

Technical Specifications

Mains Supply	110-130 VAC or 220-240 VAC	
Bus voltage	24VDC typical	
Current at 24Vdc per PSU	1.8 A	
Main board current draw	Standby	112 mA
	Alarm	350 mA
Zones Expansion Module current draw	Standby	60 mA
	Alarm	220 mA
Relays Expansion Module current draw	Standby	40 mA
	Alarm	230 mA
Keypads current draw	Standby	25 mA
	Alarm	110 mA
Auxiliary output	24VDC +/- 10%, 800 mA max, current limited, monitored	
Batteries	2x 12V, 7Ah sealed lead acid gel, self regulated	
Battery replace Resistance	Greater than 3 Ohms $\pm$ 10%	
Zone Inputs Voltage	16.3 VDC $\pm$ 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	
Max Zone Input Ratings	10 Ohm max Wiring resistance, 5uF max capacitance	
Signaling devices outputs	24VDC $\pm$ 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 capacitive load	400 nF	
Bus max length	1200m using typical RS485 cables	
Main board zones	8 zones (configurable as 8 normal zones, 8 intellizones, 2 cross-zone areas)	
Expansion Zones	Up to 8 expansion boards of 8 zones each (total 72 zones with main's panel)	
Expansion Relays	Up to 9 expansion boards of 8 relays each (total 72 relays)	
Expansion Keypads	Up to 8 keypads 2 models of keypads currently exists (long type and stand alone type)	
Communicator	Build-in DTMF communicator supports Ademco C.I.D. format	
Module address allocation	Addressable expansion modules. Addresses are selected with the on-board dip-switch.	
Construction	1.2mm steel sheet powder coated in grey colour	
Environmental	Class A temperature range: -5 to 40 °C (23 to 104 °F) Humidity: 5 to 95% RH, non condensing	
Terminal blocks rating	All terminals rated for 12 to 18 AWG (0.75 to 2.5 sq mm)	
Dimensions (HxWxL [cm])	Main unit: 31 x 45 x 9 (Fighter MP/MPR, KZRPS, KZPS, KRPS, ZRPS, ZPS) Expansion modules (small box): 17 x 32 x 5 (models EKZ, EKR, EXZ, EXR) Stand Alone LCD keypad KSDA: 15,5 x 11 x 2,8	



PARADOX HELLAS S.A. fire alarm & security systems

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fighter

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EVPU (Notified Body: No. 1293)
EN 54-2: 1997/A1: 2006/AC: 1999
EN 54-4: 1997/A2: 2006/AC: 1999
EN 12094-1:2003 (Extinguishing)

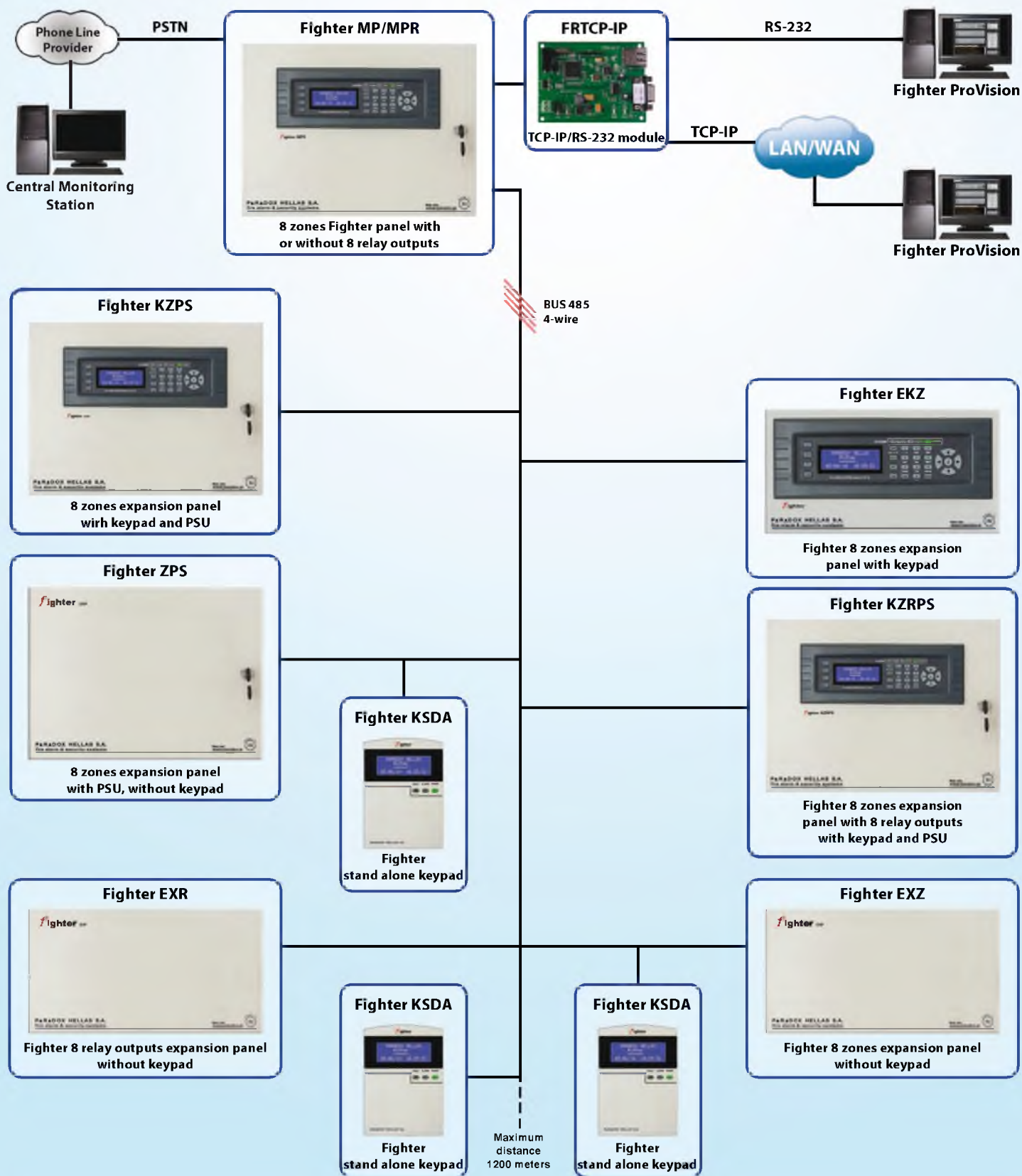


PARADOX HELLAS S.A.
fire alarm & security systems

General Specifications

- 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 **Fighter ProVision** 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 **Fighter Pro Vision** 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.

Installation and Connectivity Layout Example



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.