication and security

The Tecnoalarm systems use three separate serial communication BUS, 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 attempts at sabotage.
Each Sensor Bus port of the system can manage and synchronize up to 8 detectors.

Documentation and support

As prescribed by the norms, 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.
Through a 4-wires cable and occupying only one zone of the system, the RSC® detectors provide detailed information about each type of event: alarm, opening and detachment attempts, cable cutting, masking, failure.
Thus, 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 with 4-wires shielded cables over a maximum length of 1 kilometer with high interference resistance. 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. On startup, it is recommended to agree a brief test period with the user during which all the acoustic signaling is deactivated and only the optical one is active. During this period, it is possible to remotely analyze the devices' performance with the help of the functioning monitor and the alarm graphs. At the end of the test period, the installer can enable the acoustic signaling from his office.

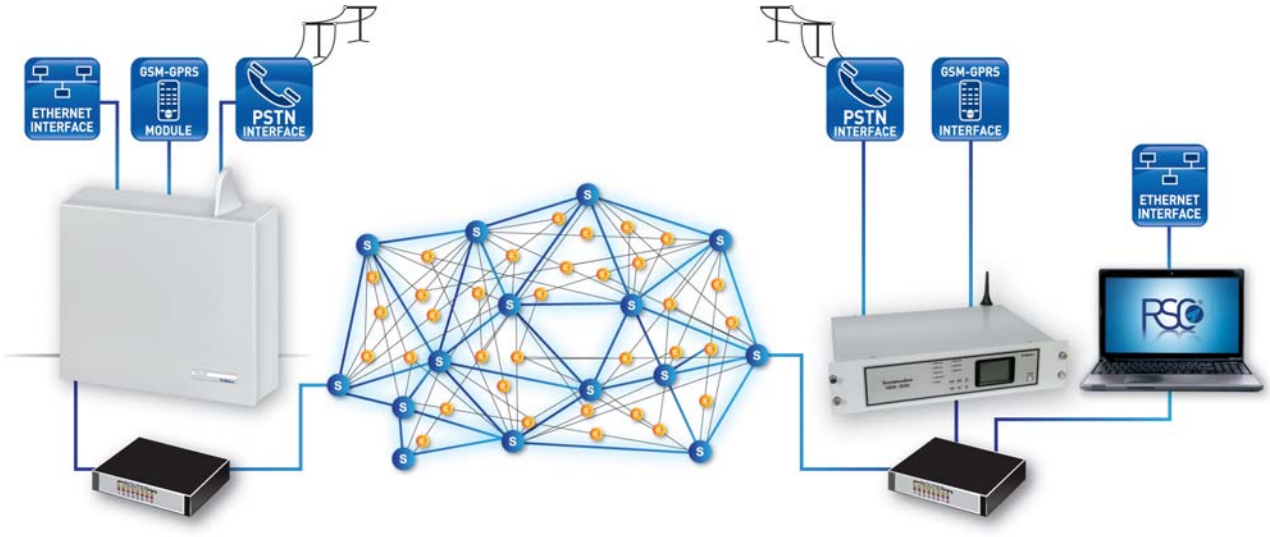
Maintenance and self test

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. Thanks to the Hardware coherence control tool it is possible, for example, to compare the power supply voltage recorded during startup, with that of the later controls. To the self test functions of the RSC® devices deserve particular attention. The self-powered siren, for instance, which are usually installed in inaccessible places of the building wall, automatically check the status of the battery, horn, flashlight and tamper protections, without the need for annoying test alarms.

SOFTWARE

The RSC® technology (Remote Sensitivity Control) allows to remotely control each component of the burglar alarm system to which the installer can connect via modem anytime and anywhere. The possibility of remotely modifying all the parameters permits a considerable reduction of the time and the costs of programming and technical assistance. In addition, the remote management of the system permits constant monitoring of its efficiency and maintenance, even if it is not possible to access the premises due to the customer's absence, during the night or the company holidays.

Remote management



Thanks to the Tecnomodem and the Tecnoalarm software, the installer can be remotely connected with the system. The software establishes the connection through the PSTN and GSM/GPRS communication vectors and provides a clear and intuitive graphical interface to supervise and interact with the system.
The access to the management and control functions is protected by a password which permits access to the user only to the authorized levels.

Local/remote programming

MINIMODEM

PSTN INTERFACE | RS232 INTERFACE

Modem for the local/remote programming. PSTN interface. RS232 port.
The modem, together with the local programming software from Tecnoalarm, permits the local/remote programming of the Tecnoalarm systems.

Item no. F104MINIMODEM

Tecnomodem remote management

TECNOMODEM ISDN-GSM

ISDN INTERFACE | GSM-GPRS INTERFACE | USB INTERFACE | RS232 INTERFACE | ETHERNET INTERFACE

Modem for the remote management. ISDN and GSM/GPRS interfaces. USB, RS232 and TCP/IP ports.
The modem, together with the remote management software from Tecnoalarm, permits the reception of the events and the remote programming of the Tecnoalarm systems.

Item no. F104MODISDNGSM

TECNOMODEM PSTN-GSM

PSTN INTERFACE | GSM-GPRS INTERFACE | USB INTERFACE | RS232 INTERFACE | ETHERNET INTERFACE

Modem for the remote management. PSTN and GSM/GPRS interfaces. USB, RS232 and TCP/IP ports.
The modem, together with the remote management software from Tecnoalarm, permits the reception of the events and the remote programming of the Tecnoalarm systems.

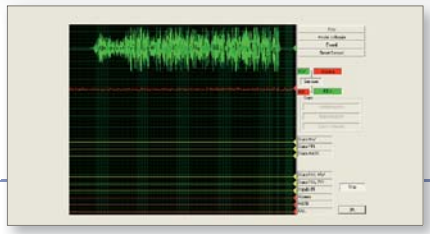
Item no. F104MODPSTNGSM

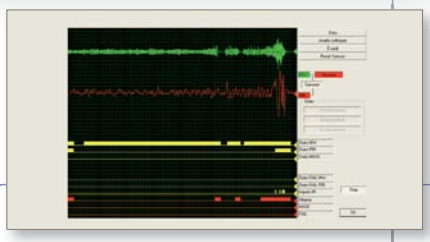
RSC®

7

Option of the licence for the following Tecnoalarm software: local/remote programming, remote management and TCP/IP. It permits the management of the RSC® devices. In the window of the software release this option is identified by the number 7.

LOCAL AND REMOTE PROGRAMMING | REMOTE MANAGEMENT | TCP/IP

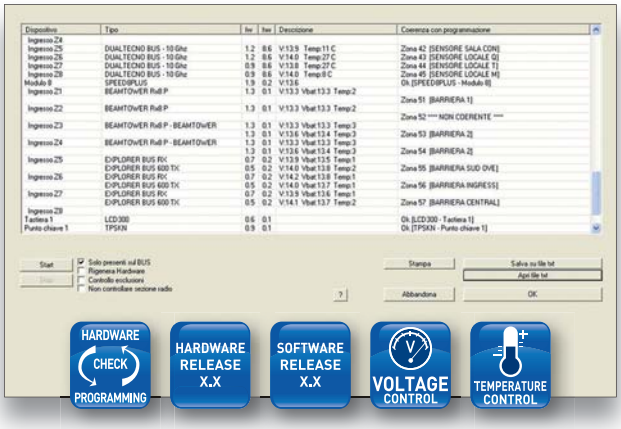




Software

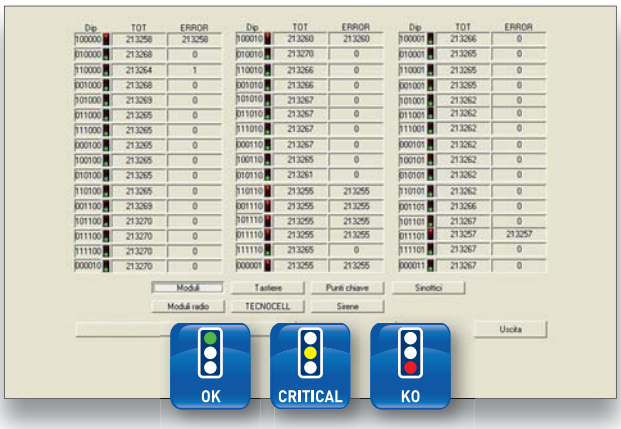
SYSTEM CONFIGURATION

System configuration
The singularity of the RSC® technology (Remote Sensitivity Control) consists in the possibility of programming and checking, both locally and remotely, all the functioning parameters of the system, starting with those of the control panel to those of the detection and signaling devices. The analysis and diagnosis tools permit checking of the electrical and functional parameters of the RSC® peripherals on demand whenever it is considered necessary.



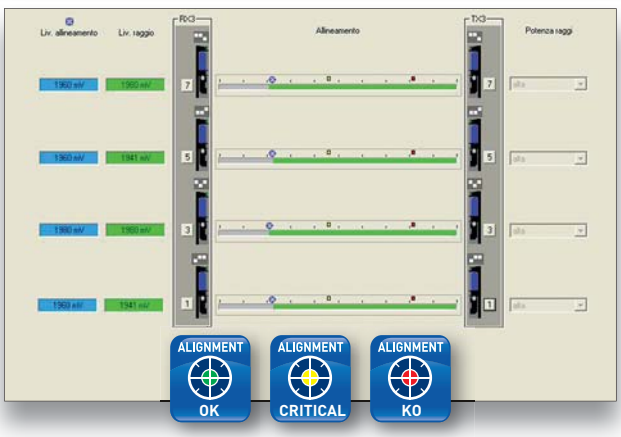
HARDWARE DIAGNOSE

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.
It identifies the connected devices, verifies the consistency of the serial address and configuration and indicates the hardware and firmware releases, the supply values as well as the internal temperature of the infrared detectors.
The overview can serve as an inspection report in order to certify the efficiency of the system on the basis of objective data.



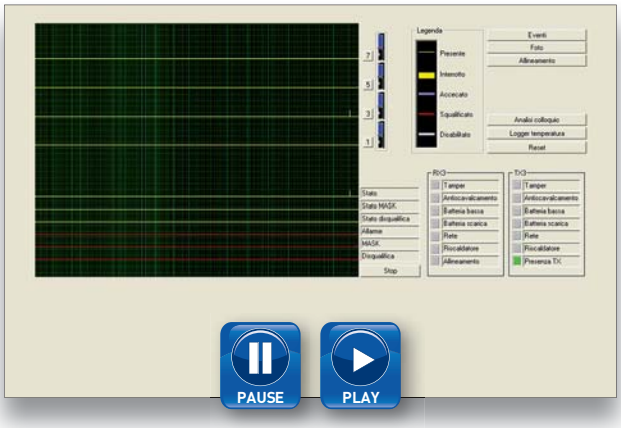
SERIAL DATA ANALYSIS

Network analysis
The Network analysis tool constantly monitors all the communications of the devices connected to the RS485 serial lines, Serial Bus, Sensor Bus and Siren Bus, and verifies the correctness of the exchanged data.
Two counters sum up all the communications and communication errors. The number of communication errors gives an indication of the quantity of electrical interferences and the quality of the serial line.
The tool provides further support by comparing the counters and classifying the percentage of errors as insignificant, negligible or critical by means of colors.



ALIGNMENT MONITOR

Barrier alignment monitor
The alignment monitor tool for the RSC® barriers permits electronic monitoring of the alignment of the beams, both locally and remotely. For each beam of the barrier, the tool shows the level of the captured signal, compares it with the reference values recorded during setup and classifies it as good, critical or insufficient with the help of a graduated scale and the colors green, yellow or red.



ZONE MONITOR

Functioning monitor
The Functioning monitor tool permits the real time control of the RSC® detectors functioning. A graph shows the signal detected by the infrared, microwave or antimasking sensors.
In addition, it is possible to consult the temperature logger and the last six alarms graphs.

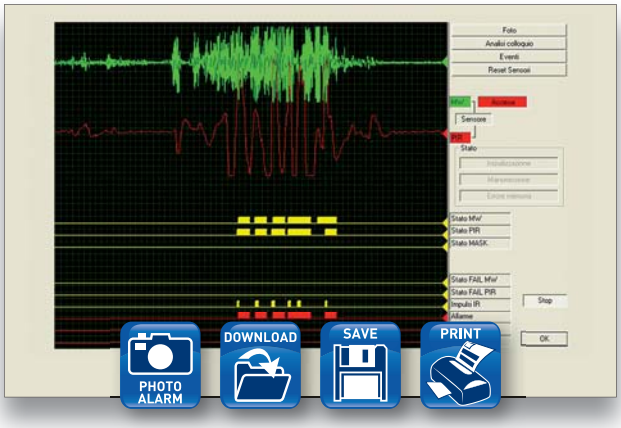
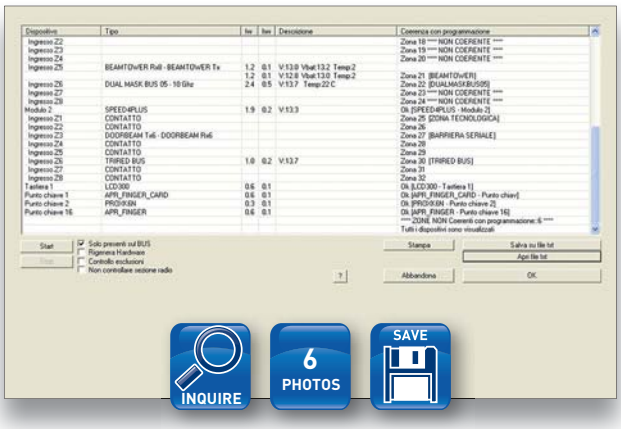


PHOTO ALARM

Alarm graphs
The alarms coming from the RSC® detectors are stored into 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. The RSC® detectors can store up to six graphs during each functioning session.



EVENT LOG

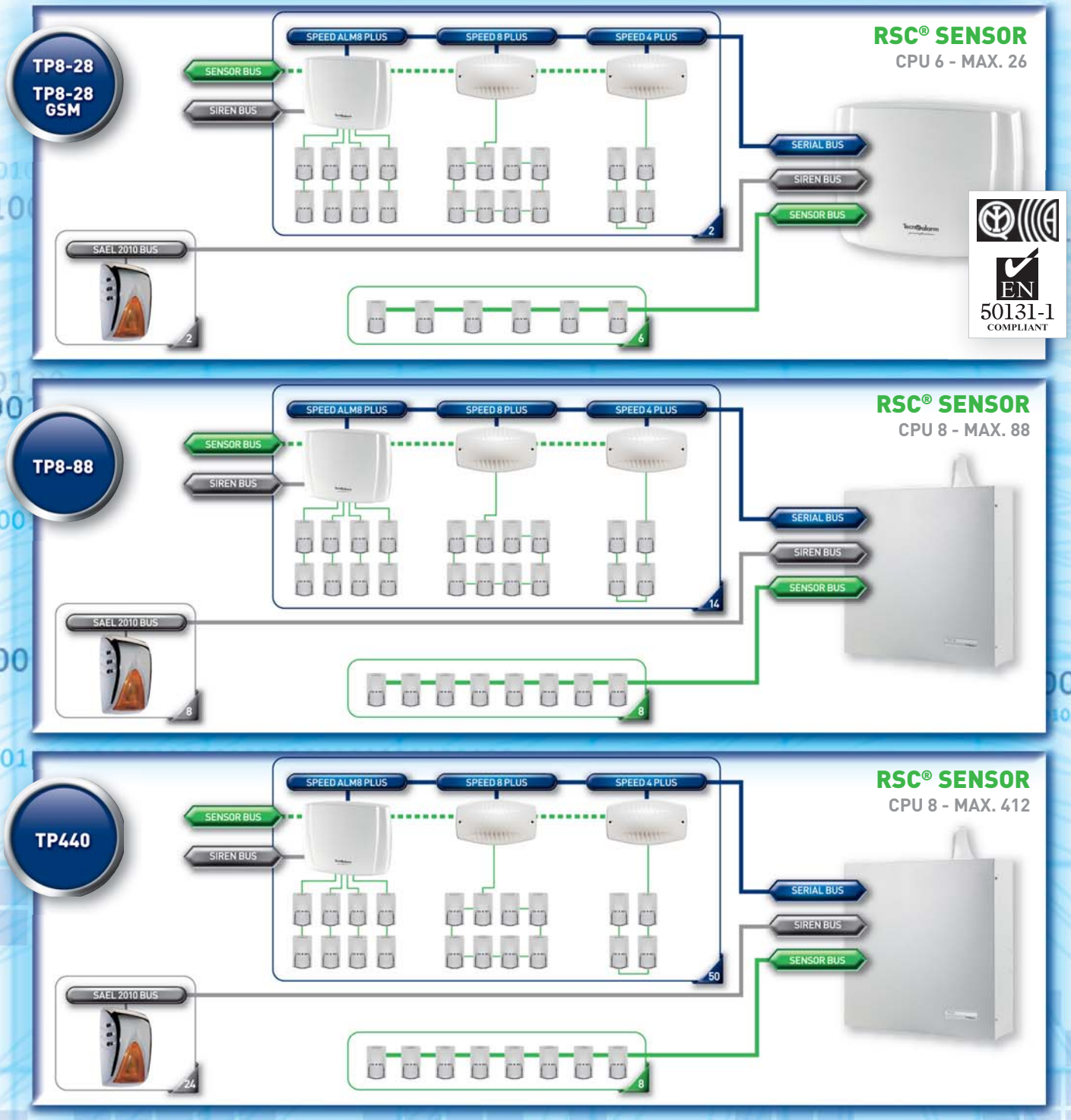
Event log
The event log contains all the events relating to the system's functioning, i.e. alarms, diagnostics and system status signaling. The events are stored in reverse chronological order, with indication of date and time and all the details concerning the functioning status as well as possible telephone calls. The affected zones, programs and remote controls are identified by a number or a description. The installer can download the event log at any time, in order to analyze the system's functioning.

DEVICE WINDOW

Device window
The acquisition of data is essential to provide a professional maintenance service and the RSC® technology being a reliable tool of supervision, control and analysis is a useful innovation. The possibility of monitoring the functional parameters of the devices connected to the serial bus allows preventive maintenance and the prevention of failures caused, for example, by power supply errors.

SYSTEMS

With the RSC® systems, Tecnoalarm offers appropriate solutions for each type of installation, with 6 to 412 zones, and different application fields: residential, industrial, commercial and banking.
The range includes indoor and outdoor protections, made to meet the highest security demands and provide solutions for sites with a high level of risk.
Thanks to the RSC® technology, the remote control not only reaches the control panel, but also, in a capillary mode, all the alarm detection and signaling peripherals.



SPEED PLUS

Input expansions

Their modular structure makes the Tecnoalarm systems very versatile. This feature is emphasized by the input expansions of the SPEED PLUS range. The three available models satisfy any installation requirement and permit a optimum utilization of the advantages of the RSC® detectors.

SPEED ALM8 PLUS - Input expansion with 4 Sensor Bus serial ports for 8 RSC® detectors, 1 Siren Bus serial port for 1 RSC® siren, 4 programmable logic outputs, 1.8A switched power supply, antistatic ABS casing.

SPEED 8 PLUS - Input expansion with 1 serial port for 8 RSC® detectors, 2 programmable logic outputs, optioanl casing.

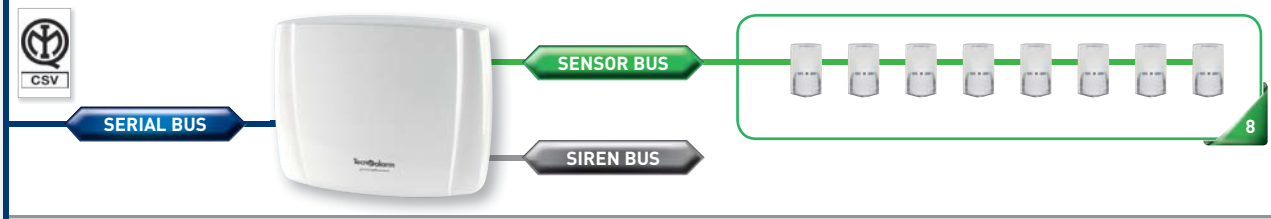
SPEED 4 PLUS - Input expansion with 1 serial port for 4 RSC® detectors, 4 parallel zone inputs for conventional detectors, RDV® or Zone Bus, 1 programmable logic output.

Serial BUS RS485 Connexion

SPEED ALM8 PLUS

Item no. F101SPEALM8PLUS

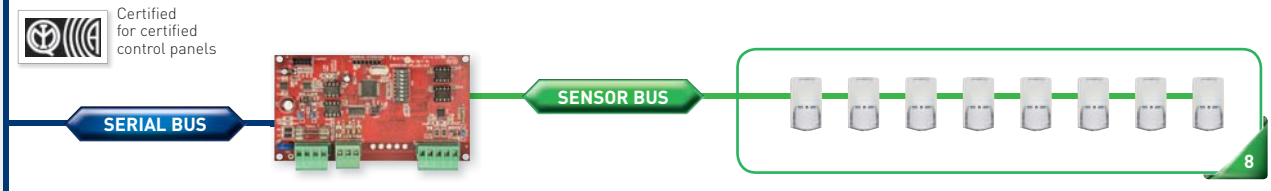
RDV | 8 SENSOR BUS DETECTORS | SIREN BUS CONNECTION | 4 OUTPUTS | POWER SUPPLY | 14.4V 1.8A | ABS BOX



SPEED 8 PLUS

Item no. F101SPEED8PLUS

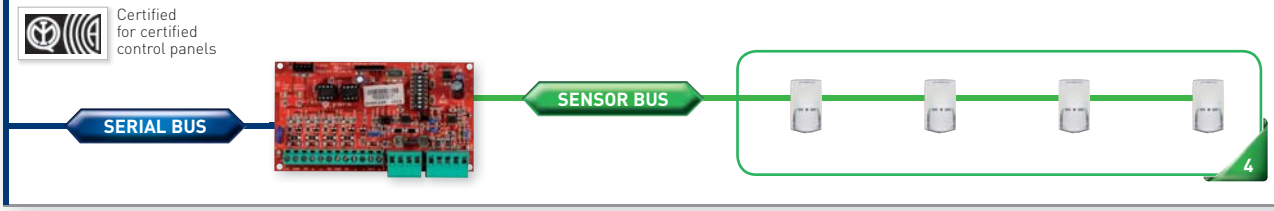
RDV | 8 SENSOR BUS DETECTORS | 2 OUTPUTS



SPEED 4 PLUS

Item no. F101SPEED4PLUS

RDV | ZONE BUS DETECTORS | 4 SENSOR BUS DETECTORS | 4 CONVENTIONAL DETECTORS | 1 OUTPUT



TAPS-8 BUS

Power supply

8A-13.8V power supply. The power supply complies with the EN 50131-6 norm level 2 or 3 (according to the batteries and the remote management of the system). It is equipped with a power factor correction (PFC) circuit, sophisticated self test functions.
The battery is automatically disconnected in case of deep discharge.
All failures are signaled by dedicated LED on the front side.
The black metal casing provides bays for 2 batteries of 17Ah/12V.

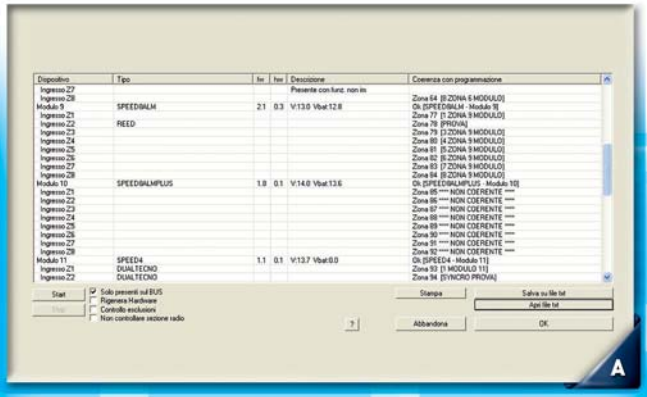
EN 50131-1 COMPLIANT

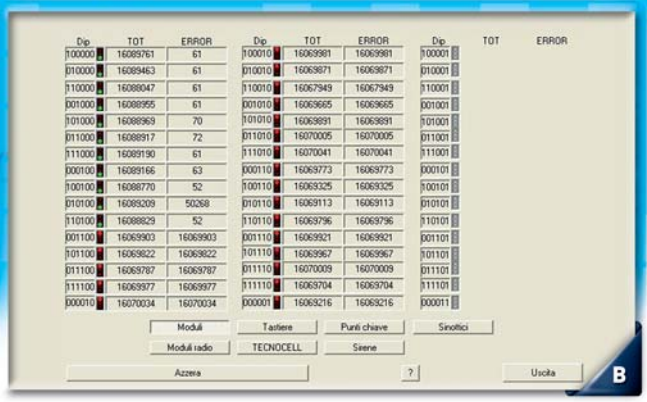
Serial BUS RS485 Connexion

TAPS-8 BUS

EN 50131-1 50131-6 | RSC | DEVICE WINDOW | SIREN BUS | 4 OUTPUTS | 13.8V 8A | PFC POWER FACTOR CORRECTION | SELF TEST | METAL BOX

Item no. F107TAPS-8BUS





Hardware coherence check
This tool identifies the devices and draws a system overview containing all the necessary information to verify the correct installation.

A

Network analysis
This tool constantly monitors the communication between the devices connected to the RS485 serial buses: Serial Bus, Sensor Bus and Siren Bus.

B

Device window
The device window permits the constant monitoring of the functional status of the device and gives access to the other analyzing and control tools, such as the functioning monitor.

C

TAPS-8 BUS - Technical and functional specifications

Classification	EPS power supply	**13.8V/8A type A**
Conformity	Norm	**EN 50131-6**
	Security grade	**2/3** (according to the batteries and system management)
	Required autonomy	**Grade 2: 12h (2.83Ah*)**
		Grade 3: 60h (0.56Ah*)
		Grade 3 monitored: 30h (1.12Ah*)
Connection	Serial ports	**RS485 and Siren Bus**
	Baud rate	**38,400bps**
	Alarm outputs	**4 programmable outputs**
Electrical output specification	Independent power supply outputs	**4 parallel outputs 2 serial outputs**
	Output voltage	**14V...14.5V DC**
	Ripple (max. electrical noise factor)	**≤50mV p-p**
	Available current	**1.1A per output**
	Battery recharge current	**Max. 850mA per battery**
	Current available for loads	**Max. 5.5A**
	Overvoltage signaling	**>16V +/- 10%**
	Overcharge signaling	**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	✓
	EPS status	✓
Tamper	Anti-opening Anti-detachment	**Mechanical micro-switch**
Power supply	Switching power supply	**13.8V/8A Flyback**
	Operating voltage	**230V AC +10 - 15% 50Hz**
	Consumption	**600mA AC**
Batteries	Capacity	**2x 12V/17Ah**
	Battery test	**Automatic 1x day/manual**
	Low battery threshold	**10.8V DC**
	Cut-off voltage	**<8.8V DC**
	Charging time	**80% ca. 19h (2 batteries of 17Ah)**
Physical specifications	Operating temperature	**-10°C...+55°C**
	Environmental class	**II**
	Casing	**Metal**
	Dimensions (L x H x D)	**320 x 365 x 170mm**
	Weight	**5.8kg**

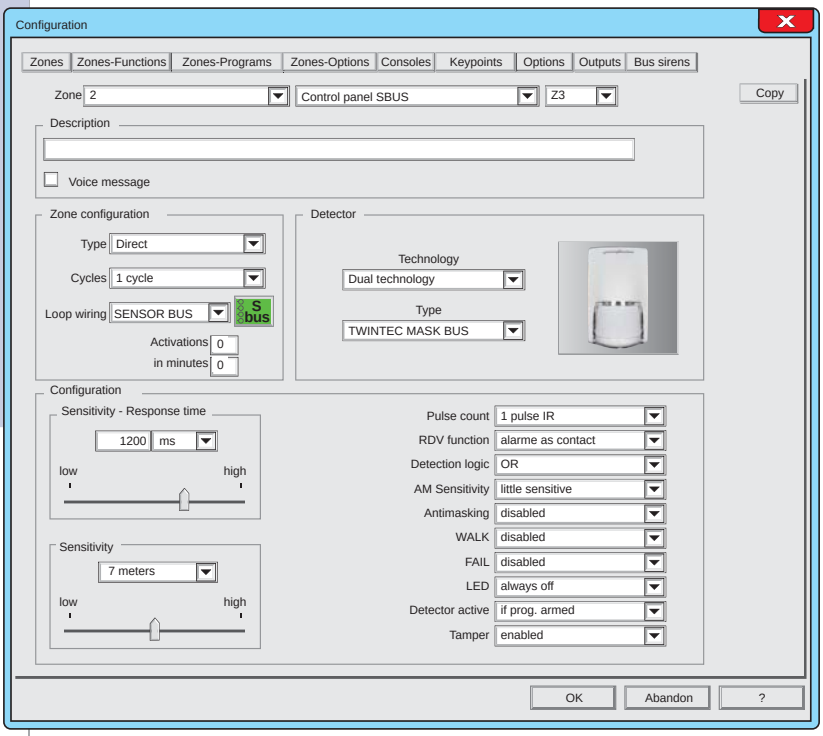
** Current available for loads in case of power failure*

TWINTEC BUS - TWINTEC MASK BUS

Dual technology detector for indoor mounting

The new RSC® detectors TWINTEC BUS 18 and TWINTEC MASK BUS 18 include all the Tecnoalarm experience.
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 or WALK, which can be combined with the RDV® function. The detectors are also equipped with advanced automatic functions, such as the self test and the temperature compensation.
The TWINTEC MASK BUS 18 model provides an antimasking control which, if necessary, of the detector changes the detection logic to guarantee full efficiency of the detector.
The analyzing and programming tools of the RSC® technology permit the control and maintenance of the detector efficiency.
The TWINTEC BUS 18 detector is compliant with the EN 50131-1 norm - Grade 2
The TWINTEC MASK BUS 18 detector is compliant with the EN 50131-1 norm - Grade 3

EN 50131-1 COMPLIANT



Programming

Sensitivity/Response time
Setting of the response time of the detector

Sensitivity
Setting of the range, i.e. the maximum detector coverage

Pulse count
Number of pulses which must be counted by the infrared section before the alarm is released

RDV® function
Selection of the functioning mode in case of alarm, as a contact (status) or with RDV® function (doppler signal)

Detection logic*
Selection of the OR or AND detection logic

AM Sensitivity*
Setting of the sensitivity of the antimasking control

Antimasking*
Enabling and disabling of the antimasking control

WALK
Enabling and disabling of the Walk detection logic. The Walk logic compensates any difficulties of detection of the infrared section by a double convalidation of the detection by the microwave section

FAIL
Enabling and disabling of the failure signaling

LED
Activation of the LED or permanent deactivation

Detector active
Activation of the detector subject to the program status or not

Tamper
Enabling and disabling of the anti-tamper protection

*Only available for the TWINTEC MASK BUS 18 model

Sensor BUS RS485 Connexion

TWINTEC BUS 18

Item no. F102TWINB18/V

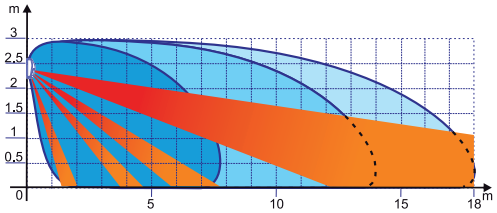
AND WALK LOGIC · RDV · SELF TEST · TEMPERATURE COMPENSATION · RANGE 18m

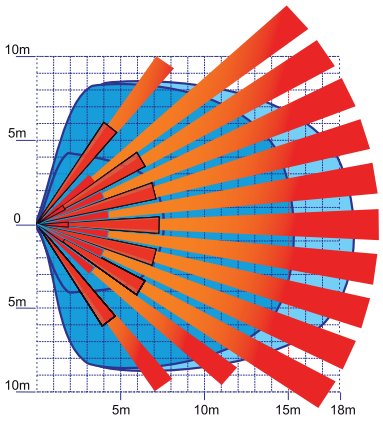
TWINTEC MASK BUS 18

Item no. F102TWINMB18/V

ANTI-MASK · AND WALK LOGIC · RDV · SELF TEST · TEMPERATURE COMPENSATION · RANGE 18m

Coverage diagrams





TWINTEC BUS - TWINTEC MASK BUS - Technical and functional specifications

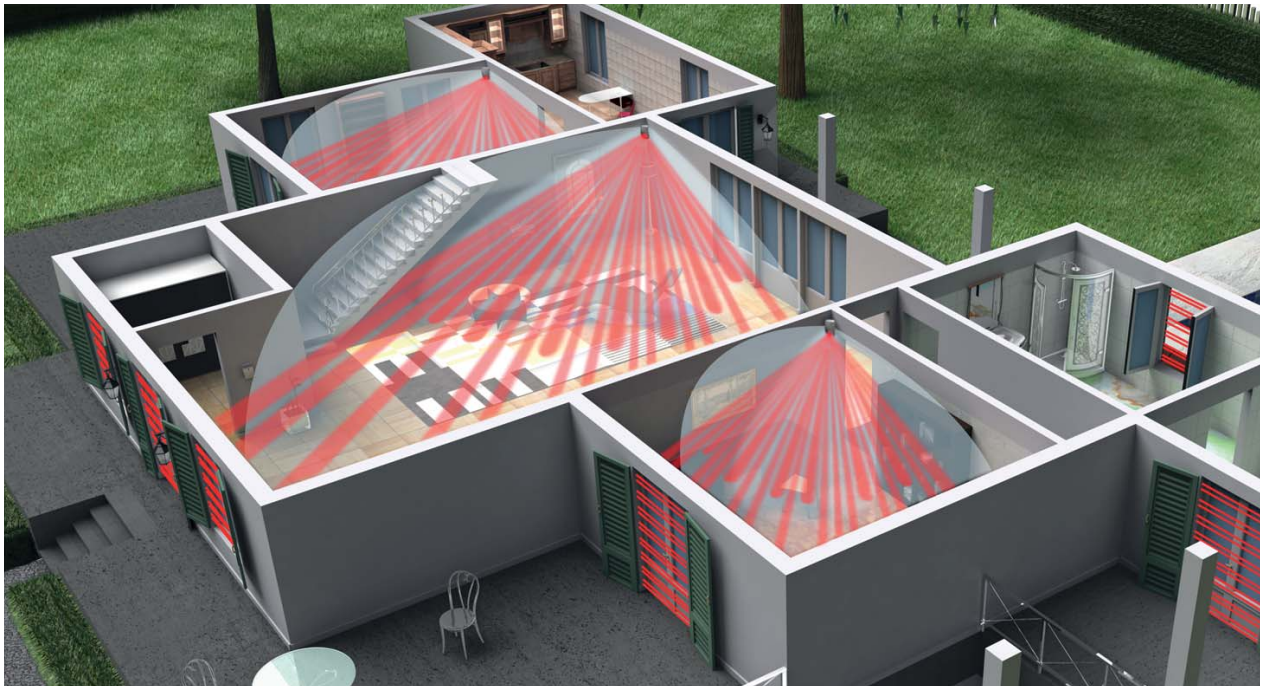
Detection	MW frequency	**10.525GHz***
	Sensitivity	**Programmable (5 settings)**
	Response time	**Programmable (4 settings)**
	IR pulse counter	**Programmable (2 settings)**
	IR beams	**29**
	IR levels	**4**
	Max. range	**18m**
Detection logics	AND	**IR+MW**
	OR**	**IR or MW****
	WALK	**IR+MW or MW+MW**
	AND + RDV®	**IR+MW with doppler signal**
	WALK + RDV®	**MW+MW with doppler signal**
Coverage	IR	**108°**
	MW	**72° horiz. axis 36° vert. axis**
Alarm and status signaling	Intrusion	**Alarm**
	Sabotage	**Tamper alarm**
	Masking**	**Antimasking alarm**
	Failure	**Signaling of failure status**
Anti-tamper protection	Anti-opening Anti-detachment	**Meccanico micro-switch**
	Antimasking**	**Electronic programmable**

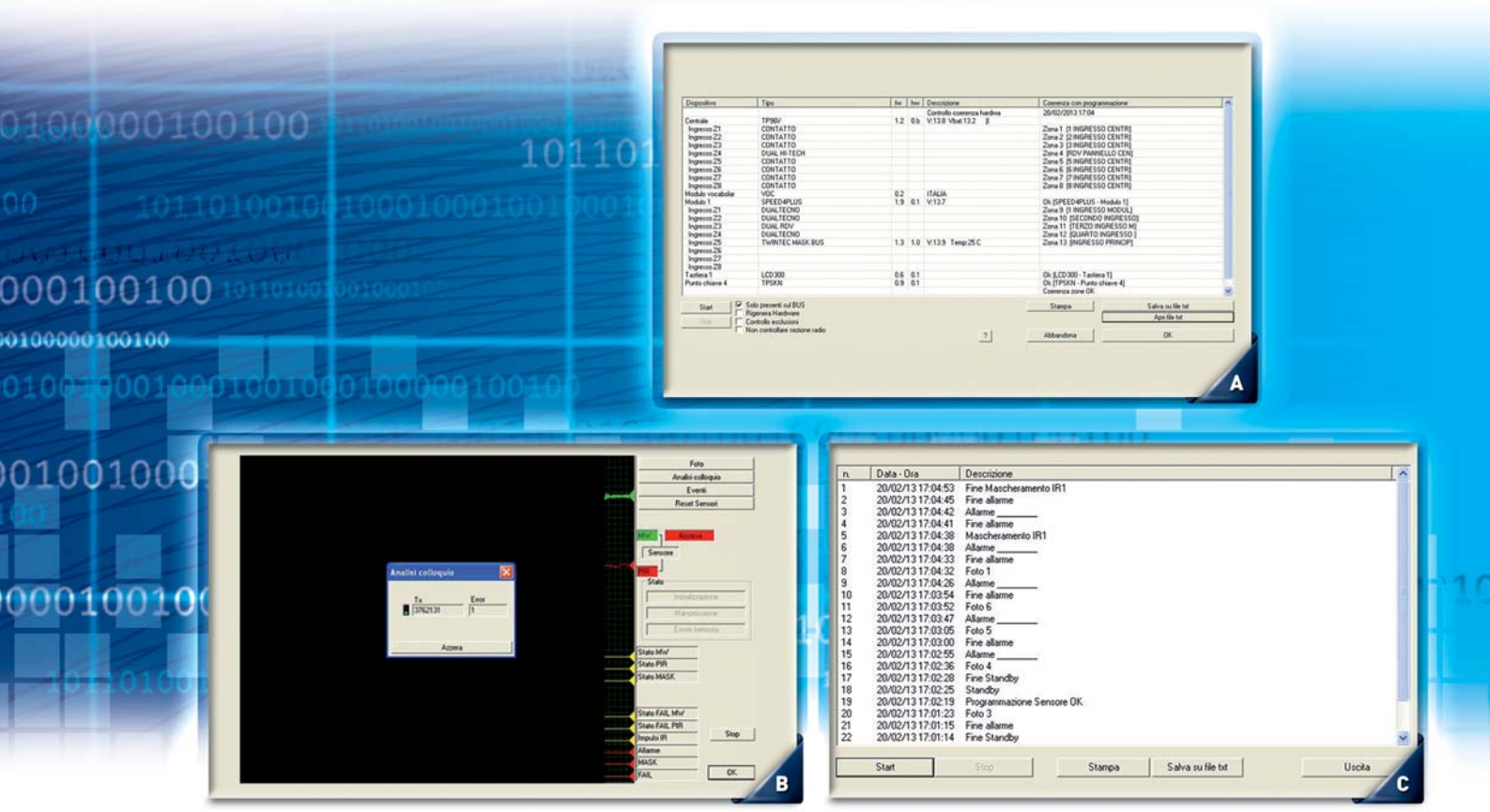
Functions	Stand-by	**Programmable**
	Self test	**Automatic**
	Temperature compensation	**Automatic**
Power supply	Operating voltage	**9V DC...15V DC**
Consumption	Twintec Bus 18	**Stand-by 17mA @ 12V DC Alarm 28mA @ 12V DC**
	Twintec Mask Bus 18	**Stand-by 20mA @ 12V DC Alarm 30mA @ 12V DC**
Connection	RS485 serial bus	**Sensor Bus**
Physical specifications	Operating temperature	**-10°C...+55°C**
	Environmental class	**II**
	Protection class	**IP30-IK02**
	Twintec Bus 18	**Security grade 2**
	Twintec Mask Bus 18	**Security grade 3**
	Casing	**Antistatic ABS**
	Dimensions (L x H x D)	**68 x 118 x 51mm**
	Weight	**160g**

** Also available with the frequencies 9,9GHz and 9,35GHz*
*** Only available with the Twintec Mask Bus 18 model*

TWINTEC BUS - TWINTEC MASK BUS

Protection configuration





Hardware coherence check
This tool identifies the devices and draws a system overview containing all the necessary information to verify the correct installation.

A

Network analysis
This tool constantly monitors the communication between the devices connected to the RS485 serial buses: Serial Bus, Sensor Bus and Siren Bus.

B

Event log
The event log contains all the events relating to the system's functioning, with indication of date and time.

C

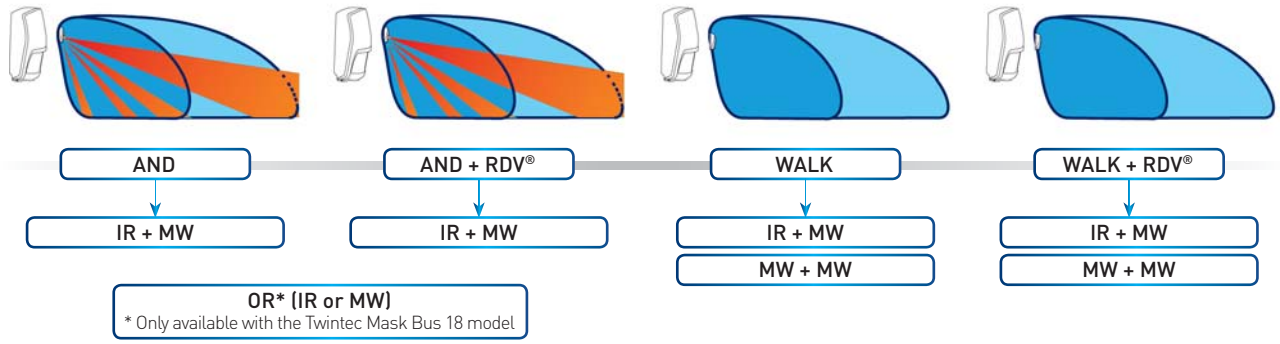
Alarm graphs
The alarms coming from the RSC® detectors are stored in the event buffer of the system with a graph of functioning at the moment the alarm has occurred.

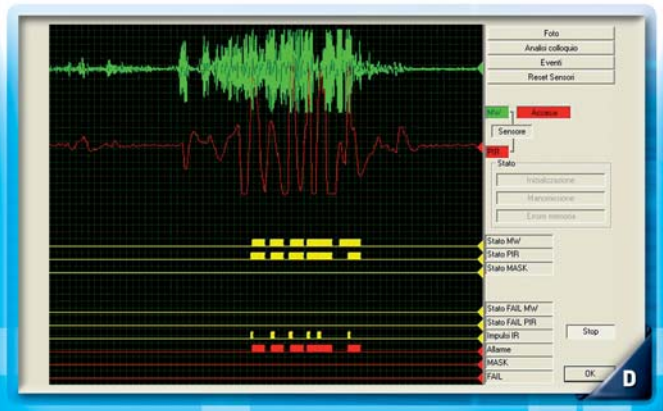
D

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

E

Detection logic

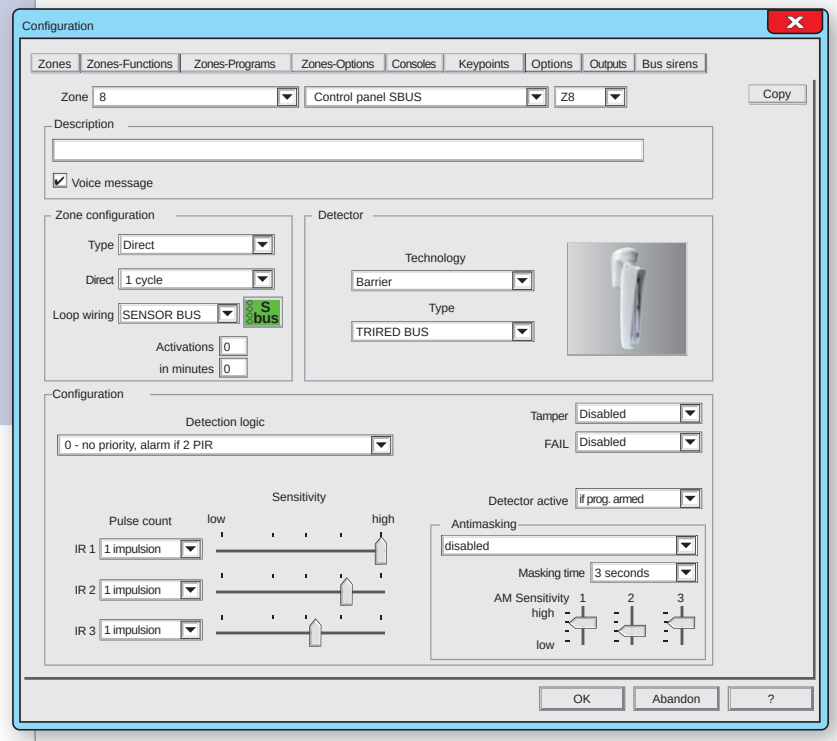




TRIRED BUS

Passive infrared detector for outdoor mounting

The TRIRED BUS detector provides an exclusive type of protection based on 3 overlapping infrared elements. The detector has been developped for outdoor mounting and to cover distances up to 30 meters. 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 building or factory.
The detector adapts to any protection requirement thanks to the many adjustments, such as 8 detection logics and 3 independent alarm counters.
The automatic functions of self test, temperature compensation and antimasking control are part of the remarkable standard equipment. In case of failure or masking of one of the beams, the detector automatically applies the logic which controls the interruption of the two functioning beams (AND 2 defined or undefined beams).
The analyzing and programming tools of the RSC® technology permit the control and maintenance of the detector's efficiency.



Programming

Detection logic
Selection of the detection logic among 8 available AND logics

Pulse count
Number of pulses which must be counted before the alarm is released.
Setting of the three counters

Sensitivity
Setting of the range, i.e. the maximum coverage of the three beams

Tamper
Enabling and disabling of the anti-tamper protection

FAIL
Enabling and disabling of the failure signal

Detector active
Activation of the detector subject to the program status or not

Antimasking
Enabling and disabling of the antimasking control

Masking time
Setting of the minimum time the masking condition must persist before the alarm is released

AM Sensitivity
Setting of the sensitivity of the antimasking control

OUTDOOR

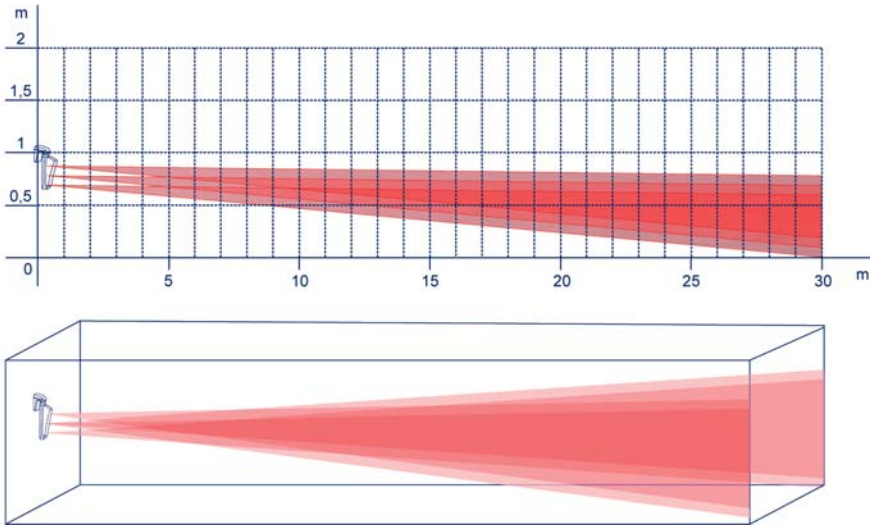
Sensor BUS RS485 Connexion

TRIRED BUS

Item no. F102TRIREDBUS

ANTI-MASK | AND LOGIC | SELF TEST | TEMPERATURE COMPENSATION | RANGE 30m | IP55 WEATHER RESISTANT

Coverage diagrams



TRIRED BUS - Technical and functional specifications

Detection	Infrared elements	**3**
	Beams	**3 with curtain lens**
	Levels	**3 on the same axis**
	Max. coverage	**30m**
	Sensitivity	**Programmable for each beam (16 levels)**
Detection logic	AND 2 undefined beams	**1 mode**
	AND 2 defined beams	**3 modes**
	AND 3 undefined beams	**1 mode**
	AND 3 beams with priority	**3 modes**
	Pulse count	**Programmable for each beam (1 to 4)**
Anti-tamper protection	Anti-opening Anti-detachment	**Mechanical (micro-switch)**
	Antimasking	**Electronic independent for each beam**
	AM Sensitivity	**Programmable (4 levels)**
	Antimasking alarm	**Programmable**
	Masking time	**Programmable (4 levels)**
Alarm and status signaling	Intrusion	**Alarm**
	Sabotage	**Tamper alarm**
	Masking	**Antimasking alarm**
	Failure	**Signaling of failure status**

Activation condition	Always active or with program activated	**Programmable**
Functions	Self test	**Independent for each beam**
	Temperature compensation	**Automatic**
	Coverage test	**Manual with LED and buzzer**
Power supply	Rated voltage	**12V DC**
	Operating voltage	**10V DC...14.5V DC**
Consumption	Stand-by and alarm	**13mA @ 12V DC**
	Maximum during test	**20mA @ 12V DC**
Connection	RS485 serial bus	**Sensor Bus**
Physical specifications	Functioning temperature	**-20°C...+65°C**
	Environmental class	**II**
	Protection class	**IP55-IK04**
	Orientation	**+/-90° horiz. axis +/-10° vert.**
	Casing	**Antistatic UV resistant ABS**
	Dimensions (L x H x D)	**82 x 400 x 260mm**
	Weight	**1.2kg**

TRIRED BUS

Configuration of protection

Hardware coherence check
This tool identifies the devices and draws a system overview containing all the necessary information to verify the correct installation.

A

Network analysis
This tool constantly monitors the communication between the devices connected to the RS485 serial buses: Serial Bus, Sensor Bus and Siren Bus.

B

Event log
The event log contains all the events relating to the system's functioning, with indication of date and time.

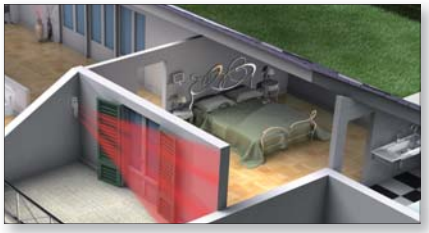
C

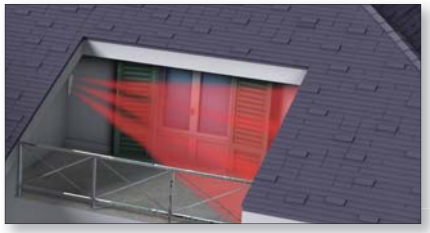
Alarm graphs
The alarms coming from the RSC® detectors are stored in the event buffer of the system with a graph of functioning at the moment the alarm has occurred.

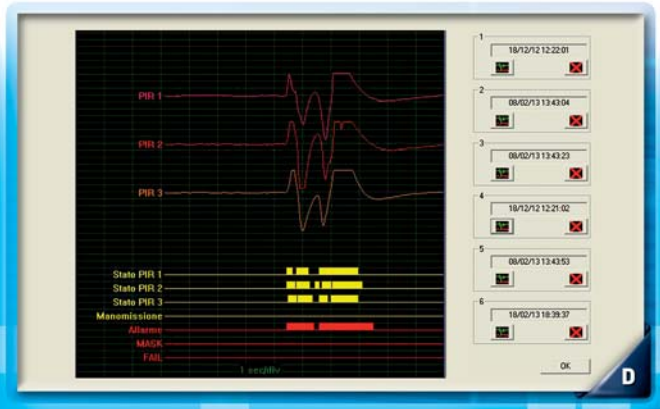
D

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

E







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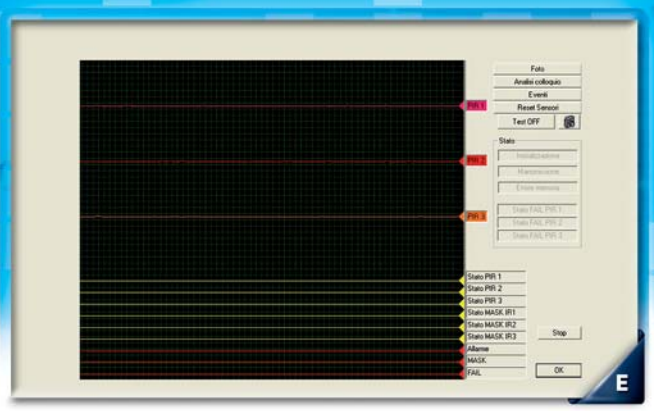
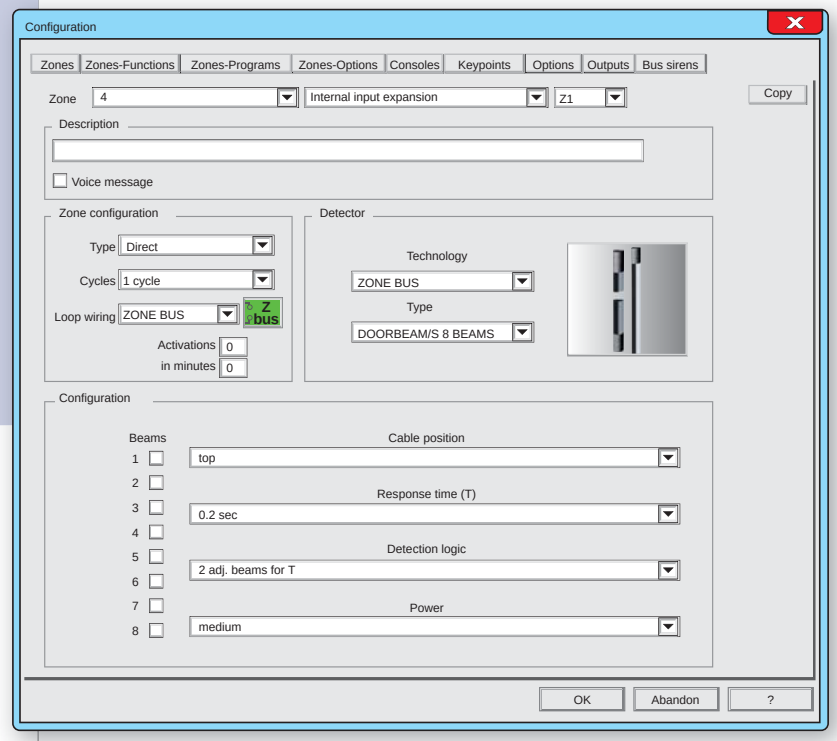


E

WINBEAM/S DOORBEAM/S

Active infrared barriers for outdoor mounting

The WINBEAM/S and DOORBEAM/S active infrared barriers represent the best solution for the protection of the doors and windows of houses and buildings in general.
They can be easily installed next to the window or door frame.
They are resistant to mechanical stress and weather and a sophisticated digital synchronism protects them against unwanted reflections and other interference.
The barriers, which are available with a large range of colors and heights, including custom-made dimensions, stand out due to a great versatility and an elegant and functional design which permits a perfect blending with any architectural framework.
The analyzing and programming tools of the RSC® technology permit the control and maintenance of the barrier's efficiency.



Programming

Model
Selection of the barrier model and the number of beams

Beams
Enabling and disabling of a specific beam

Cable position
Selection of the connection cable exit and numeration of the beams

Response time (T)
Selection of the minimum time of interruption of the beam before the alarm is released

Detection logic
Selection of the detection logic from 4 available

Power
Selection of the detection logic from 4 available

Zone BUS Connexion

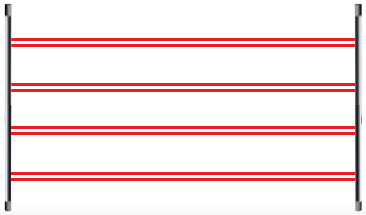
WINBEAM/S • DOORBEAM/S

TX + RX | SYNC MODE | ALUMINUM BOX | RANGE 16m | IP52 WEATHER RESISTANT

MODEL	ITEM NO. BROWN	ITEM NO. WHITE	ITEM NO. GRAY METALLIC	HEIGHT	BEAMS
WINBEAM/S 60	F102WINBS60	F102WINBS60BI	F102WINBS60GR	60cm	2
WINBEAM/S 80	F102WINBS80	F102WINBS80BI	F102WINBS80GR	80cm	3
WINBEAM/S 105	F102WINBS105	F102WINBS105BI	F102WINBS105GR	105cm	4
WINBEAM/S 130	F102WINBS130	F102WINBS130BI	F102WINBS130GR	130cm	5
DOORBEAM/S 155	F102DOORBS155	F102DOORBS155BI	F102DOORBS155GR	155cm	6
DOORBEAM/S 180	F102DOORBS180	F102DOORBS180BI	F102DOORBS180GR	180cm	7
DOORBEAM/S 205	F102DOORBS200	F102DOORBS200BI	F102DOORBS200GR	205cm	8

N.B. The barriers can be made to measure, with specific heights from 60 to 300cm

Barrier protection



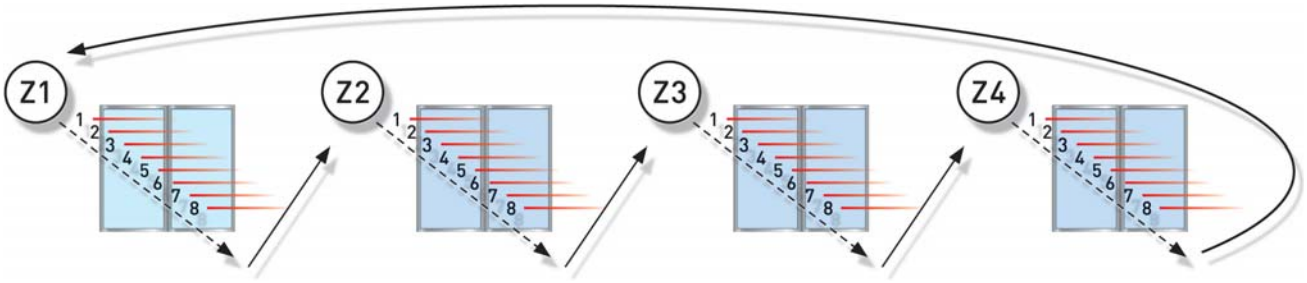
WINBEAM/S - DOORBEAM/S - Technical and functional specifications

Programming	Range	**3 programmable settings (minimum 4m, medium 8m, maximum 16m)**			
	Cable position	**Programmable (top and bottom)**			
	Beams	**Enabling/disabling of each single beam**			
	Response time	**Programmable (2 settings)**			
	Detection logic	**Programmable (4 settings)**			
Connection	RS485 serial bus	**Zone Bus**			
	Wiring	**6m prewired cable**			
	Conductors	**3 (2 for power supply + 1 for zone input)**			
	Synchronization	**Digital automatic**			
Power supply	Operating voltage	**9.5V...14.5V DC**			
	Rated voltage	**12V DC**			
Physical specifications	Casing	**Anodized aluminium**			
	Operating temperature	**-10°C...+40°C**			
	Environmental class	**III (EN 50130-5)**			
	Protection class	**IP52**			
Consumption	WINBEAM/S 60	TX min. 7.2mA	TX max. 16,5mA	RX stand-by 10mA	RX alarm 18mA
	WINBEAM/S 80	TX min. 7.5mA	TX max. 19mA	RX stand-by 11mA	RX alarm 19mA
	WINBEAM/S 105	TX min. 7.6mA	TX max. 21.5mA	RX stand-by 12mA	RX alarm 20mA
	WINBEAM/S 130	TX min. 7.7mA	TX max. 24mA	RX stand-by 13mA	RX alarm 21mA
	DOORBEAM/S 155	TX min. 7.8mA	TX max. 26.5mA	RX stand-by 14mA	RX alarm 22mA
	DOORBEAM/S 180	TX min. 8.0mA	TX max. 29mA	RX stand-by 15mA	RX alarm 23mA
	DOORBEAM/S 205	TX min. 8.2mA	TX max. 31.5mA	RX stand-by 16mA	RX alarm 24mA

WINBEAM/S DOORBEAM/S

Configuration of protection

Synchronization



Hardware coherence check
This tool identifies the devices and draws a system overview containing all the necessary information to verify the correct installation.

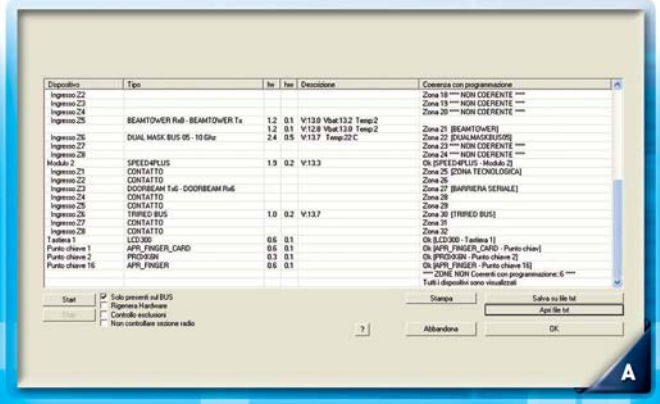
A

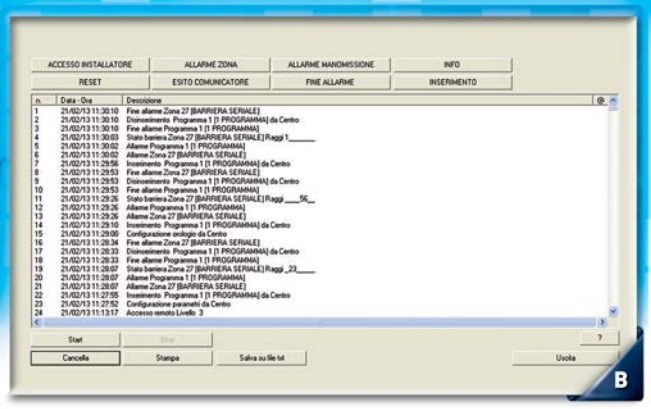
Event log
The event log contains all the events relating to the system's functioning, with indication of date and time.

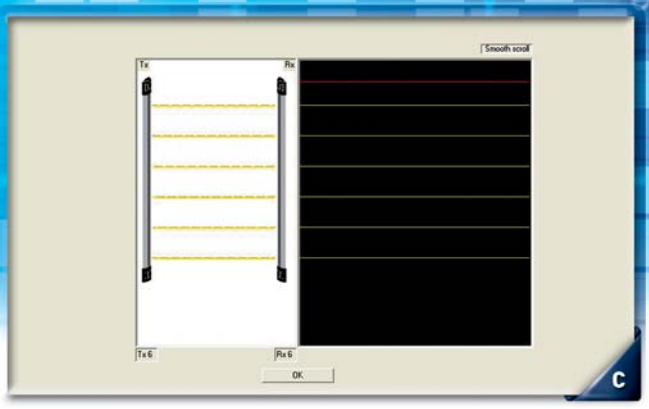
B

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

C



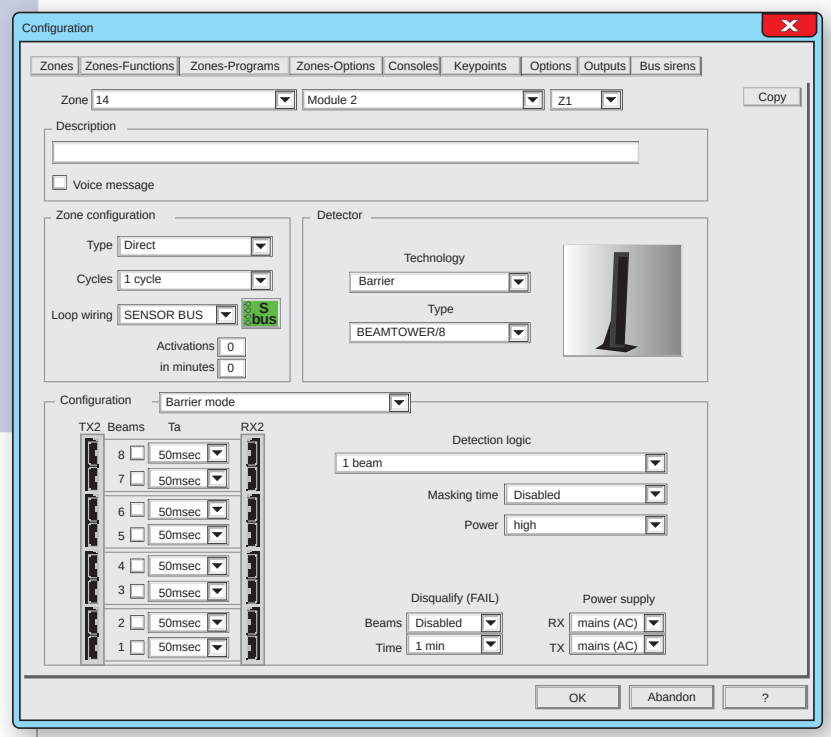




BEAMTOWER

Active infrared barrier for outdoor mounting

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.
The MODBEAM optical modules emit, two beams each which are composed of two parallel rays. The interruption of a beam is only validated if both rays it is composed of are interrupted, a reliable technique to minimize the false alarm risks.
The barrier distinguishes itself by the multiple settings, the completely independent programming of the beams and the great orientation possibilities of the optical modules, both on the horizontal and vertical axis, thanks to precision control knobs permitting a millimetric adjustment.
The analyzing and programming tools of the RSC® technology permit the control and maintenance of the barrier's efficiency.



Programming

Model
Selection of the barrier model and the number of beams

Configuration
Selection of the configuration from 1 barrier configuration, 6 open perimeter configurations and 3 closed perimeter configurations

Beams
Enabling and disabling of a specific beam

Ta (response time)
Selection of the minimum interruption time of the beam before the alarm is released

Detection logic
Selection of the detection logic from 16 available

Masking time
Minimum persistence of the masking signal before the alarm is released

Power
Setting of the emission power of the beams

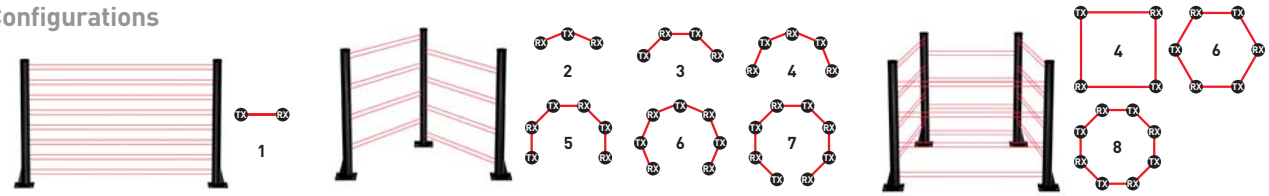
Disqualify (FAIL)
Setting of the number of disqualified beams and the minimum disqualification time before the barrier disqualification signal is released

Power supply
Selection of the kind of power supply, from mains power (AC) or through a transformer (DC)

Sensor BUS RS485 Connexion

BEAMTOWER/4 Item no. F102BEAMTW/4		TX + RX 4 BEAMS	SYNC MODE	RANGE 150m	HIGH 1425mm	IP45 WEATHER RESISTANT
BEAMTOWER/6 Item no. F102BEAMTW/6		TX + RX 6 BEAMS	SYNC MODE	RANGE 150m	HIGH 1970mm	IP45 WEATHER RESISTANT
BEAMTOWER/8 Item no. F102BEAMTW/8		TX + RX 8 BEAMS	SYNC MODE	RANGE 150m	HIGH 2515mm	IP45 WEATHER RESISTANT
BEAMTOWER/8 3M Item no. F102BEAMTW/83M		TX + RX 8 BEAMS	SYNC MODE	RANGE 150m	HIGH 3060mm	IP45 WEATHER RESISTANT

Configurations



Barrier | Open perimeter | Closed perimeter

BEAMTOWER - Technical and functional specifications

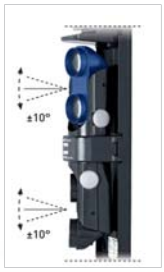
Optical specifications	Max. range	**150m**
	BEAMTOWER/4	**4 beams**
	BEAMTOWER/6	**6 beams**
	BEAMTOWER/8	**8 beams**
	BEAMTOWER/8 3M	**8 beams**
	Orientation	**180° (+/- 90°) horiz. axis 20° (+/- 10°) vert. axis**
	Synchronization	**Digital automatic**
Programming	Emission power	**5 settings**
	Masking time	**3 settings**
	Disqualification	**4 settings for each beam**
	Detection logic	**16 settings**
Configurations	Barrier	**1 configuration**
	Closed perimeter	**3 configuration**
	Open perimeter	**6 configuration**
Anti-tamper protection	Anti-opening	**Mechanical (2 micro-switches)**
	Anti-climb-over	**Mechanical (6 micro-switches)**

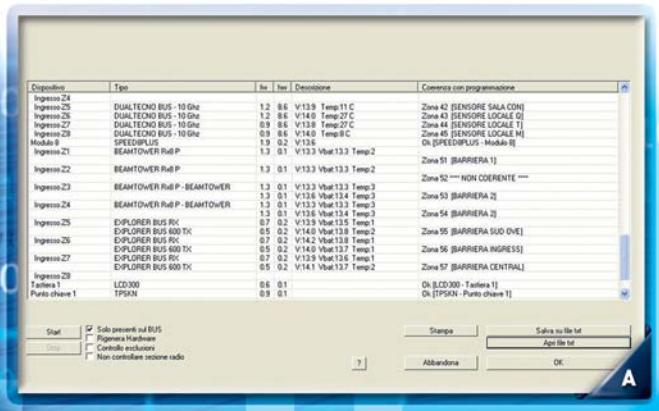
Consumption	BEAMTOWER/4	**Max. RX 165mA @ 13V**
		Max. TX 197mA @ 13V
	BEAMTOWER/6	**Max. RX 180mA @ 13V**
		Max. TX 243mA @ 13V
	BEAMTOWER/8	**Max. RX 196mA @ 13V**
		Max. TX 288mA @ 13V
	BEAMTOWER/8 3M	**Max. RX 196mA @ 13V**
		Max. TX 288mA @ 13V
	Heater (2 units)	**Max. 770mA @ 28V AC**
Electrical specifications	Operating voltage	**10.5V...14.5V DC**
	Rated voltage	**13V DC**
	Power supply from mains power	**230/28V AC (optional)**
	Battery	**12V/7Ah**
Physical specifications	BEAMTOWER/4 (L x A x P)	**153 x 1425 x 178mm**
	BEAMTOWER/6 (L x A x P)	**153 x 1970 x 178mm**
	BEAMTOWER/8 (L x A x P)	**153 x 2515 x 178mm**
	BEAMTOWER/8 3M (L x A x P)	**153 x 3060 x 178mm**
	Wall mounting	**with optional support**
	Floor mounting	**with optional support**
	Operating temperature	**-25°C...+55°C**
	Protection class	**IP45 (retrofitting possible)**

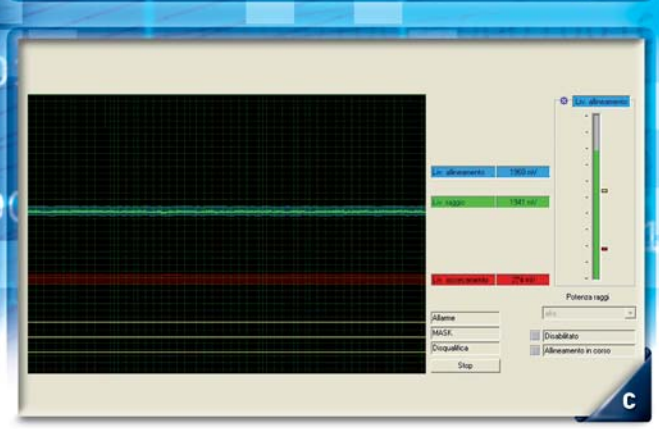
BEAMTOWER

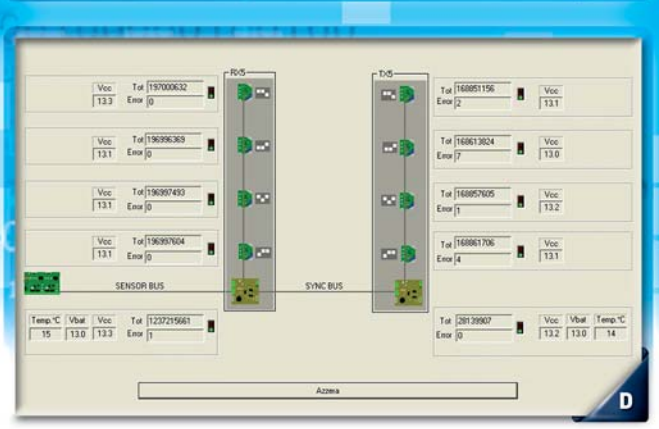
Configuration of protection

Setting optical modules









Hardware coherence check
This tool identifies the devices and draws a system overview containing all the necessary information to verify the correct installation.

A

Alignment monitor
This tool monitors the barrier alignment, comparing the level of the captured signals with the reference values recorded during the initial alignment.

B

MODBEAM alignment monitor
Viewing of the level of the signals emitted and captured by the MODBEAM optical module selected through the Alignment monitor or Functioning monitor.

C

Network analysis
This tool constantly monitors the communication between the devices connected to the RS485 serial buses: Serial Bus, Sensor Bus and Siren Bus.

D

Event log
The event log contains all the events relating to the system's functioning, with indication of date and time.

E

Alarm graphs
The alarms coming from the RSC® detectors are stored in the event buffer of the system with a graph of functioning at the moment the alarm has occurred.

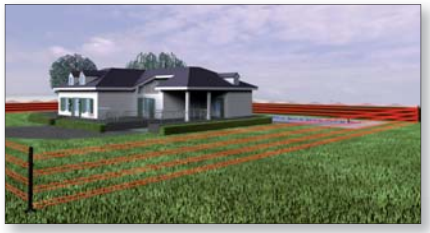
F

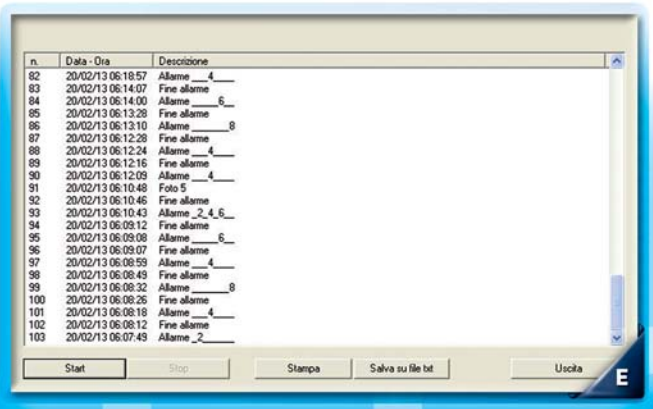
Functioning monitor
This tool permits the real time control of functioning of the RSC® detectors.

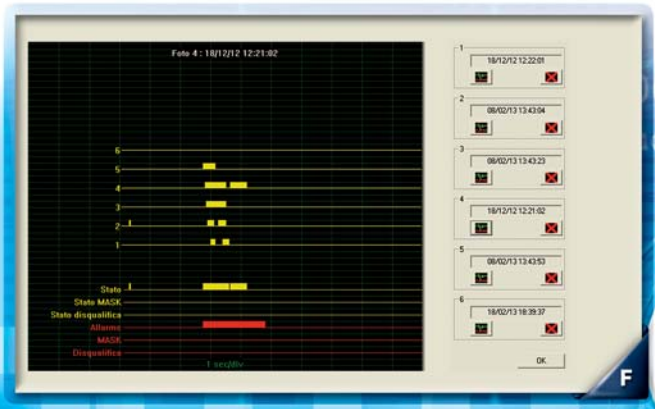
G

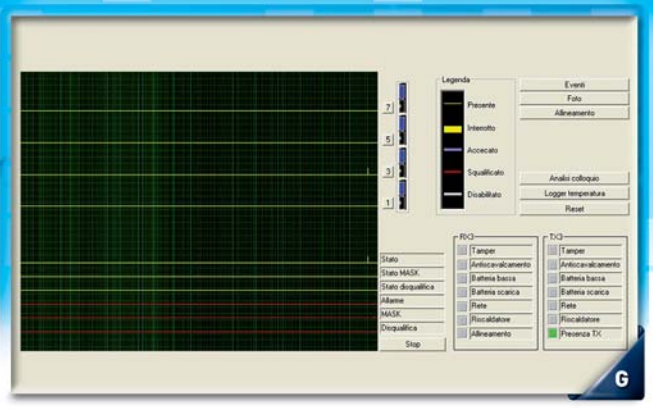
Temperature logger
The temperature logger displays the graph of the temperature measured inside the casing as well as the intervention of the heaters and the disqualified beams.

H





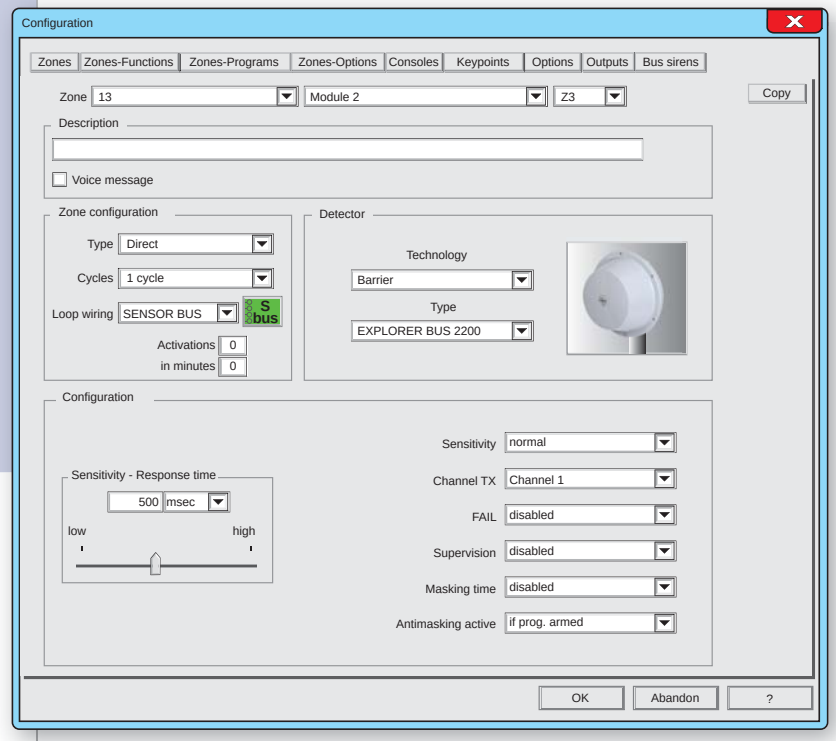




EXPLORER BUS

Microwave barrier for outdoor mounting

The EXPLORER BUS barrier benefits from Tecnoalarm's decades of experience in producing perimeter protections for high security sites, such as large industrial areas, photovoltaic parcs, warehouses, airports etc.
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. It is available in three models with ranges of 60, 120 and 220 meters. The possibility of programming the transmission channels with different operating frequencies allows to realize protection configurations in which several barriers work next to each other without causing interferences.
The analyzing and programming tools of the RSC® technology permit the control and maintenance of the barrier's efficiency.



Programming

Model
Selection of the barrier model

Sensitivity/Response time
Setting of the barrier response time

Sensitivity
Setting of the range, i.e. the width of the beam

Channel TX
Selection of the transmission channel

FAIL
Enabling and disabling of the failure signaling

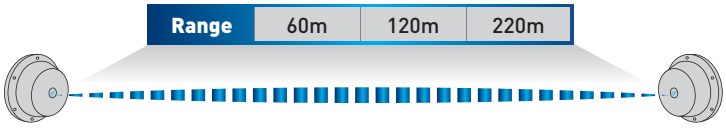
Supervision
Enabling and disabling of the supervision function
(functioning test of the TX)

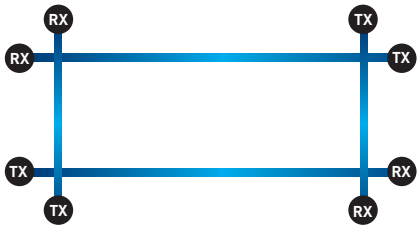
Masking time
Minimum persistence time of the masking signal before the alarm is released

Antimasking active
Binding or not of the antimasking control activation to the program status

EXPLORER BUS 600 Item no. F102EXPBUS600		TX + RX	4 CHANNELS	RANGE 60m	IP65 WEATHER RESISTANT
EXPLORER BUS 1200 Item no. F102EXPBUS1200		TX + RX	4 CHANNELS	RANGE 120m	IP65 WEATHER RESISTANT
EXPLORER BUS 2200 Item no. F102EXPBUS2200		TX + RX	4 CHANNELS	RANGE 220m	IP65 WEATHER RESISTANT

Configuration





Perimeter with 4 sides

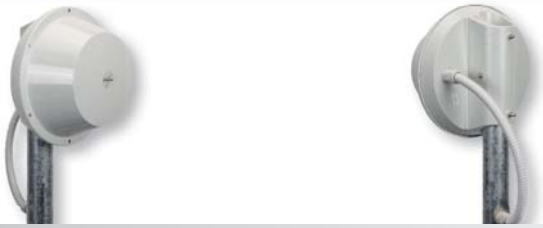
EXPLORER BUS - Technical and functional specifications

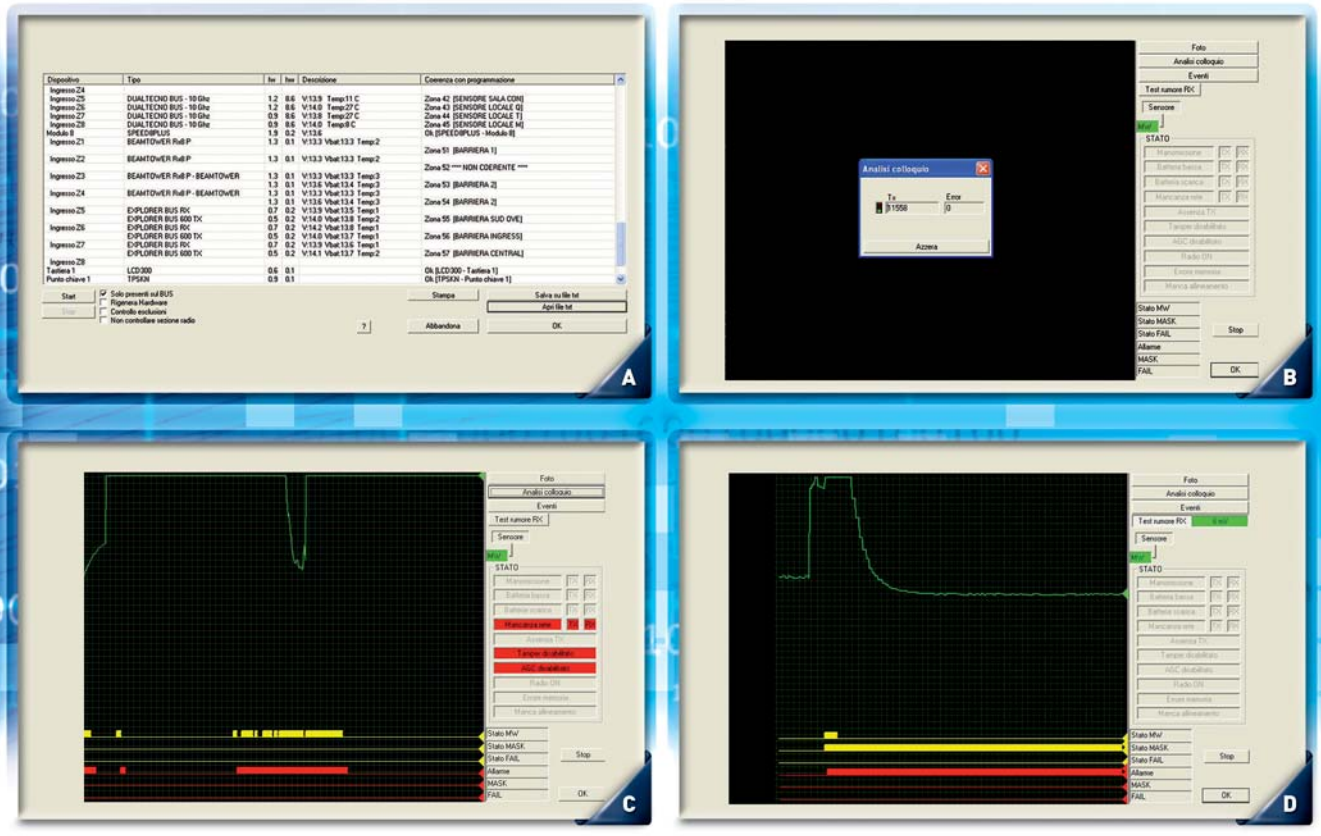
Detection	Explorer Bus 600	**Max. range 60 meters**
	Explorer Bus 1200	**Max. range 120 meters**
	Explorer Bus 2200	**Max. range 220 meters**
	MW frequency	**10.525GHz (pulse 50%)**
	Transmission channel frequency	**5KHz - 6KHz 7KHz - 8KHz**
	Transmission power	**≤500mW**
Connection	RS485 serial bus	**Sensor Bus**
Programming	Response time	**4 settings**
	Sensitivity	**5 settings**
	Transmission channel	**4**
	Failure signal	**Excludable**
	Supervision	**Excludable**
	Masking time	**4 settings**
	Antimasking	**2 modes**
Anti-tamper protection	Anti-opening	**Mechanical (micro-switch)**
	Anti-climb-over	**Mechanical**

Power supply AC	Rated voltage	**18V AC**
	Max. consumption TX	**260mA @ 18V AC**
	Max. consumption RX	**100mA @ 18V AC**
Power supply DC	Operating voltage	**9...15V DC**
	Rated voltage	**13.8V DC**
	Max. consumption TX	**115mA @ 13.8V DC**
	Max. consumption RX	**45mA @ 13.8V DC**
Battery	Max. capacity	**1x 12V/2.1Ah**
	Max. recharge voltage	**240mA**
Physical specifications	Operating temperature	**-25°C...+55°C**
	Protection class	**IP65**
	Casing	**Aluminum and ABS**
	Dimensions (L x H x D)	**310 x 310 x 239.5mm**
	Weight	**14.4kg**

EXPLORER BUS

Configuration of protection





Hardware coherence check
This tool identifies the devices and draws a system overview containing all the necessary information to verify the correct installation.

A

Network analysis
This tool constantly monitors the communication between the devices connected to the RS485 serial buses: Serial Bus, Sensor Bus and Siren Bus.

B

Alignment monitor
This tool monitors the barrier alignment, comparing the level of the captured signals with the reference values recorded during the initial alignment.

C

Noise test
This tool views the graph of electrical noise which may interfer with the alarm threshold of the barrier.

D

Event log
This tool contains all the events relating to the system's functioning. The events are stored with indication of date and time.

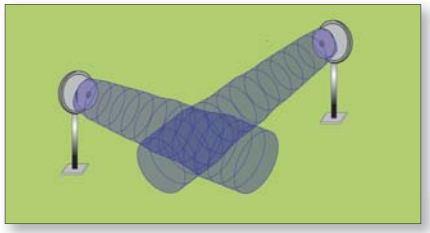
E

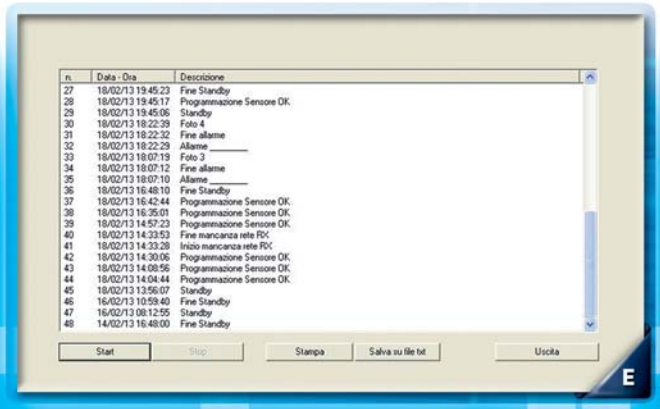
Alarm graphs
The alarms coming from the RSC® detectors are stored in the event buffer of the system with a graph of functioning at the moment the alarm has occurred.

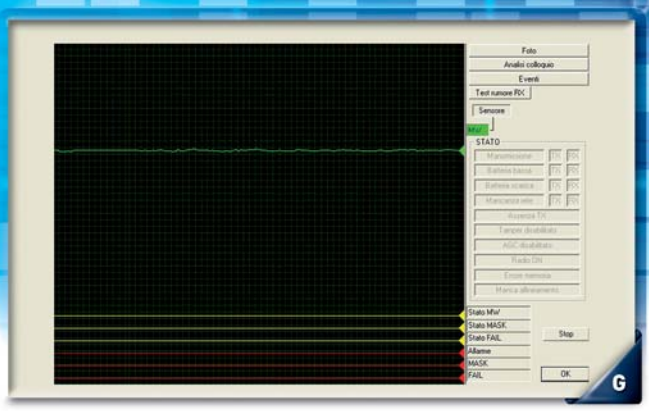
F

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

G





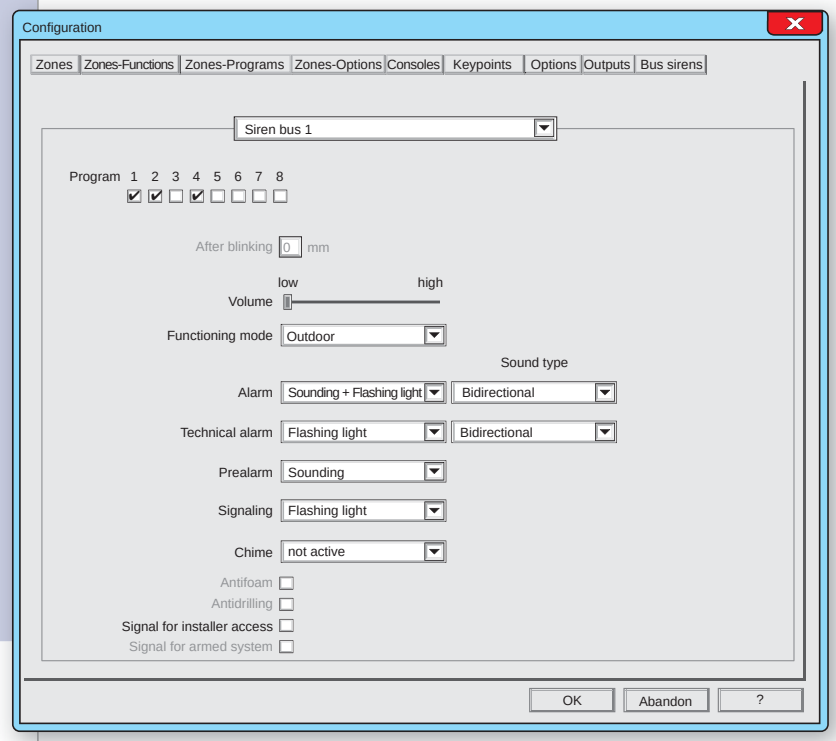


SIRTEC BUS

Indoor siren

The SIRTEC BUS is a self-powered magnetodynamic siren for indoor mounting. Thanks to the RSC® technology, functioning is completely programmable so that it is possible to diversify the signals for alarm, prealarm, technical alarm, chime and system status.
The siren also permits acustic signaling of arming/disarming of the associated programs.
It is equipped with a sophisticated self test function which constantly controls the power supply and the horn as well as an anti-tamper protection.
The siren complies with the EN 50131-4 norm grade 3.

EN 50131-1 COMPLIANT



Programming

Selection of the siren
Selection of the (address of the) siren to be programmed

Program
Association of the programs to the selected siren

Volume
Setting of the volume for chime, prealarm and arming/disarming signaling

Functioning mode
Selection of the functioning mode (indoor siren or outdoor siren)

Alarm
Selection of the activation mode and sound type in case of alarm

Technical alarm
Selection of the activation mode and sound type in case of technical alarm

Prealarm
Selection of the activation mode in case of prealarm

Signaling
Selection of the activation mode in case of arming/disarming signaling

Chime
Selection of the activation mode in case of chime signaling

Signal for installer access
Enabling and disabling of the acoustic signal for the installer access (maintenance mode).

Siren BUS RS485 Connexion

SIRTEC BUS

SELF TEST | SOUND LEVEL 117 dB(A) @1m | TONE MODE | STEP-UP BATTERY CHARGE | SELF POWERED | ABS BOX

Item no. F105SIRTECBUS (White color)

Item no. F105SIRTECBUSGR (Metallic gray color)

SIRTEC BUS - Technical and functional specifications

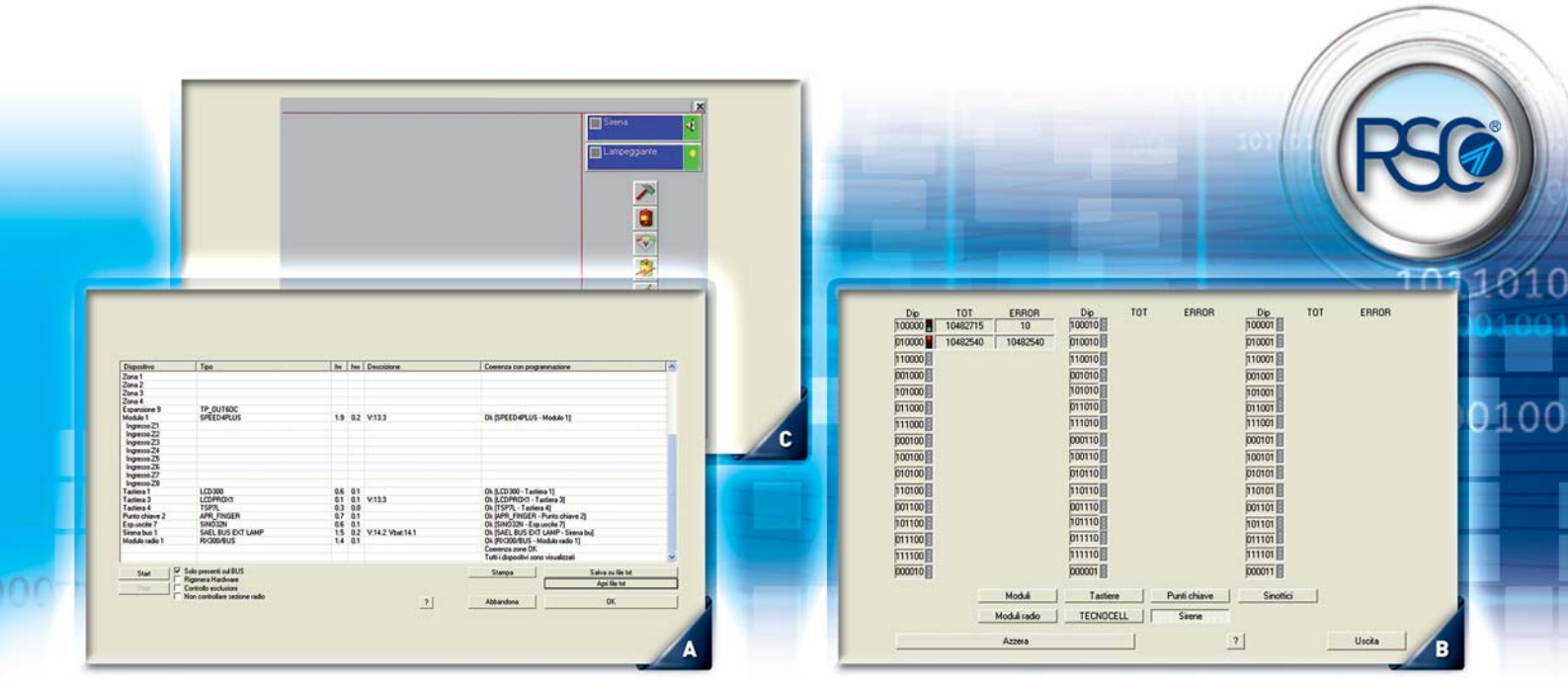
Acoustic specifications	Sound level (main axis)	**117dB (A) @ 1m**
	Frequency	**2400-3500Hz**
	Sound type	**Programmable (3 types)**
	Volume	**Programmable (4 settings)**
Anti-tamper protection	Anti-opening Anti-detachment	**Mechanic (micro-switch)**
Programming	Program association	**No restriction**
	System arming/ disarming signal	**Acustic**
	System status signal	**3 settings**
	Prealarm signal	**3 settings**
	Alarm signal	**3 settings**
	Technical alarm signal	**3 settings**
	Chime alarm signal	**3 settings**
Self test	Power supply	✓
	Battery	✓
	Horn	✓

Electrical specifications	Operating voltage	**10.5...14.5V DC**
	Rated voltage	**12V DC**
	Stand-by consumption	**8mA**
	Max. consumption (alarm)	**1.8A**
	Battery recharge	**With booster circuit**
	RS485 serial connection	**Siren Bus**
Physical specifications	Operating temperature	**-10°C...+55°C**
	Environmental class	**II**
	Protection class	**IP41-IK06**
	Security grade	**3**
	Casing	**ABS**
	Weight	**780g**
	Dimensions (L x H x D)	**290 x 95 x 70mm**
	Battery	**1x 12V/2.1Ah**
Conformity	Norm	**EN 50131-4**

Hardware coherence check
This tool identifies the devices and draws a system overview containing all the necessary information to verify the correct installation.

Network analysis
This tool constantly monitors the communication between the devices connected to the RS485 serial buses: Serial Bus, Sensor Bus and Siren Bus.

Device window
The device window permits the constant monitoring of the functional status of the device and gives access to the other analyzing and control tools, such as the functioning monitor.

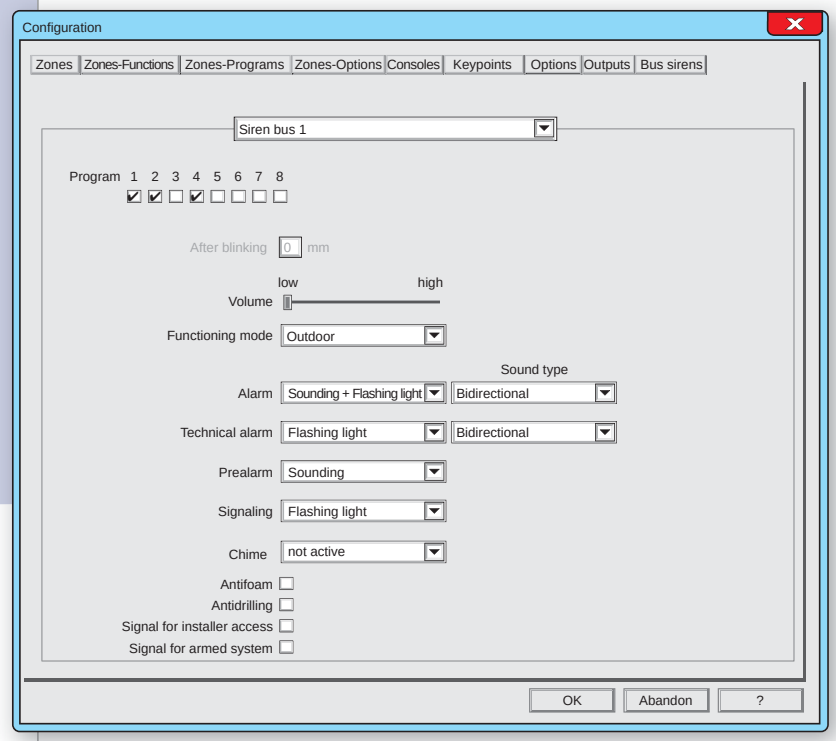


SAEL 2010 BUS - SAEL 2010PRO BUS

Outdoor sirens

The SAEL 2010 BUS and SAEL 2010PRO BUS sirens renew and redefine the concepts of security, reliability, performance and energy consumption.
The RSC® technology, applied to the outdoor sirens, allows to manage a large number of functions with only 4 wires and guarantees continuous monitoring of functioning to ensure the full efficiency of the device at any time.
The sirens are equipped with an anti-tamper protection able to prevent any attempt at sabotage. The flashlight has been made using the LED technology which, thanks to the point effect and the high switching speed, permits the implementation of new and dynamic light signals. Their high resistance to moisture and vibrations and their capacity of bearing an extremely high number of switching, ensure longevity of the flashlight.
In conclusion, the high light efficiency reduces significantly the energy consumption of the devices.

EN 50131-1 COMPLIANT



Programming

Selection of the siren
Selection of the (address of the) siren to be programmed

Program
Association of the programs to the selected siren

After blinking
Programming of the time during which the flashlight remains active once the alarm time has expired

Volume
Setting of the volume for chime, prealarm and arming/disarming signaling

Functioning mode
Selection of the functioning mode (indoor siren or outdoor siren)

Alarm
Selection of the activation mode and sound type in case of alarm

Technical alarm
Selection of the activation mode and sound type in case of technical alarm

Prealarm
Selection of the activation mode in case of prealarm

Signaling
Selection of the activation mode in case of arming/disarming signaling

Chime
Selection of the activation mode in case of chime signaling

Antifoam
Enabling and disabling of the antifoam protection

Antidrilling
Enabling and disabling of the antidrilling protection

Signal for installer access
Enabling and disabling of the acoustic signal for the installer access (maintenance mode).

Signal for armed system
Enabling and disabling of the optical signal for armed system (rotating LED).

SAEL 2010 BUS Certified EN 50131-4 Grade 3	EN 50131-1 COMPLIANT		PROTECTION	SELF TEST	LED	ASA BOX	IP44
Item no. F105S2010BUSBI (ASA white casing)							
Item no. F105S2010BUSGR (ASA gray metallic casing)							
Item no. F105S2010BUSAL (Varnished aluminum casing)	EN 50131-1 COMPLIANT		PROTECTION	SELF TEST	LED	ALUMINUM BOX	IP44
Item no. F105S2010BUSCR (Chrome-plated aluminum casing)							
SAEL 2010PRO BUS Certified EN 50131-4 Grade 4	EN 50131-1 COMPLIANT	PROTECTION	PROTECTION	SELF TEST	LED	ALUMINUM BOX	IP44
Item no. F105S2010PBUSAL (Varnished aluminum casing)							
Item no. F105S2010PBUSCR (Chrome-plated aluminum casing							

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

Acoustic specifications	Sound level (main axis)	**103dB (A) @ 1m**
	Sound level (main axis)	**100dB (A) @ 3m**
	Frequency	**1400-3600 Hz**
	Sound type	**Programmable (3 types)**
	Volume	**Programmable (4 settings)**
Flashlight	Technology	**LED**
	Color	**Orange**
	Flash rate	**45/minute**
Anti-tamper protection	Anti-opening Anti-detachment	**Mechanic (micro-switch)**
	Antifoam	**Optical**
	Antidrilling*	**Mechanic-electronic**
Programming	Functioning mode	**Indoor/outdoor siren**
	Program association	**No restriction**
	System arming/ disarming signal	**Optical and acoustic**
	System status signal	**3 settings**
	Prealarm signal	**3 settings**
	Alarm signal	**3 settings**
	Technical alarm signal	**3 settings**
	Chime alarm signal	**3 settings**
	After blinking	**Programmable**

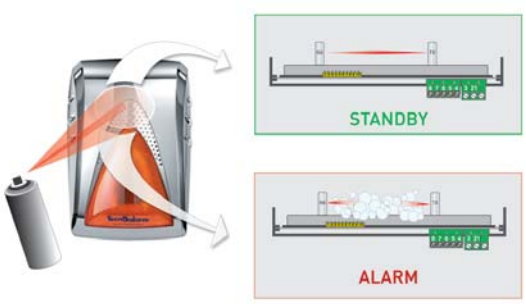
** Only available with the SAEL 2010PRO BUS model*

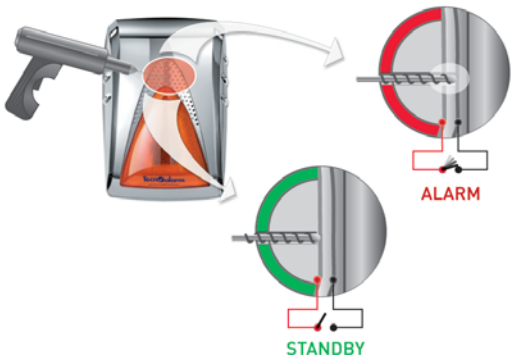
Self test	Power supply	✓
	Battery	✓
	Horn	✓
	Flashlight	✓
Electrical specifications	Operating voltage	**10.5...14.5V DC**
	Rated voltage	**12V DC**
	Stand-by consumption	**12mA**
	Max. consumption (alarm)	**1.8A**
	Signaling consumption	**70mA**
	Battery charge controller	✓
	RS485 serial connection	**Siren Bus**
Physical specifications	Operating temperature	**-40°C...+50°C**
	Environmental class	**IIIA**
	Protection class	**IP44-IK08**
	SAEL2010 BUS	**Security grade 3**
	SAEL2010PRO BUS	**Security grade 4**
	Casing	**ASA or aluminium**
	SAEL2010 BUS	**Weight ASA 2kg - Al 2.7kg**
	SAEL2010PRO BUS	**Weight Al 3.1kg**
	Dimensions (L x H x D)	**211 x 315 x 98mm**
	Battery	**1x 12V/2.1Ah**
Conformity	Norm	**EN 50131-4**

SAEL 2010 BUS - SAEL 2010PRO BUS

Configuration of protection

Anti-tamper protection





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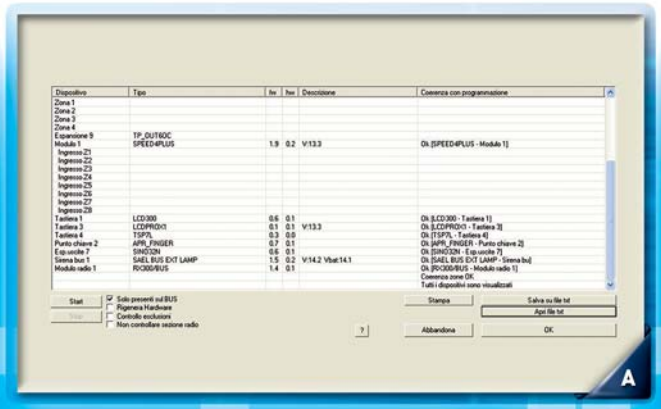
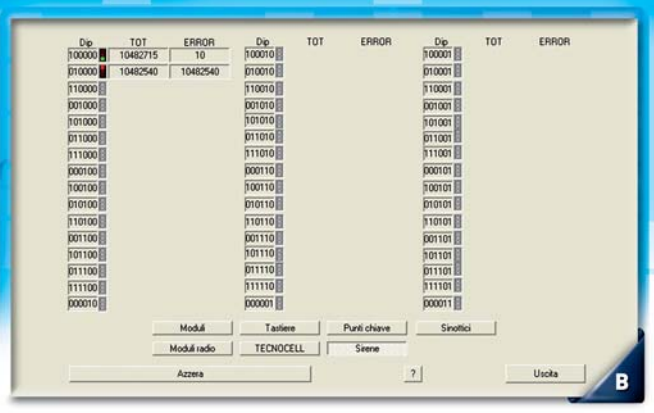
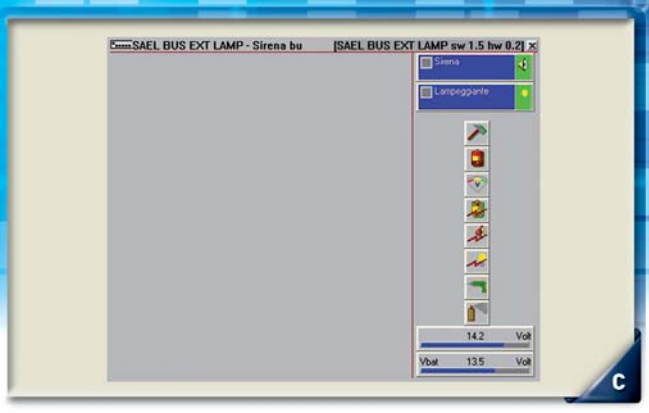
C





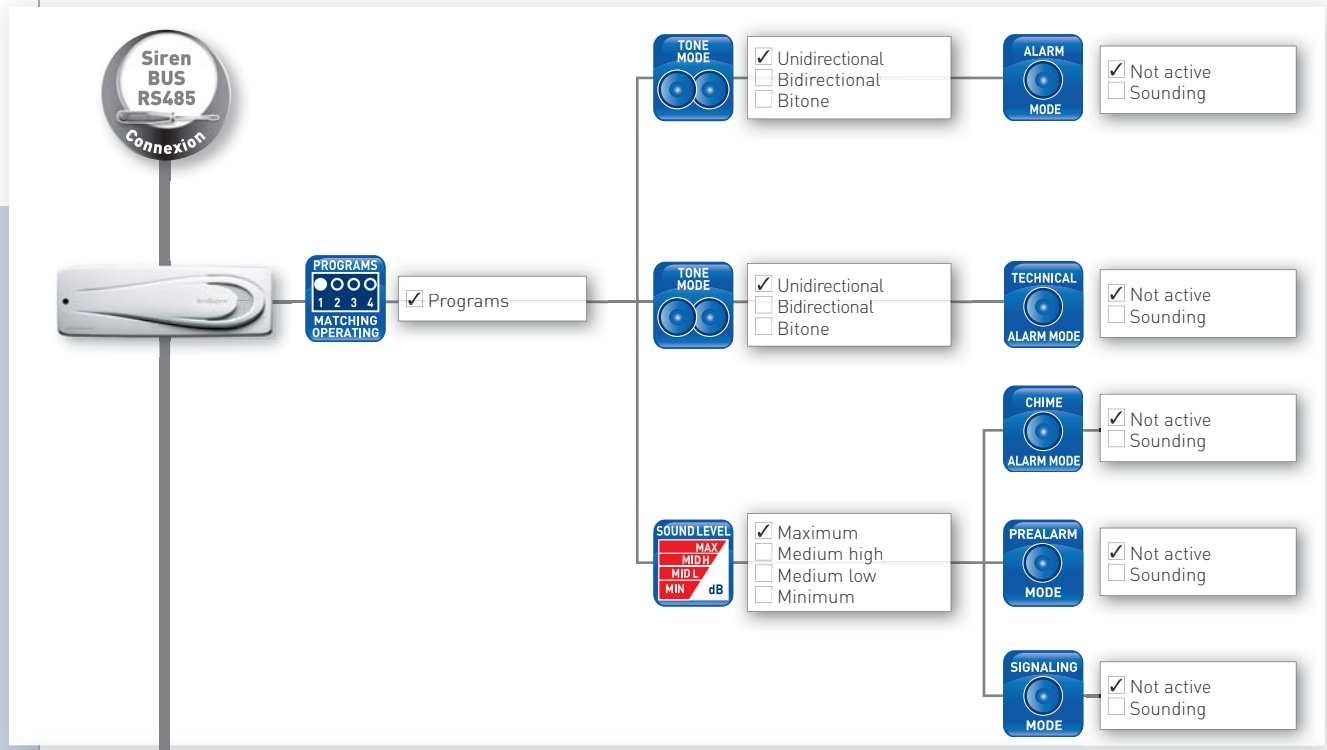


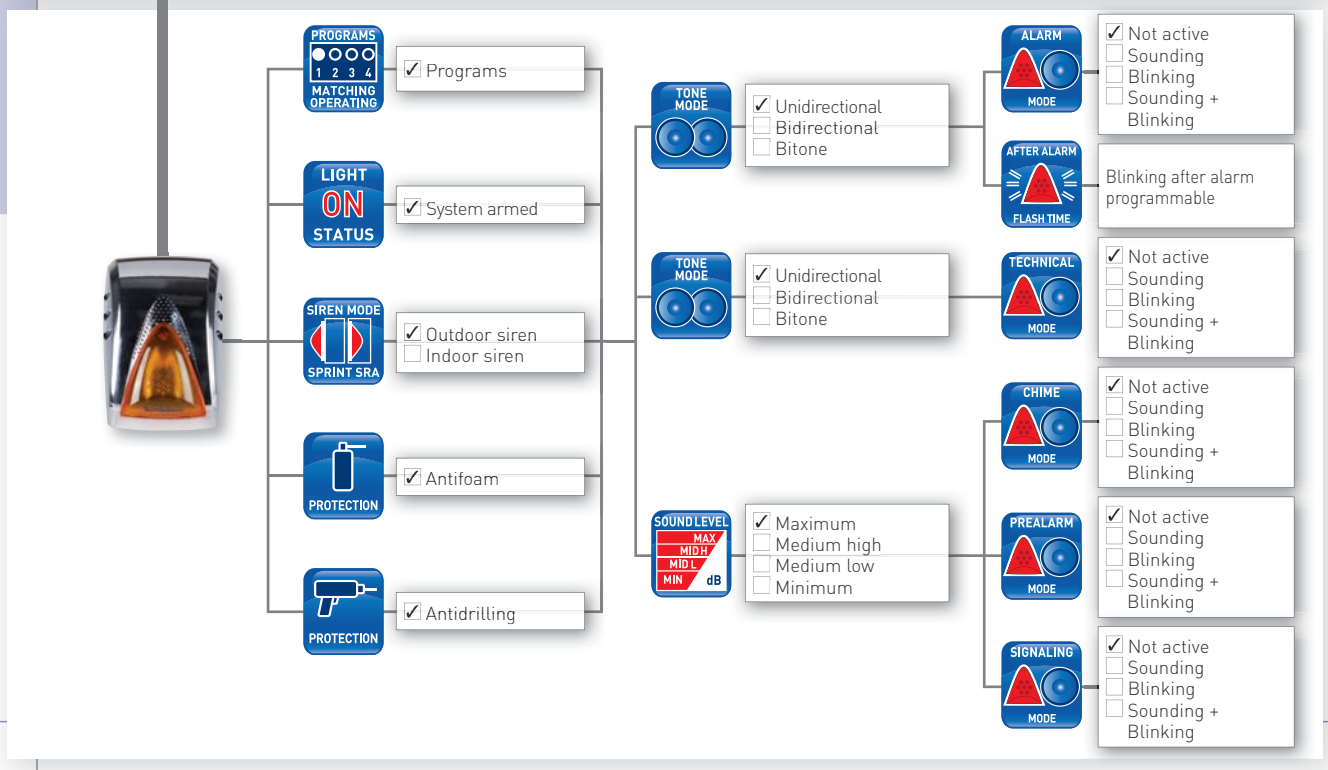
OVERVIEW OF RSC® FUNCTIONS

Sirens

The bus technology allows to verify many functions with only 4 connection 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.





TRAINING

Tecnoalarm introduces the concept of **Security professional** by offering, on a regular basis, free training courses for companies specialized in the installation of security system. Only after a practical/theoretical training conducted by a technician from Tecnoalarm, the customer obtains the permission to use the RSC® systems. The constant training increases the professional level of the companies and offers them new opportunities for business development and growth.

Advanced programming

The **advanced programming** level, based on a software tool, is an expansion of the control panel's programming facilities. It permits a large extent of customization thanks to an absolutely free programming of the system's resources. The functions of the inputs, outputs, remote controls and telephone channels can be redefined by programming operations which associate actions to specific events. The advanced programming level allows the installer to meet the most demanding requirements of the customers, overcome the limits of a traditional burglar alarm system and integrate home automation applications. The course for the obtainment of the qualification and the license for the first and second advanced programming level is an integral part of the training program that Tecnoalarm offers to its customers.

The Tecnoalarm RSC® technology

The Tecnoalarm RSC® technology is an innovative management platform which guarantees the continuity and reliability of the service, ensures an efficient use of the system's resources and provides analysis and monitoring tools for preventive maintenance of the systems. The need for constant innovation requires that we, as a manufacturer, on the one hand produce increasingly sophisticated devices but on the other hand propose refresher courses to enhance the knowledge of the installers and users in terms of security technology.
Tecnoalarm periodically organizes training courses on the RSC® products, with particular attention to the complex regulatory framework.
The courses are addressed to professionals involved in the design, installation and maintenance of the security systems.

NOTES

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