

## PROTOCOL CONVERTER

### Protocol Converter MPO Sense Edition

The MPO Protocol Converter operates as an interface between the INFO communication protocol and defined external protocols.

There in one system can be at the most four MPO units connected to one FDP-panel.

The MPO can be connected to the FDP Sense Edition Panels; FDP221, FDP252 and FDP292 and FX-3Net System. It is also backward compatible with Esmi Sense Fire Detection Panels and FX-3Net systems.



Figure 2. Protocol Converter MPO Sense Edition

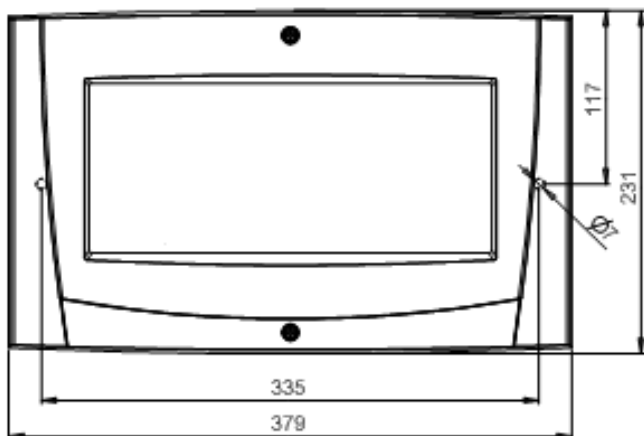


Figure 2. Protocol Converter MPO Sense Edition mechanical installation

Technical data

Table 1. Protocol Converter MPO Sense Edition technical data

<b>Product number</b>	FFS00703853
<b>Dimensions (W x H x D)</b>	379 x 231 x 54 mm
<b>Weight</b>	2,1 kg
<b>Colour</b>	White
<b>Operating Temperature</b>	+5°C ... +40°C
<b>Humidity</b>	max. RH 95%
<b>Operating Voltage</b>	19 ...30 VDC
<b>Standby current</b>	50 mA
<b>Serial communication ports</b>	In: RS485 or RS232 Out: RS485 Isolated: RS232
<b>IP Rating</b>	IP30

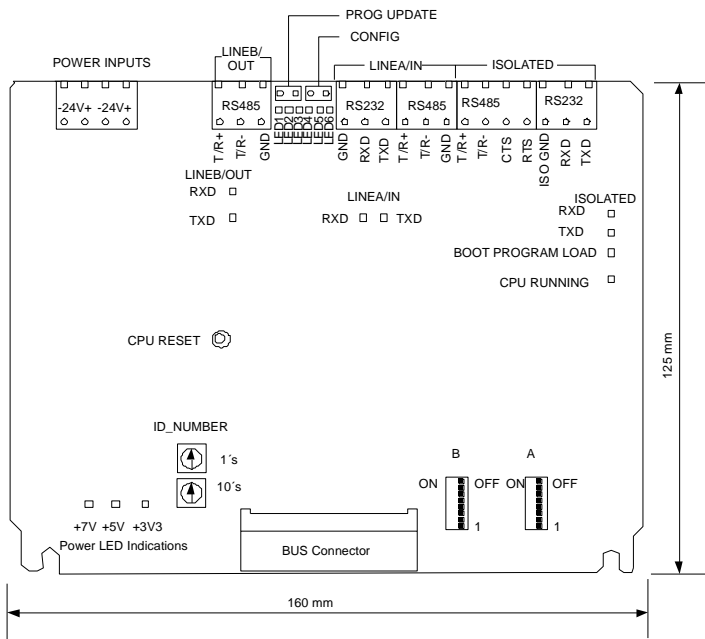
Schneider Electric Fire & Security Oy reserves the right to make modifications.

Product Codes

Table 2. Protocol Converter MPO Sense Edition product codes

Product	Code	Description
<b>MPO</b>	FFS00703853	Panel version, wall mounting
<b>MPOX-OB</b>	FFS00703852	PCB version, card slot mounting

Electrical connections



Settings and LED indications  
A dip switch

Table 3. Protocol Converter MPO Sense Edition settings and LED indications

A1	OFF	Normal
	ON	Always SEK & ADR before text, if switch A3 = OFF
A2	OFF	NOT sending addressfault to paging system
	ON	Sending addressfault to paging system
A3	OFF	Sending text after trigger character
	ON	Sending all text from fire panel
A4	OFF	NOT sending comm.fault message to fire panel when no contact with paging system.
	ON	Sending comm.fault message to fire panel when no contact with paging system.
A5	OFF	Ascom character set 2
	ON	Ascom character set 1 (U910 chars)
A6	OFF	Normal
	ON	Sending paging id = 999
	OFF	Normal
	ON	Sending paging id = 9999

<b>A7</b>		
<b>A8</b>	OFF	Normal
	ON	Sends one paging with id as (Sw A6-A7) and text "TESTALARM"

**Note!** Switch A6-A7 can not be used in ascom paging system together with telephony. In sites with telephony, use group numbers instead.

#### LED indications in normal use

#### B dip switch

<b>B1</b>	OFF	MS Windows codepage 1252
	ON	MS-DOS codepage 850 (Multilingual Latin 1)
<b>B2</b>	OFF	Not used
	ON	Not used
<b>B3</b>	OFF	Used with FX system (mess code set G)
	ON	Used with ESA/MESA system (mess code set F)
<b>B4</b>	OFF	OUT "B" port is used with debug info (printf())
	ON	OUT "B" port is used with INFO-protocol
<b>B5</b>	OFF	Not used
	ON	Not used
<b>B6</b>	OFF	IN "A" port baud rate 1200
	ON	IN "A" port baud rate 9600
<b>B7</b>	OFF	OUT "B" port baud rate 1200
	ON	OUT "B" port baud rate 9600
<b>B8</b>	OFF	To be "OFF"! Only for service purposes.
	ON	To be "OFF"! Only for service purposes.

<b>LED 1</b>	Continuous	Not acknowledge alarm in memory
	Blinking	Blink quickly at configuration state
<b>LED 2</b>	Continuous	Not acknowledge polling in memory
	Blinking	NA
<b>LED 3</b>	Continuous	MPO parameters data in flash
	Blinking	MPO data corrupted
<b>LED 4</b>	Continuous	NA
	Blinking	NA
<b>LED 5</b>	Continuous	No connection to fire panel
	Blinking	NA
<b>LED 6</b>	Continuous	No connection to external system
	Blinking	NA

**Note!** In system fault all LED indications are continuous.

### LED indications in start up condition (10 seconds)

LED	State	Description
LED 1	Continuous	Display HW installed (not used with MPO)
	OFF	Display HW not installed
LED 2	Continuous	Isolated port installed
	OFF	Isolated port not installed
LED 3	Continuous	NA
	OFF	NA
LED 4	Continuous	NA
	OFF	NA
LED 5	Continuous	NA
	OFF	NA
LED 6	Continuous	MCO HW installed (not used with MPO)
	OFF	MCO HW not installed

### Jumpers for service purposes

Jumper	ON	OFF
Prog update	Program update	Normal use
Config	Configuration state	Configuration state

### Software update

The unit is set to the software update state by setting "prog update" jumper ON and restarting the unit (by pressing the CPU reset button). Please set the jumper to OFF again after restart. The software update is done by using the PC loader tool and the incoming serial port with RS232 setting. During the software update of the MPO unit the communication line to the FDP- panel (RS485) must be disconnected.

### Operating modes

#### Hex switch 1's

Table 4. Protocol Converter MPO Sense Edition operating modes

Hex switch 1's	Paging system	Isolated port RS-232			
		baud	parity	Data bits	stop bit
0	ascom-tateco, Bosch, STT-Condigi mm ESPA 4.4.4 format	9600	no	8	1
1	ascom-tateco, Bosch, STT-Condigi mm ESPA 4.4.4 format	9600	no	8	1
2	STT (Svenska trygghetstelefoner)	1200	even	7	2
3	GoGool/T1 protocol for SMS function	9600	even	8	1
4	CareTech 4000	9600	no	8	2
5	CareTech 5000	9600	no	8	2
6	CSDL (Siemens) MPO emulates Siemens fire panel	1200	no	8	1
7	SCADA, extended ESPA protocol on mode 0 & 1 ESPA 4.4.4 format	9600	no	8	1
8	Printer, alarm printout	9600	no	8	1

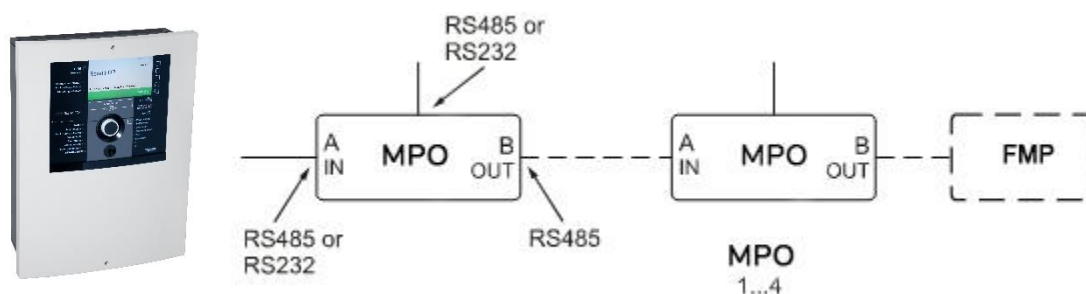
### Team code settings

The team code for the ESPA communication is depending of the language setting for the FDP-panel.

Table 4. Protocol Converter MPO Sense Edition team code settings

Language		Team Code		
		Fire alarm	Pre alarm	Fault alarm
0,8,9	English	889	889	889
1	Finnish	901	902	903
2,6	Swedish	990	990	990
3	Norwegian	9999	9999	9999
4	Danish	9002	9003	9004
11	Belgian	2100	2050	2000

### System principle



#### Note!

The maximum number of MPO units connected to one FDP- panel is 4.

The RS232 setting is used for the software update and configuration.

The maximum number of REP, FMP, DAP, ZLPX, MCO and MPO units connected to one FDP- panel is 16.

**Note!** The maximum RS485 cable length is 1000 m.

The maximum RS232 cable length is 15 m.