PARADOX HELLAS S.A.

PRODUCTS
CATALOG

Limitation of liability

It is mandatory, Paradox Hellas products to be installed in accordance with the manuals, applicable codes, and the instructions of the Authority Having Jurisdiction. The manufacturer shall not under any circumstances be liable for any incidental or consequential damages arising from loss of property or other damages or losses owing to the failure of products beyond the cost of repair or replacement of any defective products. The manufacturer reserves the right to make product improvements and change product specifications at any time.

The manufacturer assumes no responsibility for errors or omissions, while every precaution has been taken during the preparation of the manuals to ensure the accuracy of its contents.

Warranty

Paradox Hellas warrants its products to be free from defects in materials and workmanship under normal use for a period of two (2) years (the "Warranty Period") from the delivery date, identified by date code(s) indicated on the products. Because Paradox Hellas does not install or connect the products and because the products may be used in conjunction with products not manufactured by Paradox Hellas, Paradox Hellas cannot guarantee the performance of the products and shall not be responsible in any way whatsoever for faulty installation or connection.

RoHS directive compliance

The EC RoHS guideline has been released in order to reduce the heavy metal load in electrical and electronic products caused by e.g. lead and mercury. All manufacturers are obligated to provide only RoHS-compliant products to the European market, effective from July 1st, 2006.

Paradox Hellas hereby states that all products are fully compliant with RoHS 2002/95/EC directive.

Disposal of your old appliance

1. When this crossed-out wheeled bin symbol is attached to a product it means the product is covered by the European Directive 2002/96/EC.

2. All electrical and electronic products should be disposed of separately from the municipal waste stream via designated collection facilities appointed by the government or the local authorities.

3. The correct disposal of your old appliance will help prevent potential negative consequences for the environment and human health.

4. For more detailed information about disposal of your old appliance, please contact your city office, waste disposal service or the shop where you purchased the product.

about

P▲R▲DOX HELLAS

Paradox Hellas S.A. was founded January 1990 and has established itself as the leading company in the Greek market as an importer and wholesale distributor of Security systems, Fire Detection systems, CCTV and Access Control. Since 2003 has started to design and manufacture Fire alarm panels, accessories for security systems such as outdoor sirens, GSM back up communication modules, IP communication modules etc.

It has a big number of clients in Greece, Cyprus and other countries in and outside the European Union. These clients have been selected according to their professional occupation (security and/or fire alarm systems installers) as well as to their highly technical expertise.

Paradox Hellas' Headquarters is located in a modern, fully owned building and is at the moment employing more than 30 people. It's core structure consists of Sales, Marketing, R&D and Technical Support departments.

Construction of new production facilities were completed on May 2007. The fully owned area and building of more than 2000 square meters is located at Vrises Avlidos in the industrial park of Ritsona, at the 72nd km of Athens-Thessaloniki National Road.

An ISO9001:2000 certification concerning design, production and wholesale retail of Security and Fire Detection systems by Bureau Veritas has been obtained several years back. Paradox Hellas is also an overseas member of BSIA (British Security Industry Association).

Its products, apart from being distributed with great success in the Greek market, are exported to countries like Bulgaria, Hungary, Italy, Serbia, Spain, Sweden and countries of South America.

The main products that Paradox Hellas produces are:

SmartX: SmartX is a single loop, analogue addressable control panel, based on the ESP Hochiki protocol and Apollo's protocols S90, X95 & Discover. It targets small to medium installations. The key points of this panel is low cost, ease of use through a intuitive user interface, expandability through networking and programming flexibility all in a robust, high quality construction. Easy for both installers and users provides an ideal solution for a certified entry level panel easily integrated in future installation expansions.

Fighter: The Fighter is an advanced expandable conventional fire alarm & extinguishing panel, using Bus technology. With a configuration of up to 72 zones, 8 expansion keypads and 72 relay outputs, permits very flexible installations. The supervision, monitoring, operation and programming of the system can be achieved through LCD keypad units or the Fighter ProVision software via RS-232, RS-485 or TCP/IP connection. They are fully certified to European Standards: EN5-2 & 4, EN 12094-1 (Extinguishing), CPD, LVD & EMC.

Matrix2000: The Matrix2000 series are microprocessor controlled, conventional Fire alarm panels with unique features; They are fully certified to European Standards: EN5-2 & 4, CPD, LVD & EMC. Matrix2000 is ETL certified from Intertek Ltd. (UL Listed). The panels come at various configurations depending on the application (fire detection and/or extinguishing) from 4 up to 24 zones. The supervision, monitoring, operation and programming of the system can be achieved through ViewMartixPlus software via RS-232, RS-485 or TCP/IP connection.

Artion: A universal GSM backup communication module. It provides a communication path between an installed Alarm Panel and a Central Monitoring Station. This path is used for the transmission of Panel events. It may be used as a backup to a PSTN primary path or as the main communications path in case of PSTN absence. It may also provide PSTN voice services over GSM to areas not having Land Line PSTN coverage (FTS operation). Acting as a PSTN backup unit, the transition to GSM is handled automatically in the event of PSTN loss or sabotage.

Sirion: A universal TCP/IP module that provides any alarm panel in the market (as long as it has a dialer using Contact ID communication format) the means to transmit events to a Central Monitoring Station over the internet. This way it eliminates the cost of outgoing calls to the Monitoring Station for the end users and at the same time provides a safe communication path when VoIP telephony is used. (The required support software for the Central Monitoring Station is provided from Paradox Hellas free of charge. Most Central Monitoring Stations in Hellas have already implemented Sirion support to their services. This kind of service is also being adopted by several Stations in Europe).

certificates
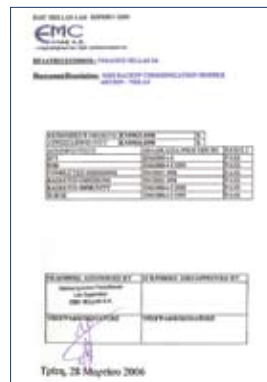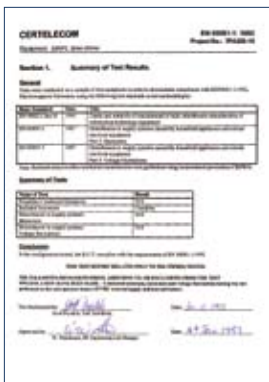
- Matrix2000 is EN 54-2 & EN 54-4 certified from EVPU a.s.
- Matrix2000 is ETL (UL864 & ULCS527 standards) certified from Intertek Ltd.
- Fighter is EN 54-2, EN 54-4 & EN 12094-1 certified from EVPU a.s.
- SIR/PL is CE certified from Certelecom.
- SIR/V is CE certified from Certelecom.
- Artion is CE certified from EMC Hellas.
- Sirion is CE certified from EMC Hellas.
- BUREAU VERITAS ISO 9001:2008. No GR.14.1738Q. Distribution, design, production & technical support.

Fire Alarm

smartX

single loop analogue addressable control panel series

apollo

HOCHIKI

S90
XP95
Discovery
ESP

General Specifications

- Single Loop Analogue Addressable control panels.
- Zonal Indicators: 16 or 32.
- 2 Conventional Zones. Maximum 20 detectors per zone.
- 2 Supervised Siren Outputs.
- 2 Logical Inputs.
- 2 Supervised Relay Outputs.
- 4 PGM outputs.
- 25 button silicon rubber keypad for Operation and Programming.
- Storage of up to 2.000 log events.
- Built-in communicator (Ademco Contact ID).
- System LED indications: Power, Fault, Alarm, Pre Alarm, Delay Active, Sirens Silenced, On Test.
- WalkTest installation testing feature.
- Weekly reminder for system test.
- Real time clock.

Technical Specifications

Number of loops	1
Loop current	500mA
Fire zones	16 or 32
Zonal indicators	16 (smartX 116), 32 (smartX 132)
Mains Power	220 VAC 50Hz
Conventional zones	2 (Maximum 20 detectors per zone)
Conventional zones termination resistors	4,7K Ohms / 1W
Mains supply fuse	1,6A 250V
Power Supply	24 VDC / 2.5A
AUX output	24VDC +/- 10%, 700mA max, current limited, monitored
Battery Backup power	2x 12V / 7Ah sealed lead acid gel batteries
Battery health monitoring (periodic load test)	Every 90 seconds
Supervised siren outputs	2 outputs, 24VDC ±10%, 1A max, fused and monitored
Generic trouble output (on main unit) non monitored	Dry relay contacts NO - C - NC
Analogue Inputs	2 intern AUX pulled up inputs 1.5mA sinc current
Relay Outputs	2 general relay outputs N/O or N/C (jumper selectable) dry contacts 28V/3A max
PGM Outputs	4 PGM outputs. Open collector, 200mA sink max current, 30V max handling
Outputs	2 relay outputs and 4 PGM outputs
Earth faults detection and indication	Front panel LCD indication & buzzer
Display	4 lines of 20 characters LCD
Enclosure	Epoxy powder coated metal box
Dimensions	31,5(H) x 42.5(W) x 10(L)
IP rating	IP30

smartX

single loop analogue addressable control panels

The SmartX fire panel has the following characteristics:

- **PSTN communicator** for remote reporting of events.
- **LOG event registry**, up to 2000 events.
- **Bypasses (disablements)** for inputs and outputs.
- **Delayed outputs**, Alarm verification for all inputs.
- **Global evacuation** triggered by any input, selectable at Access Level 3.
- **Periodic test reminder**.
- **Walk test:** An easy way to test the system by triggering one input at the time.
- **TCP/IP expansion port** provides remote monitoring and control with optional TCP/IP module.
- **PC connectivity:** The expansion port along with the required communication module permits PC connectivity for system supervision and operations.
- **Direct activation of outputs** from inputs regardless of alarm/evacuation state programmed at A.L.3.
- **Group operations** change specific attributes in groups of objects, making programming much more efficient.
- **Autolearn function** for loop devices.
- **Backup/Restore configuration;** Save current system configuration to on-board memory and restore it if needed.
- **Real time clock/calendar** with battery backup.
- Optional eight, 24V output, **monitored relay expansion module** with 3A power supply and battery power backup (also fully monitored).
- **Easy device identification** through their LED indicators.
- **Easy contamination levels/sensor health checks** with device identification.
- **Delayed group activation** for cascaded evacuation schemes.
- **Easy configurable inverse operation** of outputs for high safety applications (e.g. fire doors).
- **Programmable activation** of outputs on faults/bypasses (required for fire doors in some locales).
- **Easy identification of contaminated sensors** with simultaneous LED activation on all troubled devices.
- **User friendly interface:** List based presentation with cursor keys navigation, filters and formatting of viewable information.
- On screen, **context intelligent short help**.
- **User defined descriptions** for all inputs, outputs and zones.
- **Advanced Access level control:** The system is not limited to (the required by European and American) standard.
- **3 access levels:** It provides 8 Access Level 2 users plus one Master user that manages the rest. There is also the Access Level 3 user (installer) and an access codes reset mechanism.
- **Main screen branding, Installer's contact info:** The installer has one line (20 characters) on the main screen that can program to display any message he wishes (e.g. company name). Contact information (e.g. telephone number) may also be programmed into the panel for user reference.
- **Convenient loop devices overview** with alarms, faults and installed types indications.
- **Visual overview** of installed loop devices.

SMARTX 116 - ESP

Single Loop Addressable panel (16 Zonal Indicators)

ESP Single Loop Analogue Addressable control panels. Zonal Indicators: 16. Fire Zones: 32. 2 Conventional Zones. Maximum number of detectors per zone 20. 2 Supervised Siren Outputs. 2 Logical Inputs. 2 Supervised Relay Outputs. Storage of up to 1.000 log events. Built-in communicator.

Order Code: **PH.SH.116.EN**

SMARTX 132 - ESP

Single Loop Addressable panel (32 Zonal Indicators)

ESP Single Loop Analogue Addressable control panels. Zonal Indicators: 32. Fire Zones: 32. 2 Conventional Zones. Maximum number of detectors per zone 20. 2 Supervised Siren Outputs. 2 Logical Inputs. 2 Supervised Relay Outputs. Storage of up to 1.000 log events. Built-in communicator.

Order Code: **PH.SH.132.EN**

SMARTX 116 - S90, XP95, DISCOVERY

Single Loop Addressable panel (16 Zonal Indicators)

Single Loop Analogue Addressable control panels, based on Apollo's S90, XP95 & Discovery protocols. Zonal Indicators: 16. Fire Zones: 32. 2 Conventional Zones. Maximum number of detectors per zone 20. 2 Supervised Siren Outputs. 2 Logical Inputs. 2 Supervised Relay Outputs. Storage of up to 1.000 log events. Built-in communicator.

Order Code: **PH.SA.116.EN**

SMARTX 132 - S90, XP95, DISCOVERY

Single Loop Addressable panel (32 Zonal Indicators)

Single Loop Analogue Addressable control panels, based on Apollo's S90, XP95 & Discovery protocols Zonal Indicators: 32. Fire Zones: 32. 2 Conventional Zones. Maximum number of detectors per zone 20. 2 Supervised Siren Outputs. 2 Logical Inputs. 2 Supervised Relay Outputs. Storage of up to 1.000 log events. Built-in communicator.

Order Code: **PH.SA.132.EN**

SRTCP-IP

Communication Module TCP/IP - RS232

SRTCP-IP module connects directly with SmartX panel's main board (LAN-RS232 connector). SRTCP-IP gives the ability to access and control the SmartX fire alarm panel, locally through the RS232 port or remotely through the ethernet / internet (TCP/IP) in real time.

Technical Characteristics

Power Supply	
10 pin box connector	5 VDC / 12-24 VDC
Terminal Connector	12-24VDC
Consumption	250mA max.
Connections	Ethernet, Serial RS232
RS232	
Ground Isolation	50 V
Connector	Female D9
Ethernet	
Ground Isolation	Full galvanic isolation
Connector	RJ45
Ethernet type	10/100 Mbps
Indications	
Power	Device is powered
Fault	Ground isolation potential is more than 50 V
LED1	Remote client connected
General	
Operating Temperature	From 0°C to 50°C (From 14°F to 122 °F)
Humidity	95% max.
Dimensions	7.4 x 9.7cm

Order Code: **PH.SR.TCP.IP**

ighter

unique conventional BUS expandable fire alarm & extinguishing system
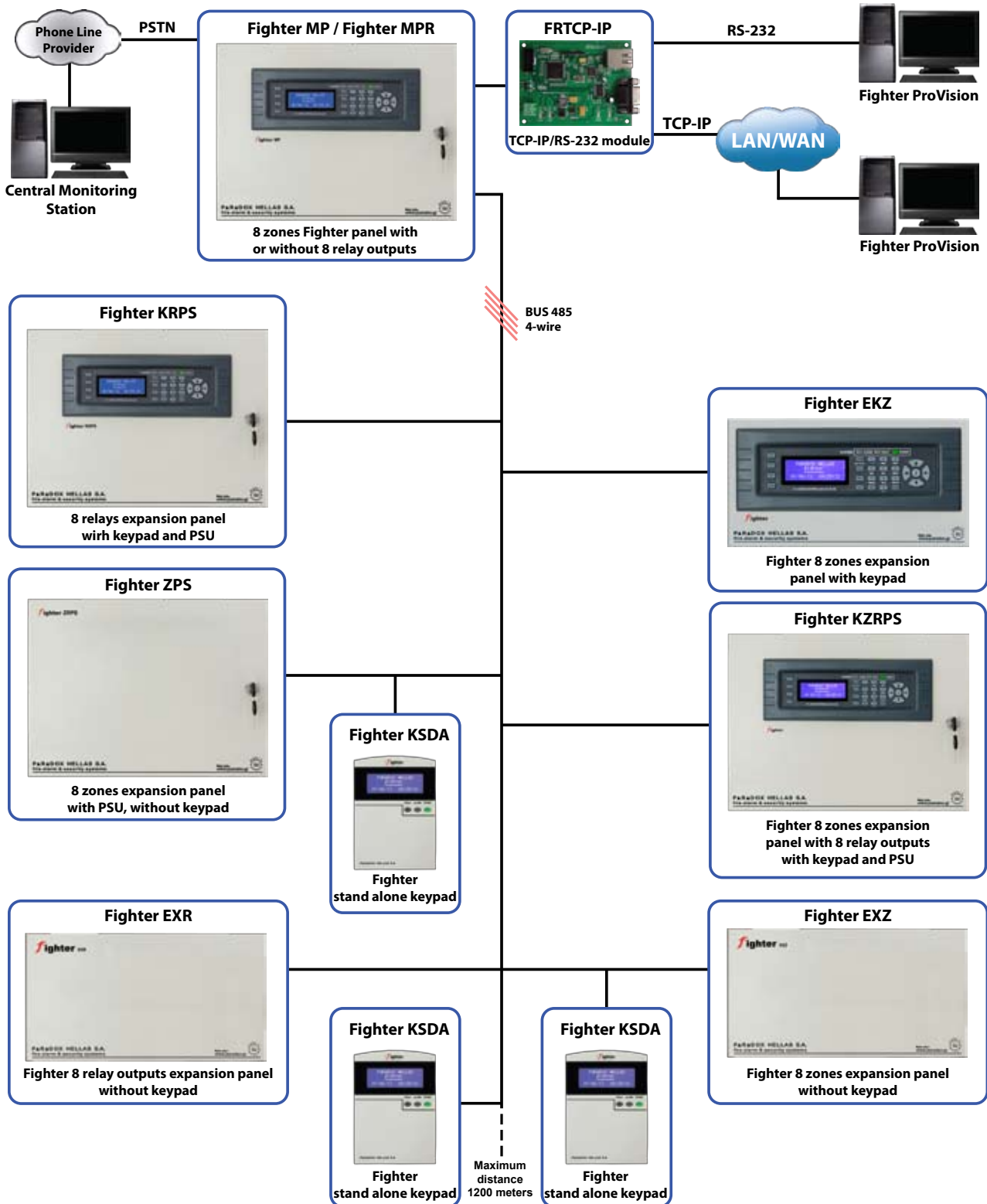

**EC Certificate Number
1293-CPD-0308**

General Specifications

- Advanced conventional fire alarm & extinguishing panel using Bus technology permitting flexible installations.
- Zone expandability; 8 to 72 zones using expansion modules (8 zones per module).
- Output expandability; 8 relay modules with 8 relays each.
- Up to a maximum of 16 keypads units.
- LCD keypad unit for supervision, monitoring, operation and programming of the system.
- Build-in DTMF communicator supports Ademco C.I.D. format.
- Serial (RS232) connection for supervision, monitoring, operation and programming of the system through the Fighter ProVision software and the RS-232/485 module.
- Remote supervision, monitoring, operation and programming of the system with TCP/IP connection and the Fighter ProVision software (optional).
- Intellizone and Cross-zone feature (up to 18 extinguishing areas).
- Walk Test feature.
- Day / Night feature.
- Certified to European directives **EN 54-2**:1997/A1:2006/AC:1999,
  EN 54-4:1997/A2:2006/AC:1999 & **EN12094-1**:2003 (Extinguishing).

Technical Specifications

Bus voltage	24VDC typical
Current at 24Vdc per PSU	1.8 A
Main board current draw [Standby / Alarm]	112 mA / 350 mA
Zones Expansion Module current draw [Standby / Alarm]	60mA / 220 mA
Relays Expansion Module current draw [Standby / Alarm]	40mA / 230 mA
Keypads current draw [Standby / Alarm]	25 mA / 110 mA
Auxiliary output	24VDC +/- 10%, 800 mA max, current limited, monitored
Batteries	2x 12V, 7Ah sealed lead acid gel, self regulated
Zone Inputs Voltage	16.3 VDC ±10%, 0,5 V max ripple voltage
Zone Reset Operation	0,5 VDC max voltage, duration 3,1 sec
Max total detector's standby current per zone	15 mA
Signaling devices outputs	24VDC ±10%, 1A max, fused and monitored
Fault relay contacts rating	Dry contacts (NO/NC) 30 VDC, 3 Amps
BUS system	4 wire RS485 bus system
Bus max length	1200m using typical RS485 cables
Bus Max capacitive load	400 nF
Dimensions (HxWxL [cm]) Main unit:	31,5x42,5x10 (MP/MPR, KZRPS, KZPS, KRPS, ZRPS, ZPS)
Expansion modules (small box):	17x32x5 (EKZ, EKR, EXZ, EXR)
Stand Alone LCD keypad KSDA:	15.5x11x2.8

unique conventional BUS expandable fire alarm & extinguishing system

Phone Line Provider — PSTN

Central Monitoring Station

Fighter MP / Fighter MPR
8 zones Fighter panel with or without 8 relay outputs

FRTCP-IP
TCP-IP/RS-232 module

RS-232 — **Fighter ProVision**

TCP-IP — **LAN/WAN** — **Fighter ProVision**

BUS 485 4-wire

Fighter KRPS
8 relays expansion panel wirh keypad and PSU

Fighter EKZ
Fighter 8 zones expansion panel with keypad

Fighter ZPS
8 zones expansion panel with PSU, without keypad

Fighter KSDA
Fighter stand alone keypad

Fighter KZRPS
Fighter 8 zones expansion panel with 8 relay outputs with keypad and PSU

Fighter EXR
Fighter 8 relay outputs expansion panel without keypad

Fighter KSDA
Fighter stand alone keypad

Maximum distance 1200 meters

Fighter KSDA
Fighter stand alone keypad

Fighter EXZ
Fighter 8 zones expansion panel without keypad

Full Fighter System Setup
The maximum Fighter system setup may include:
- 8 modules of zones expansion
- 9 modules of relays expansion: 8 + 1 relay expansion module of the Fighter Main Panel
- 9 keypads: 1 Fighter MP keypad and 8 keypads selectable through Fighter KSDA and "on panel" keypads.
- Up to 16 PSUs (Power Supply Unit): 1PSU per zones expansion module and/or relay outputs expansion module

ighter

unique conventional BUS expandable fire alarm & extinguishing system

- Menu driven conventional fire alarm and extinguishing panel using 4-wire Bus technology expandability RS-485, permitting flexible and cost optimized installations.
- **Zones expandability:** 8 to 72 analogue conventional detector inputs, using modules interconnected with 4-wire BUS. 8 zones per module. This is the way that detectors connect, get power and communicate an alarm condition to the fire panel.
- **Cross-zoning/extinguishing operation:** Up to 18 extinguishing areas with the full system setup. The system uses 4 zones and 4 relays to produce a very reliable alarm detection and commence a sequence of relay activations. Mainly used to drive extinguishing systems. Any group of 4 zones on any module along with their corresponding relays may be programmed as an extinguishing area.
- **Outputs expandability:** 8 to 72 relays using modules interconnected with 4-wire BUS. 8 monitored relays per module. Relay boards with one relay dedicated to each zone input: Each zone input is mirrored by a relay. When the zone is in alarm the relay is active producing 24 VDC.
- **LCD keypad units for supervision, monitoring, operation and programming of the system**
  Multiple display/keyboard units (as repeaters): Up to 8 extra keypad units may be connected with the 4 wire interface. The system ensures correct inter-operation and implements a lock out mechanism if one keypad unit enters an elevated access level (2 or 3). The keypads have 4x20 alphanumeric LCD, and backlit ruler keys. Embedded help system provides vital in system information.
- **Two general alarm siren relay outputs 24VDC/1A max (monitored):** The two siren outputs get activated when an alarm condition is detected. The first of the two relays produce a constant output when active. The second can be programmed to produce an output pattern (e.g. ANSI evacuation pattern).
- **1 main general fault output (not monitored):** Dry contact relay 3A max. Gets activated when any fault condition is detected.
- **Power supply expansion:** Up to 16 fully supervised power supply units (PSU) may be connected on expansion modules. The system is fully monitoring the AC supply, battery connections and health of each connected power supply. Power supplies are EN54-4 certified.
- **Built in communicator:** A PSTN line interface provides communication of events to a Central Monitoring Station. The communication format used is Contact ID.
- **Automatic module detection** upon installation (relay, zones and keypad modules).
- **Easy module identification:** Modules are easily identified with a selection mechanism from the keypad units and their status LED (selecting a module of interest will activate a specific blinking pattern on the selected module).
- **Bypasses (disablements) for both zone inputs and relay outputs:** Zone inputs and Relay outputs may be disabled independently from each other.
- **Intellizone operation (Alarm verification):** A system that provides a verification to an alarm condition before the alarm state is entered. Helps avoid false alarms by combining alarm signals in time and/or from different detector zones. Can be activated on selected zones and may have global or per module grouping.
- **Day/Night operation:** A system that reduces false alarms during specific hours of the day by using the intellizone feature. Used for example in smoking areas during working hours.
- **3 options for global evacuation:** The system can use manual call points or/and a key combination on the keypads or/and extinguish zones to activate the global evacuation condition.
- **Walk Test feature:** The user may activate a test state on the panel. During the test he manually triggers each one detector and the system once the alarm is detected sounds the sirens for a short period and auto resets. He/she then repeats the triggering process for all detectors to verify the system's good operation.
- **LOG (events):** Storage of up to 1.000 log events.
- **Serial (RS232) connection** for supervision, monitoring, operation and programming of the system through the **SmartView** software and the FRS-232 module.
- **Remote supervision, monitoring, operation and programming** of the system with FRTCP/IP (optional TCP/IP module) connection and the **SmartView** software (optional).
- **Certified** to European directives EN 54-2:1997/A1:2006/AC:1999, EN 54-4:1997/A2:2006/AC:1999 & EN 12094-1:2003 (Extinguishing). EC - Certificate of Conformity No. **123-CPD-0308** of July 2, 2012.

fighter

Fighter MP

8 zones conventional fire alarm panel

Expandability up to 72 zones using expansion modules (8 zones per module). Output expandability; up to 8 relay modules with 8 relays each. Up to a maximum of 8 keypads units per system. Built in communicator supporting Contact I.D protocol. Power supply 27.6 VDC, 2A. **CE** certified.

Order Code: **PH.PL.FIT.08**

Fighter MPR

8 zones and 8 relays conventional fire alarm & extinguishing panel

Expandability up to 72 zones using expansion modules (8 zones per module). Output expandability; 8 relay modules with 8 relays each. Up to a maximum of 8 keypads units per system. Built in communicator supporting Contact I.D protocol. Power supply 27.6 VDC, 2A. CE certified.

Order Code: **PH.PL.FIT.R8**

Fighter KZPS

8 zones expansion panel with keypad and PSU

Connects to the fighter panel via 4-wires RS-485 BUS. Module ID via Dip Switches. Power supply 27.6 VDC, 2A. CE certified.

Order Code: **PH.KP.Z08.PS**

Fighter KRPS

8 relays expansion panel with keypad and PSU

Connects to the fighter panel via 4-wires RS-485 BUS. Module ID via Dip Switches. Power supply 27.6 VDC, 2A. CE certified.

Order Code: **PH.KP.0R8.PS**

Fighter KZRPS

8 zones and 8 relays expansion panel with keypad and PSU

Connects to the fighter panel via 4-wires RS-485 BUS. Module ID via Dip Switches. Power supply 27.6 VDC, 2A. CE certified.

Order Code: **PH.KP.ZR8.PS**

fighter

unique conventional BUS expandable fire alarm & extinguishing system

Fighter ZRPS

8 zones and 8 relays expansion panel with PSU

Connects to the fighter panel via 4-wires RS-485 BUS. Module ID via Dip Switches. Power supply 27.6 VDC, 2A. CE certified.

Order Code: **PH.00.ZR8.PS**

Fighter ZPS

8 zones expansion panel with PSU

Connects to the fighter panel via 4-wires RS-485 BUS. Module ID via Dip Switches. Power supply 27.6 VDC, 2A. CE certified.

Order Code: **PH.00.Z08.PS**

Fighter EKZ

8 zones expansion module with keypad

Connection via BUS. Module ID via Dip Switches. Powered from the BUS. **CE** certified.

Order Code: **PH.KP.EXP.08**

Fighter EKR

8 relays expansion module with keypad

Connection via BUS. Module ID via Dip Switches. Powered from the BUS. **CE** certified.

Order Code: **PH.KP.0R8.00**

Fighter EXZ

8 zones expansion module without keypad

Connection via BUS. Module ID via Dip Switches. Powered from the BUS. **CE** certified.

Order Code: **PH.00.Z08.00**

Fighter EXR

8 relays expansion module without keypad

Connection via BUS. Module ID via Dip Switches. Powered from the BUS. **CE** certified.

Order Code: **PH.00.0R8.00**

Each zone input (main panel or expansion modules) supports up to 20 detectors (160 detectors/module max).

fighter

Note: "ighter" with stylized F

unique conventional BUS expandable fire alarm & extinguishing system

Fighter KSDA

LCD remote keypad

▪ User friendly Alphanumeric keypad - repeater with 80 characters (4 x 20) blue LCD display.

▪ Menu-driven programming for easy system setup (installer).

▪ Menu-driven user friendly operation for the end user.

▪ 3 LEDs indicate the status of the power supply, alarms and faults of the system.

▪ Backlit button gives access and indicates access levels 2 and 3.

▪ TEST button activates all visual indicators for user check.

▪ Dedicated system (zones) reset button.

▪ Dedicated Silence button for buzzers and external sirens also indicates active silence conditions.

▪ Easy user information and system status with clever filtering through 4 buttons. Filtering alarms, faults, bypasses and log events creates easy to comprehend uncluttered display screens .

▪ 12 alphanumeric buttons for data input during system programming (eg zone's descriptions).

▪ Easy menu navigation with dedicated arrow buttons.

▪ Info button gives on screen short help for many system parameters and screen items.

▪ Evacuation Command with keys combination (1 + 3 key buttons)

▪ Interconnection via RS-485 BUS system.

▪ Compatible with the Fighter system.

▪ Dimensions (HxWxL [cm]): 11 x 15.5 x 2.5.

Order Code: **PH.KP.FIS.EN**

EXP R8

PCB expansion module with 8 relays

All outputs are supervised and must be properly terminated. 24VDC/1A output per relay (fused). Maximum load depends on rest of system. Capability for extra Power Supply (FPS-5, transformer and batteries) with fully supervised mains and battery inputs. Provides the ability to connect a wide variety of loads (notification appliances, automation modules etc). Connection via BUS. Module ID via Dip Switches.

Order Code: **PH.RE.FIT.08**

EXP Z8

PCB expansion module with 8 zone inputs

All inputs are fully supervised and must be properly terminated. Capability for extra Power Supply (FPS-5, transformer and batteries) with fully supervised mains and battery inputs. Each zone input (main panel or expansion modules) supports up to 20 detectors (160 detectors max). Connection via BUS. Module ID via Dip Switches.

Order Code: **PH.ZE.FIT.08**

fighter

unique conventional BUS expandable fire alarm & extinguishing system

FPS-5

Switching stabilized power supply

Switching stabilized power supply 27,6 VDC - 2A without transformer (PCB board only). When connected to the fighter main board provides mains supervision, battery charger, battery health monitor (high internal impedance detection) and short circuit protection for the battery charger. **CE** certified.

Order Code: **PH.PF.005.V1**

FRTCP-IP

Communication Module TCP/IP - RS232

FRTCP-IP module connects directly with Fighter panel's main board (LAN-RS232 connector). FRTCP-IP gives the ability to access and control the Fighter fire alarm panel, locally through the RS232 port or remotely through the ethernet / internet (TCP/IP) in real time with the use of the specially designed Fighter ProVision software.

Programming of the FRTCP-IP module's communication parameters is performed through the Fighter panel's keypad.

Technical Characteristics

Power Supply	
10 pin box connector	5 VDC / 12-24 VDC
Terminal Connector	12-24VDC
Consumption	250mA max.
Connections	Ethernet, Serial RS232
RS232	
Ground Isolation	50 V
Connector	Female D9
Ethernet	
Ground Isolation	Full galvanic isolation
Connector	RJ45
Ethernet type	10/100 Mbps
Indications	
Power	Device is powered
Fault	Ground isolation potential is more than 50 V
LED1	Remote client connected
General	
Operating Temperature	From 0°C to 50°C (From 14°F to 122 °F)
Humidity	95% max.
Dimensions	7.4 x 9.7cm

Order Code: **PH.FI.TCP.IP**

unique conventional BUS expandable fire alarm & extinguishing system

FRS-232

Communication Module RS232

The FRS232 module provides connection capability to Fighter Panels from a local PC via a serial port.

Operations and control of the system is possible via the PC with the help of the specially designed software named ProVision.

The module provides galvanic isolation between the installation's protective earth (PC's ground) and system ground preventing an earth fault problem.

Technical Characteristics

Operation voltage	5 VDC
Maximum current consumption	100mA
Serial Port	Compatible with RS232 (galvanic isolated)
Maximum voltage galvanic isolation	50V (Red LED for threshold indication)
Operating Temperature	From 0°C to 50°C
Ambient humidity	95% max.
Dimensions	7.4 x 5.8cm

Order Code: **PH.FA.232.RS**

Fighter ProVision

Fighter panel's Monitoring & Programming Software

ProVision software provides the end user with an operational overview of an installed system consisting a Fighter fire alarm panel.

The key characteristics of the system are:

- Monitoring of multiple client panels in real time (up to 1.000 units).
- On screen representation of the remote panels including remote operations.
- Live event monitoring with audio and visual notifications for alarms and faults.
- Up to 12 plans of the customer's premises with detectors and siren placement.
- Remote panel log downloading and local storage.
- Report creation in html format with user defined criteria.
- Communicate with the panel via RS-232 for local connection or TCP-IP protocol for distance connection.

The program has been designed with a user friendly interface presenting concise uncluttered information. It gives the operator an instant understanding on the monitored units, been local or spread around the globe. As such it adds tremendous strategic value to the Fighter fire alarm panel.

Matrix2000

conventional fire alarm panels

EC Certificate Number
00223/101/1/2010
CPD Certificate Number
1293-CPD-0185
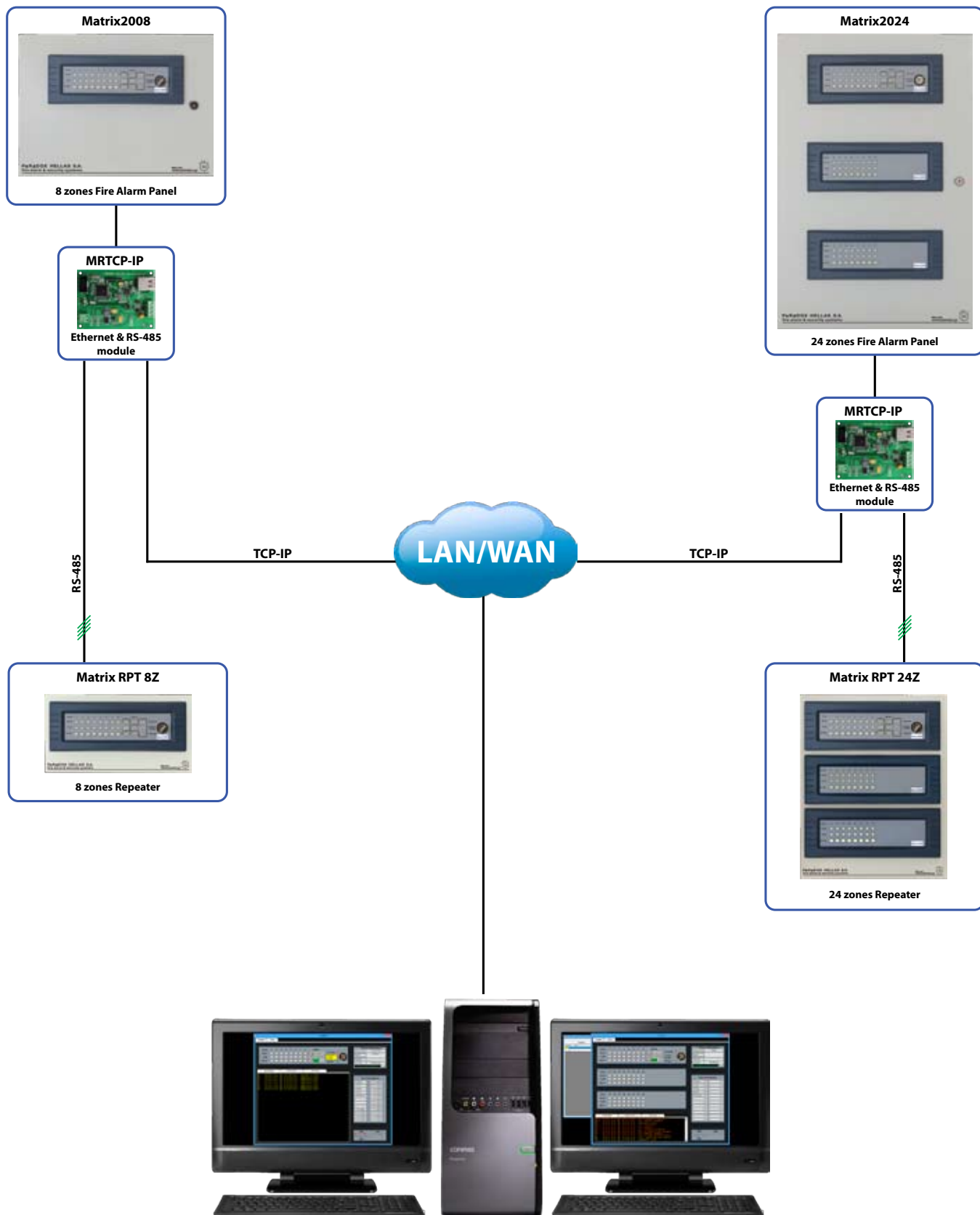
Intertek
4002437

General Specifications

- Advanced analog fire alarm control panel for small or medium installations.
- Number of zones: 4, 8, 12, 16, 20 or 24. Maximum number of detectors per zone 20.
- Two wire zone circuits (Class B, Style C).
- Outputs expandability up to 24 relays zone outputs.
- Zones Bypass (zone disablements) keys.
- Silicon rubber keypad for Operation and Programming.
- Keyswitch to access Level 2 and Evacuation procedure.
- Zone status indication: Alarm, Fault, Bypassed.
- General LED indications: Power, Alarm, Fault, Silence, AUX Fault, Siren Fault, Relays Outputs Fault.
- Earth Fault indication.
- IntelliZone (Alarm Verification) feature. Similar to Day Night mode.
- Cross-zone feature (up to 4 cross-zone pairs). Only for the mainboard's zones.
- WalkTest installation testing feature.
- Weekly reminder for system test.
- Remote connectivity through serial and ethernet expansion boards (optional extras).
- Supervision, monitoring and operation through the *ViewMatrixPlus* software.
- Certified to directive **CDP** 89/106/EEC, **EN 54-2**: 1997/A1: 2006/AC: 1999 and **EN 54-4**: 1997/A2: 2006/AC: 1999. Certified to **LVD** Directive 2006/95/EC and **EMC** Directive 2004/108/EC.
- ETL Listed for the 4 or 8 zones panels with or without relays. Certified to **UL864** and **ULCS527** Standards.

Technical Specifications

Mains Power	220V AC 50Hz or 110V AC 60Hz
Accessories operational voltage	24V DC
Backup power	2x 12V / 7Ah sealed lead acid gel batteries
Battery health monitoring (periodic load test)	Every 90 seconds
Earth faults detection and indication	Front panel LED & buzzer
Zone termination resistors	4,7K Ohms / 0.5W
Relay outputs termination resistors	4,7K Ohms / 0.5W
Supervised siren output	24VDC / 1A output
Supervised, fused relay outputs on the relay expansion modules	1.5A fuse
Panel's current consumption at 24VDC (standby)	4 zones: 55mA, 8 zones: 70mA, 12 zones: 95mA, 16 zones: 110mA, 20 zones: 135mA, 24 zones: 150mA
Panel's dimensions (cm)	4 - 8 zones: 31,5(H) x 42,5(W) x 9(L) 12 - 16 zones: 48(H) x 42,5(W) x 9(L) 20 - 24 zones: 64,5(H) x 42,5(W) x 9(L)
Generic trouble output (on main unit) non monitored	Dry relay contacts NO - C - NC.
Temperature	-2°C to 45°C (32°F to 120°F)
Humidity	5% to 95% RH, noncondensing

Matrix2000

conventional fire alarm panels

Matrix2008

8 zones Fire Alarm Panel

Matrix2024

24 zones Fire Alarm Panel

MRTCP-IP

Ethernet & RS-485 module

MRTCP-IP

Ethernet & RS-485 module

RS-485

RS-485

TCP-IP

LAN/WAN

TCP-IP

Matrix RPT 8Z

8 zones Repeater

Matrix RPT 24Z

24 zones Repeater

ViewMatrix Plus

Matrix2000

conventional fire alarm panels

MATRIX2004 | 4 zones fire alarm panels

MATRIX2004R00TO

4 Zones Fire Alarm Panel (HxWxD: 31x45x9 cm). **CE** certified.

Order Code: **PH.MA.422.CP**

MATRIX2004R04TO

4 Zones Fire Alarm Panel with 4 zone outputs (1xMER-4). **CE** certified.

Order Code: **PH.MR.422.CP**

MATRIX2008 | 8 zones fire alarm panels

MATRIX2008R00TO

8 Zones Fire Alarm Panel (HxWxD: 31x45x9 cm). **CE** certified.

Order Code: **PH.MA.822.CP**

MATRIX2008R08TO

8 Zones Fire Alarm Panel with 8 zone outputs (1xMER-8). **CE** certified.

Order Code: **PH.MR.822.CP**

MATRIX2012 | 12 zones fire alarm panels

MATRIX2012R00TO

12 Zones Fire Alarm Panel (HxWxD: 48x45x9 cm). **CE** certified.

Order Code: **PH.MA.012.CP**

MATRIX2012R04TO

12 Zones Fire Alarm Panel with 4 zone outputs (1xMER-4). **CE** certified.

Order Code: **PH.04.012.CP**

MATRIX2012R08TO

12 Zones Fire Alarm Panel with 8 zone outputs (1xMER-8). **CE** certified.

Order Code: **PH.08.012.CP**

MATRIX2012R12TO

12 Zones Fire Alarm Panel with 12 zone outputs (1xMER-4 and 1xMER-8). **CE** certified.

Order Code: **PH.12.012.CP**

EC Certificate Number
00223/101/1/2010
CPD Certificate Number
1293-CPD-0185

MATRIX2016 | 16 zones fire alarm panels

MATRIX2016R00TO

16 Zones Fire Alarm Panel (HxWxD: 48x45x9 cm). **CE** certified.

Order Code: **PH.MA.016.CP**

MATRIX2016R08TO

16 Zones Fire Alarm Panel with 4 zone outputs (1xMER-4). **CE** certified.

Order Code: **PH.08.016.CP**

MATRIX2016R16TO

16 Zones Fire Alarm Panel with 8 zone outputs (1xMER-8). **CE** certified.

Order Code: **PH.16.016.CP**

MATRIX2020 | 20 zones fire alarm panels

MATRIX2020R00TO

20 Zones Fire Alarm Panel (HxWxD: 65x45x9 cm). **CE** certified.

Order Code: **PH.MA.020.CP**

MATRIX2020R04TO

20 Zones Fire Alarm Panel with 4 zone outputs (1xMER-4). **CE** certified.

Order Code: **PH.04.020.CP**

MATRIX2020R08TO

20 Zones Fire Alarm Panel with 8 zone outputs (1xMER-8). **CE** certified.

Order Code: **PH.08.020.CP**

MATRIX2020R12TO

20 Zones Fire Alarm Panel with 12 zone outputs (1xMER-8 and 1xMER-4). **CE** certified.

Order Code: **PH.12.020.CP**

MATRIX2020R16TO

20 Zones Fire Alarm Panel with 16 zone outputs (2xMER-8). **CE** certified.

Order Code: **PH.16.020.CP**

MATRIX2020R20TO

20 Zones Fire Alarm Panel with 20 zone outputs (2xMER-8 and 1xMER-4). **CE** certified.

Order Code: **PH.20.020.CP**

Matrix2000

conventional fire alarm panels

EC Certificate Number
00223/101/1/2010
CPD Certificate Number
1293-CPD-0185

MATRIX2024 | 24 zones fire alarm panels

MATRIX2024R00TO

24 Zones Fire Alarm Panel (HxWxD: 64.5x42.5x10 cm). **CE** certified.

Order Code: **PH.MA.024.CP**

MATRIX2024R08TO

24 Zones Fire Alarm Panel with 8 zone outputs (1xMER-8). **CE** certified.

Order Code: **PH.08.024.CP**

MATRIX2024R16TO

24 Zones Fire Alarm Panel with 16 zone outputs (2xMER-8). **CE** certified.

Order Code: **PH.16.024.CP**

MATRIX2024R24TO

24 Zones Fire Alarm Panel with 24 zone outputs (1xMER-8). **CE** certified.

Order Code: **PH.24.024.CP**

Matrix2000

conventional fire alarm panels

MATRIX2004 | 4 zones fire alarm panels

M2004-A6N

4 Zones Fire Alarm Panel (HxWxD: 31.5x42.5x10 cm). 220-240VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MA.422.UL**

M2004-E4J

4 Zones Fire Alarm Panel with 4 zone outputs (1xMER-4) (HxWxD: 31.5x42.5x10 cm). 220-240VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MR.422.UL**

M2004-G8M

4 Zones Fire Alarm Panel (HxWxD:31.5x42.5x10 cm). 110-120VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MA.411.UL**

M2004-G4R

4 Zones Fire Alarm Panel with 4 zone outputs (1xMER-4) (HxWxD: 31.5x42.5x10 cm). 110-120VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MR.411.UL**

MATRIX2008 | 8 zones fire alarm panels

M2008-A6N

8 Zones Fire Alarm Panel (HxWxD: 31.5x42.5x10 cm). 220-240VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MA.822.UL**

M2008-H3K

8 Zones Fire Alarm Panel with 8 zone outputs (1xMER-8) (HxWxD: 31.5x42.5x10 cm). 220-240VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MR.822.UL**

M2008-G8M

8 Zones Fire Alarm Panel (HxWxD: 31.5x42.5x10 cm). 110-120VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MA.811.UL**

M2008-J5G

8 Zones Fire Alarm Panel with 8 zone outputs (1xMER-8) (HxWxD: 31.5x42.5x10 cm). 110-120VAC / 50-60Hz. **ETL** certified.

Order Code: **PH.MR.811.UL**

Repeaters

Matrix2000 repeaters provide a remote indication and operation of the fire panel. The user interface has the same controls and indications as the main panel. It is connected to the main panel with a 4 wire cable (RS485 and power).

Attention: In order to connect the repeaters with the Matrix2000 panels you need to purchase the MRS-232 module. The RS-232 cable is not included.

MATRIX RPT 4Z

4 zones repeater

Dimensions: 32x17x5cm. Requires MRS23/485 communication module.

Order Code: **PH.RP.004.NW**

MATRIX RPT 8Z

8 zones repeater

Dimensions: 32x17x5cm. Requires MRS23/485 communication module.

Order Code: **PH.RP.008.NW**

MATRIX RPT 12Z

12 zones repeater

Dimensions: 32x29x5cm. Requires MRS23/485 communication module.

Order Code: **PH.RP.012.NW**

MATRIX RPT 16Z

16 zones repeater

Dimensions: 32x29x5cm. Requires MRS23/485 communication module.

Order Code: **PH.RP.016.NW**

Matrix2000

conventional fire alarm panels

MATRIX RPT 20Z

20 zones repeater

Dimensions: 32x40.5x5cm. Requires MRS23/485 communication module.

Order Code: **PH.RP.020.NW**

MATRIX RPT 24Z

24 zones repeater

Dimensions: 32x40.5x5cm. Requires MRS23/485 communication module.

Order Code: **PH.RP.024.NW**

Expansion modules, accessories & replacement PCBs

Expansion boards

MEZ-8

8 zones expansion board. **CE** certified.

Order Code: **PH.MZ.008.00**

MER-8

8 zone outputs expansion board. Metal base included.

Order Code: **PH.MR.008.V2**

MER-4

4 zone outputs expansion board. Metal base included.

Order Code: **PH.MR.004.V2**

Matrix2000

Replacement boards

MAIN-8

8 zones main board for MATRIX2008, MATRIX2016 & MATRIX2024 panel series.

Order Code: **PH.MN.008.V3**

MAIN-4

4 zones main board for MATRIX2004, MATRIX2012 & MATRIX2020 panel series.

Order Code: **PH.MN.004.V3**

Keypads

MKP-8K

8 zones Keypad with keyswitch.

Order Code: **PH.MK.008.V2**

MKP-4

4 zones Keypad with keyswitch.

Order Code: **PH.MK.004.V2**

MKP-8

8 zones expansion keypad without keyswitch. .

Order Code: **PH.MK.108.V2**

FPS-4

Switching stabilized power supply

Switching stabilized power supply 27,6 VDC - 2A without transformer (PCB board only). When connected to the Matrix2000 main board provides mains supervision, battery charger, battery health monitor (high internal impedance detection) and short circuit protection for the battery charger.

Order Code: **PH.PF.004.V1**

Matrix2000

conventional fire alarm panels

MRTCP/IP

Ethernet & RS485 Communication Module

The MRTCP/IP module connects directly to the main board of the Matrix 2000 panel. Provides full access and control of the panel either locally via RS485 serial connection to repeaters or via internet (TCP/IP) to any PC running the specially designed software ViewMatrix in real time.

Connecting the MRTCP/IP module reduces the maximum number of repeaters that can be connected to the panel Matrix2000 from 7 to 6.

The programming of communication parameters of the module is done through a specially designed software named "Matrix Network Utility" which can be found on our website www.paradox.gr.

Technical Characteristics

Power Supply	5 VDC
Max. module consumption	250mA
Connections	Ethernet, Serial RS485
Humidity	95% max.
Dimensions	7.4 x 9.7cm
Operating Temperature	From 0°C to 50°C (From 14°F to 122 °F)
Ethernet	
Ground isolation	Full galvanic isolation
Connector	RJ45
Ethernet type	10/100 Mbps
RS485	
Max. distance for repeater connection (twisted pair/ UDP)	200 meters
VBB/- output of 485 port max. consumption	500mA *Attention! Confirm the ability to provide of Matrix2000 panel this current*
Indications - Optioning	
Power	Device is powered
TER	RS485 termination. Connects 120Ohm resistor with RS485 bus

Order Code: **PH.RB.TCP.IP**

Note: The ethernet RJ45 network cable is not included.

Matrix2000

conventional fire alarm panels

MRS232/485

RS232/485 Communication Module

This module gives the Matrix2000 panels the ability to connect to a local PC through it's serial port.

Monitoring and control of the system from a PC can be performed with the aid of specially developed software (ViewMatrix Plus) running under Microsoft's Windows. This software simulates the keyboard and the settings of the panel in a user friendly graphic environment on the PC screen. All actions are performed with the use of a simple mouse.

MRS232/485 also provides Matrix2000 panels with the ability to accommodate through the RS-485 port up to 8 different fully functional repeater keyboards for each panel.

Technical Characteristics

Power Supply Voltage	5 VDC
Maximum Current (No repeaters connected)	100mA
Serial Port	RS232 compatible, Ground isolated
Max isolation voltage	50V (Fault indicated with Red LED on PCB)
Max RS485 wire length (twisted pair, UDP)	500m
Maximum power provided by Vbb/Gnd on 485 port	500mA *Attention! Observe power budget of Matrix2000*
Operating Temperature	0°C to 50°C (14°F to 122 °F)
Humidity	95% max.
Dimensions	7.4 x 5.8cm
Indicators	
LED1	Ground voltage fault: The ground potential between the Matrix2000 panel and the connecting device (PC) is more than 50 V
JP2	RS485 termination. Connects a 120 Ohm resistor on the RS485 bus
JP5	Disables the RS232 port

Order Code: **PH.MA.232.RS**
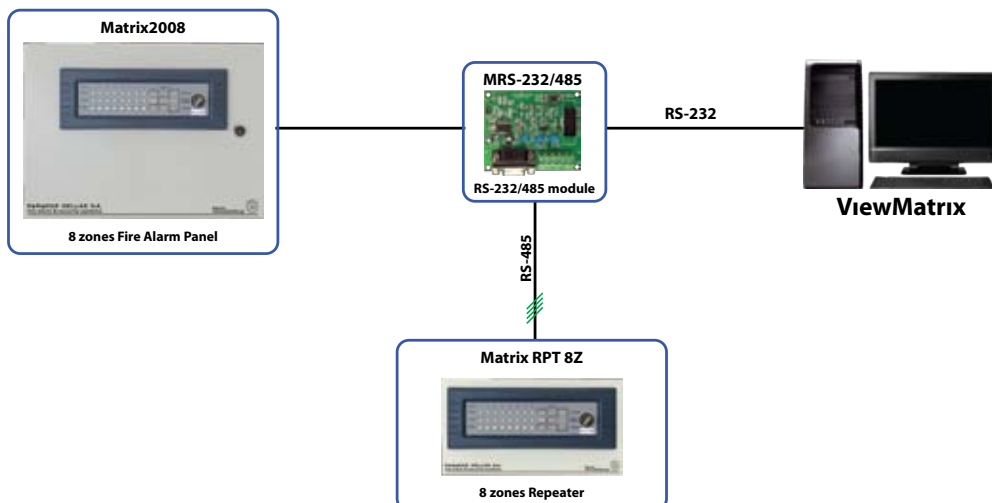
Note: The RS-232 cable is not included.

Matrix2000

conventional fire alarm panels

ViewMatrix Software

Matrix2000 panel series Monitoring & Programming Software

ViewMatrix provides the user with an overview of all the incidents that take place while a Matrix2000 panel is in use. It enables control, through an RS-232 connection, of all the parameters that a fire alarm system consists of, from the state of the sensors which are situated in the installation field to the settings of the microcontroller of the control panel.

ViewMatrix provides the user the ability to:

- Set the Date/Time Clock of the remote panel
- Remote panel log downloading and local storage

Requires the use of the optional **MRS-232/485** communication module.

ViewMatrix Plus Software

Matrix2000 panel series Monitoring & Programming Software

ViewMatrix Plus provides the user/installer with an operational overview of an installed system consisting of one or more Matrix2000 Fire Alarm Panels.

The key characteristics of the system are:

- Monitoring of multiple client panels in real time (up to 1.000 units).
- On screen mimic representation of remote panels including remote operations.
- Up to 20 simultaneous, fully operational extra mimic panels.
- Live event monitoring with audio and visual notifications for alarms and faults.
- Up to 12 plans of the customer's premises with detectors and siren placement.
- Remote panel log downloading and local storage.
- Report creation in html format with user defined criteria.
- Included network configuration utility for IP settings of the modules.
- Easy client location on map using Google Maps web location.

The program has been designed with a user friendly interface presenting concise uncluttered information. It gives the operator an instant understanding on the monitored units, been local or spread around the globe. As such it adds tremendous strategic value to the Matrix2000 fire panel series.

SIR-ZF

General Specifications

The sirens SIR/ZFP and SIR/ZFV are designed and manufactured to contain both maximum function abilities and security. The housing aesthetically pleasant, with build in FLASH and large exterior space for any company's "logo" is made of POLYCARBONATE plastic with interior metal cover made of galvanized steel sheets. Ensure maximum protection endurance to all weather conditions.

- Complete initial connection can be made before panel power up. It's put in STANDBY mode only when the + or -SSP command is given.
- Built-in FLASH.
- Protection of the siren from short circuit in the electric lamp of the FLASH.
- Protection switch TAMPER from opening or removing from the wall.
- Maximum alarm duration when shut down the SSP.
- POLYCARBONATE plastic box with UV protection, self extinguishing.

Technical Specifications

Operating Voltage	12 VDC or 24 VDC
Standby current drain	20 mA
Alarm current drain	115 mA
Acoustic pressure	115dB@1m
Operating frequency	1600-2400 Hz
Alarm duration	3, 5, 10min or indefinite
Tamper switch contact	1A / 12V
Flash	High bright LED
Dimensions in mm	275 x 250 x 90

SIR-ZF

outdoor, tampering protected & battery back-up piezo siren series

SIR/ZFP

115db@1m fire alarm outdoor piezo siren with flash and battery back-up.

Order Code: **PH.SR.ZFP.00**

SIR/ZFV

115db@1m fire alarm outdoor piezo siren with flash and battery back-up.

Order Code: **PH.SR.ZFV.00**

ACCESSORIES

MRB-01

Reset Beam module.

Order Code: **PH.AU.RES.MF**

MED-01

Extinguish delay module.

Order Code: **PH.EX.DEL.MO**

Security

SIR / PL - V

outdoor, tampering protected & battery back-up siren series

CE

General Specifications

The SIR/PL and SIR/V siren series are designed and manufactured to contain both maximum function abilities and security. The housing aesthetically pleasant, with build in FLASH and large exterior space for any company's "logo" is made of POLYCARBONATE plastic with interior metal cover made of galvanized steel sheets. Ensure maximum protection endurance to all weather conditions.

Comply with the requirements of the Directive **89/336/EEC EMC** as amended by directive **93/68/EEC** and the **EN50081-1** and **EN50082-1** Standards.

- Complete initial connection can be made before panel power up. It's put in STANDBY mode only when the + or -SSP command is given.
- The siren is activated when the alarm panel's voltage drops below 9.5 VDC.
- Built-in FLASH.
- Protection of the siren from short circuit in the electric lamp of the FLASH.
- Protection switch TAMPER from opening or removing from the wall.
- Maximum alarm duration when shut down the SSP.
- POLYCARBONATE plastic box with UV protection, self extinguishing.

Technical Specifications

Operating Voltage	11-14 VDC
Standby current drain	10 mA (SIR/PL) 20 mA (SIR/V)
Alarm current drain	2.5 A
Acoustic pressure	125dB@1m (SIR/PLL & SIR/V) 120dB@1m (SIR/PLSL & SIR/VS)
Operating frequency	1600-2400 Hz
Alarm duration	3, 5 or 10 min
Tamper switch contact	1A / 12V
Flash	High bright LED
Dimensions in mm	275 x 250 x 90

SIR / PL - V

outdoor, tampering protected & & battery back-up siren series

SIR/PL

SIR/PLL

125db@1m outdoor siren with flash and battery back-up. Can fit 7 or 2,9Ah battery. Available in white & silver color. FLASH in white, orange or blue color. **CE** certified.

Order Code: **PH.SR.PLL.00**

SIR/PLSL

120db@1m outdoor siren with flash and battery back-up. Can fit 7 or 2,9Ah battery. Available in white & silver color. FLASH in white, orange or blue color. **CE** certified.

Order Code: **PH.SR.PLS.00**

SIR/V

SIR/V

125db@1m outdoor siren with flash and battery back-up. Can fit only 2,9Ah battery. Available in white & silver color. FLASH in red color. **CE** certified.

Order Code: **PH.SR.PLV.0W**

SIR/VS

120db@1m outdoor siren with flash and battery back-up. Can fit only 2,9Ah battery. 3Available in white & silver color. FLASH in red color. **CE** certified.

Order Code: **PH.SR.PSV.0W**
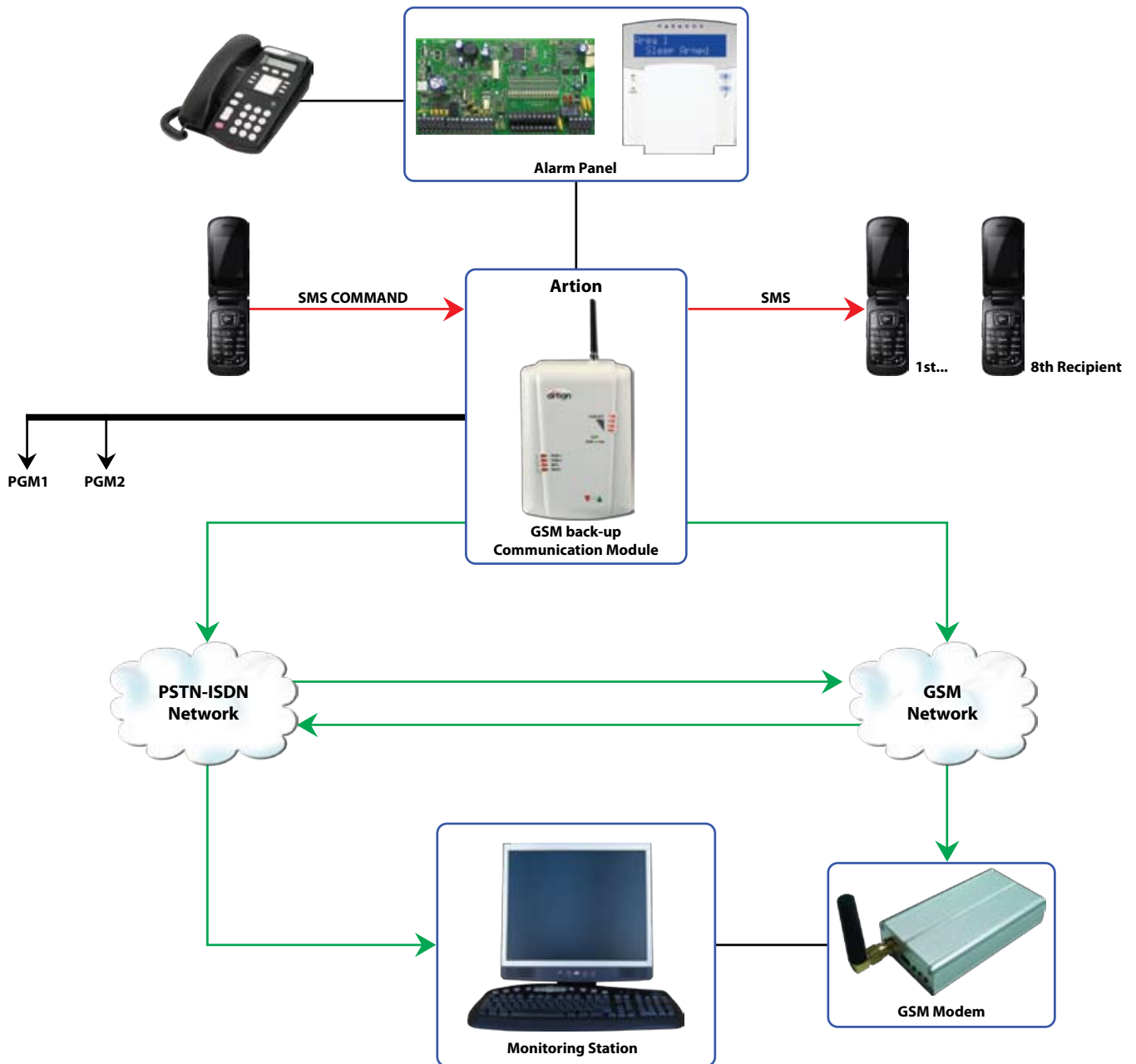
artion

GSM communication module

General Specifications

- Back-up GSM device providing communication between the security system and a Central monitoring Station, in the event that the fixed telephony network line (PSTN) is interrupted.
- It can also be used as the main communication means between the Alarm Control Panel and the Central monitoring Station in areas where a fixed telephony network is not available.
- Supports all the DTMF communication formats (Contact ID, Ademco Express).
- Option to automatically send SMS messages to up to 8 recipients in case of total failure of communication with the Central monitoring Station.
- Option to send to the end user (owner of the system, security officer etc) pre-programmed SMS by triggering inputs TSMS1 & TSMS2.
- Easy to program by SMS commands from a GSM phone or through the specially designed **artion Configuration Software** from a PC. The programming of **artion** from a PC can be achieved either through a GSM modem connected to the PC or directly using an RS232 wired connection (in every case, a Security Code is required).
- When high security applications require constant checking of an "ALIVE" status of the **artion**, we can easily and cost-free achieve this with the help of the **artion Observer** software.
- Accepts SMS commands to trigger up to two different on board PGM outputs (for activating/deactivating house electronic/electric appliances or loads).
- Option to remotely ARM/DISARM the security system by pre-programmed SMS commands, sent from the owner's mobile cellular phone (input TSMS1 and output PGM1 must be used for this feature).
- Operation in European countries 900/1800 MHz as well as North American countries 800/1900 MHz).
- Globally unique IMEI number for each **artion** device, certified by BABT (British Approvals Board for Telecommunications).

Technical Specifications

Supply Voltage	10–14 VDC
Current standby (no GSM phone call)	70 mA
Current max (during GSM phone call)	240 mA
Max Current from "COM+"	200 mA
Max Sink Current (external source)	1.5 A
Max external voltage source	24 VDC
Switching Current	500 uA
Max Voltage at any time	15 VDC
Min time for pulse detection	500 msec
Max PSTN Input Voltage	80 VDC
Line Present detection threshold (line in)	10 VDC +/- 20%
Line Output Voltage (on board SLIC)	37 VDC +/-10%
PSTN Off hook loop current (on board SLIC)	24 mA +/-10%
European Model Power output GSM 900	2 Watts
European Model Power output GSM 1800	1 Watt
American Model Power output GSM 850	2 Watts
American Model Power output GSM 1900	1 Watt
Sim card	3.3 Volts

CE

artion

GSM communication module

Alarm Panel

SMS COMMAND

Artion

SMS

1st...   **8th Recipient**

PGM1   **PGM2**

GSM back-up
Communication Module

PSTN-ISDN
Network

GSM
Network

GSM Modem

Monitoring Station

artion

GSM communication module

ARTION

GSM communication module

Back-up GSM device providing communication between the security system and a Central monitoring Station, in the event that the fixed telephony network line (PSTN) is interrupted. It can also be used as the main communication means between the Alarm Control Panel and the Central monitoring Station in areas where a fixed telephony network is not available. Supports all the DTMF communication formats (Contact ID, Ademco Express). **CE** certified.

Order Code: **PH.EU.GSM.00**

ARTION CONFIGURATION SOFTWARE

Artion programming software

The artion configuration software provides a means to program the Artion GSM unit through an easy, user friendly interface. It connects to the unit either through local RS232 connection, or through a GSM modem and SMS. Requires a PC with MS Windows operating system (Win2000 or later).

- User friendly, easy to use environment
- Local programming of artion units using RS232 connection
- Remote programming using GSM modem and SMSs
- Automatic detection of connection type
- Locally stored "per customer" settings
- Automatic settings retrieval on connection of new unit
- Device internal log retrieval and presentation

ARTION OBSERVER SOFTWARE

Artion monitoring software

Artion observer is a PC software that serves as a watchdog system for installed artion units. The idea behind it is to have the artion units placing a call to a GSM modem that is connected to artion observer in a preset interval. The call is not answered (thus no phone charges) but the called ID is send over the GSM network and captured by the software, declaring the calling device present and active. An alarm mechanism is activated when any unit from the list does not report in this manner in a predefined time.

- Easy, user friendly interface
- Audio and Visual alarm for units that do not report in time
- Database with details about every installed unit
- Easy device manager with active, in trouble and disabled lists
- Requires Microsoft Windows XP or later.

artion

GSM communication module

ARTION SERIAL INTERFACE

Artion PC connectivity module

Allows the installer to program the artion units from user friendly PC software (artion Configuration Software).

Order Code: **PH.U2.GSM.32**

GSM Antennas

FOLDING GSM ANTENNA

90 degrees folding rotatable GSM antenna with SMA connector for **artion** units.

Order Code: **SW.SA.SMA.70**

Antenna's Expansion Cable

1M EXPANSION

1 meter antenna's expansion cable for signal's improvement ▪ Includes antenna base holder.

Order Code: **PH.CB.GSM.1M**

5M EXPANSION

5 meters antenna's expansion cable for signal's improvement ▪ Includes antenna base holder.

Order Code: **PH.CB.GSM.5M**

SIRION

IP communication module

CE

General Specifications

SIRION IP Communication Module provides:

- Support of burglar alarm panels in installations with VoIP fixed telephony services.
- Ability of constant communication between the panel and the Central Monitoring Station (DSL connection required) with no extra charges for the end user (PSTN networks charges are dependent on the call time).
- Provides an upgrade path of existing older systems to modern communication methods (with no need for replacing existing equipment).

SIRION connects easily to the alarm panel (on TIP / RING output). Plug & Play; all basic programming is included in HTML pages inside **SIRION**. Easily connects to other backup systems (e.g. **artion** GSM unit). Compatible with ALL burglar alarm panels regardless of manufacturer or model.
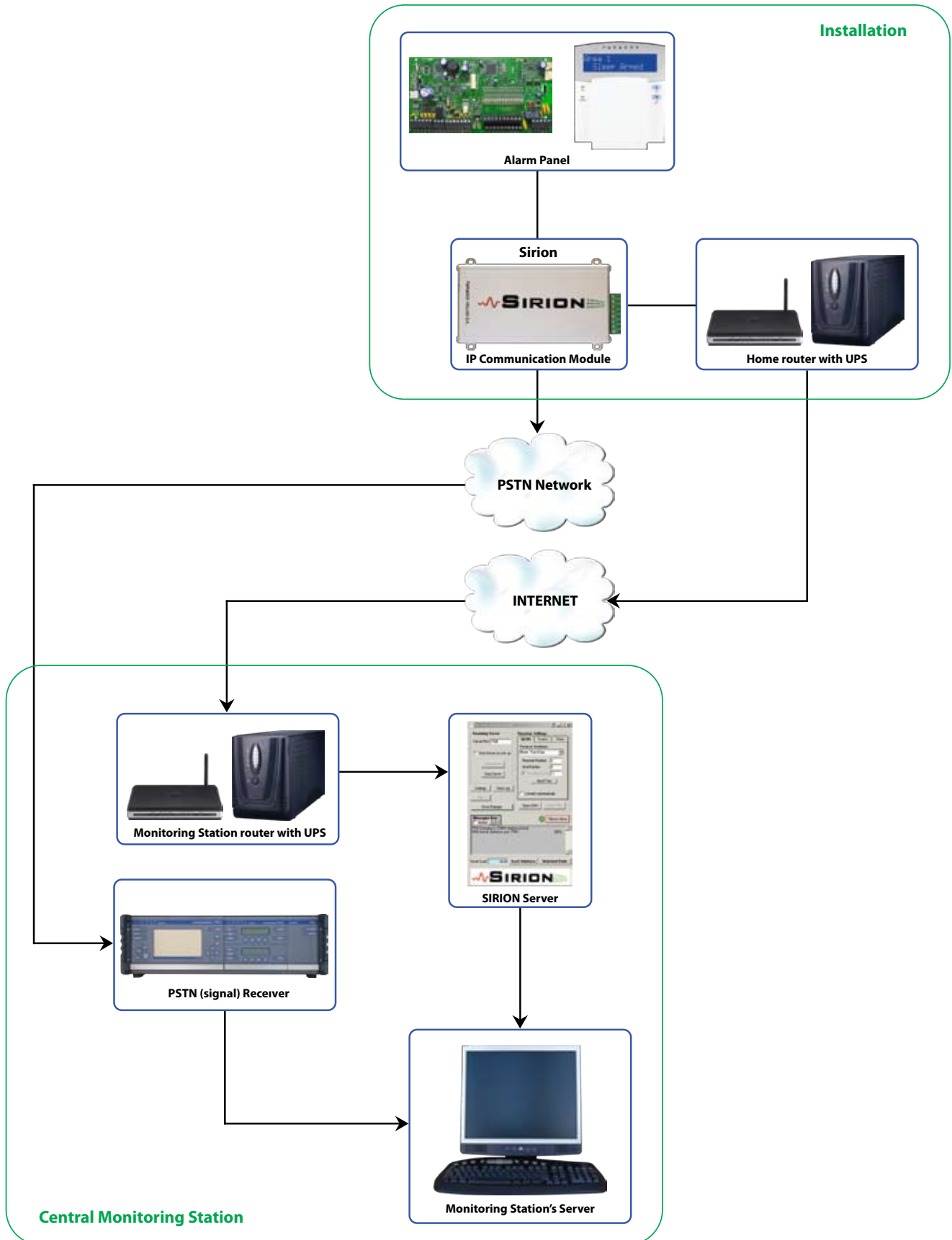
Also includes:

- 4 different operational modes.
- Activate / Deactivate 2 onboard PGMs through web browser (e.g. Internet Explorer).
- LED indicators for the state of PGMs, power and heartbeat (good working status) of the module.
- Very low network bandwidth consumption.
- Use of encryption (AES-128) for secure data communication.

Technical Specifications

Operating Voltage	12 VDC
Current consumption	200mA max
2 PGM (open collector, active low)	
Conventional telephony line (POTS) output to alarm panel	
PSTN input	
8 LED indicators for SIRION's status and condition	
RJ45 Ethernet connector	
Serial connection for programming and expansion features	
Detachable connector block for easy installation	

SIRION

IP communication module

Installation

Alarm Panel

Sirion

IP Communication Module

Home router with UPS

PSTN Network

INTERNET

Monitoring Station router with UPS

SIRION Server

PSTN (signal) Receıver

Monitoring Station's Server

Central Monitoring Station

Sirion

SIRION

IP communication module

Universal module for IP communication and event reporting to a central monitoring station compatible with all burglar alarm panels using Contact ID format.

Order Code: **PH.IP.SIR.02**

PSTN ISOLATOR

PSTN isolator module

It releases the telephone line, isolating the phones to communicate with the central station.

Order Code: **PH.IP.SIR.03**

SIRION SERVER SOFTWARE

Sirion server is a piece of software that bridges TCP/IP communications from sirion with monitoring station's receiving equipment. It receives event data originating either form the alarm panel and/or the sirion unit(s), decodes them and translates them to the format expected by the rest of the monitoring system by emulating a range of popular PSTN event receivers. It also serves as a sirion units presence and connectivity watchdog, reducing from existing software from the overhead of continues and frequent monitoring.

- Server software for reception of alarm and periodic tests events
- Compatible with existing software by simulating widely spread protocols (MCDI Exprecium, Ademco 685, Surgard SLR, Raw data
- Connectivity with monitoring system through physical serial port, emulated serial port, TCP/IP or file system sharing
- High security encryption and authentication protocol
- Unit presence and connectivity watchdog with programmable per unit parameters
- Fully logged operation (incoming, system and user events)

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