

# FIGHTER

Advanced Conventional Fire Alarm & Extinguishing Panel using BUS Technology



## 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 ±10%
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
Max Zone Input Ratings:	10 Ohm max Wiring resistance, 5uF max capacitance
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 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.
IP rating:	IP30
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



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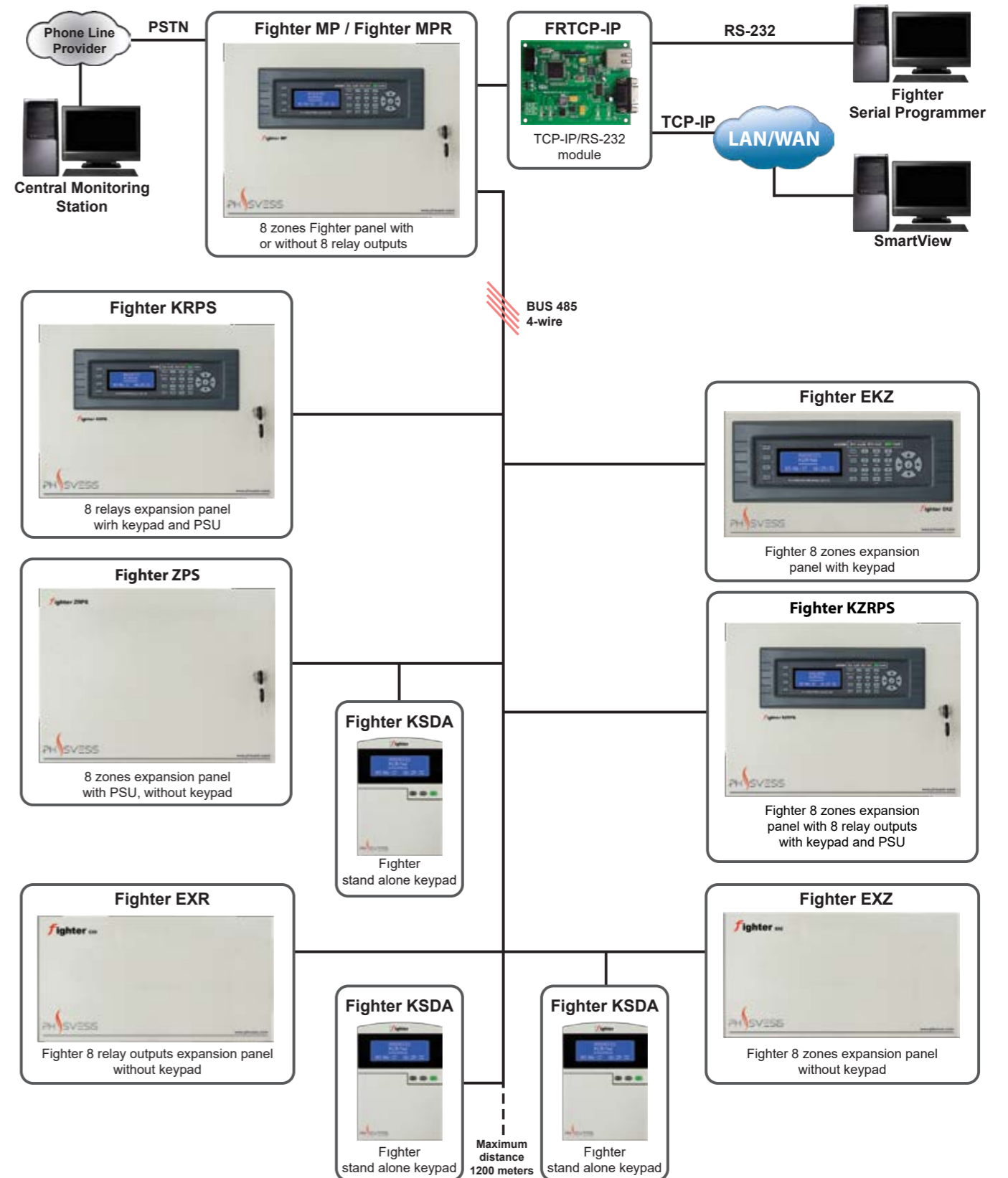


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## General Specifications

- 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/keypad 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 programming the system through the "Fighter Serial Programmer" software and the RS-232/485 module (optional).
- **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).

## 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