



COMMFRONT

CommFront RS422 – SM/SC single-mode fibre converter

Product code 41073 · Fire alarm systems > Control equipment

Industrial-grade serial-to-fibre converter (RS-232/422/485) for extending the RS-422 ring network of EBL512 G3 fire alarm control panels over single-mode fibre up to 40 km.

- Single-mode fibre with SC connectors, fibre link up to 40 km
- RS-232, RS-422 and RS-485, 300 bit/s – 115.2 kbit/s
- Automatic baud rate and data format detection, no DIP switches
- Recommended by Panasonic for fibre links in the EBL512 G3 ring network
- 600 W surge protection and 15 kV ESD protection
- DIN rail or wall mounting, operating temperature –40...+85 °C

Product description

CommFront FBR-Serial-2 (SM/SC) is an industrial-grade converter that transmits asynchronous RS-232, RS-422 or RS-485 serial data over a fibre-optic link. The converters operate in pairs, point to point. This version is intended for single-mode fibre with SC connectors, and the fibre link can be up to 40 km long. The fibre link is immune to electromagnetic interference, surges and ground loops.

In Panasonic's technical description of the EBL ring network, FBR-Serial-2 (SM/SC) is named as the recommended converter when the RS-422 link between EBL512 G3 fire alarm control panels is implemented with single-mode fibre. The converter acts as an extension of network board 5040, so the settings are made in the same way as when multimode fibre is used. A redundant network requires two converters per control panel (one for each 5040 board), and a non-redundant network one.

Technical features

- Data rate 300 bit/s – 115.2 kbit/s, automatic detection without DIP switches or jumpers
- RS-232 and RS-485/422 devices can be cross-connected; up to 128 devices on an RS-485/422 bus
- 600 W surge protection and 15 kV ESD protection
- Rugged ABS plastic housing, operating temperature –40...+85 °C

Installation

The converter is mounted directly on a DIN rail or on a wall/panel without separate brackets. The serial port and the supply voltage (9–30 V DC) are connected to the 10-way terminal block; on the 5040 board side, the cable is terminated with an RJ45 connector. The PWR, TX and RX indicator lights make commissioning and troubleshooting easier.

Technical data

Product code	41073
Manufacturer	CommFront
Product group	Fire alarm systems > Control equipment
Weight	130 g

Dimensions	127 × 73 × 33 mm
Operating temperature	−40...+85 °C
Operating voltage	9–30 V DC
Humidity	0–90% RH, non-condensing
Current consumption	< 100 mA
Material	ABS
Protocols	RS-232, RS-422, RS-485 (asynchronous)
Data rate	300 bit/s – 115.2 kbit/s, automatic detection
Fibre type	Single-mode fibre 8.3/125–10/125 µm
Wavelength	1310 nm
Range	Fibre 40 km; RS-485/422 1.2 km; RS-232 5 m
Connection	2 × SC (fibre); 10-pin terminal block (serial port and power supply)
Number of devices	Max. 128 RS-485/422 devices
Surge protection	600 W; ESD 15 kV
Mounting	DIN rail or wall/panel
Manufacturer's model	FBR-Serial-2 (SM/SC)

Documents

The manufacturer's original documents can be downloaded from the product page (QR code at the top of this sheet).

Technical datasheet: CommFront RS422 – SM/SC single-mode fibre converter

Technical datasheet (series): EBL Ring Network

Request a quote or ask for more information

Sales +358 40 668 7641 · myynti@pap.fi · Mon–Fri 8 am – 4 pm (Finnish time)

Up-to-date information and documents: pap.fi/en/tuote/commfront-rs422-sm-sc-yksimuoto-kuitumuunnin/