

PRA-SFPSX Fiber transceiver, multimode

PRAESENSA



- ▶ Industry standard small form-factor pluggable (SFP)
- ▶ Immovable lock design
- ▶ Hot pluggable
- ▶ Duplex LC connector
- ▶ Full duplex speed support

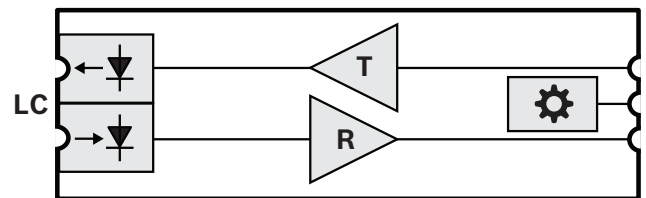
The PRA-SFPSX is a compact fiber transceiver for multi-mode fibers, covering distances up to 550 m. This fiber transceiver is an OEM transceiver, made for Bosch by Advantech for use in Bosch Public Address and Voice Alarm systems. It locks into the SFP socket of the PRAESENSA multifunction power supply and Ethernet switch. It is compliant with Fast Ethernet and IEEE 802.3z Gigabit Ethernet standards for maximum performance, reliability and flexibility. The PRA-SFPSX is certified for EN 54-16 in combination with PRAESENSA systems.


Functions

Features

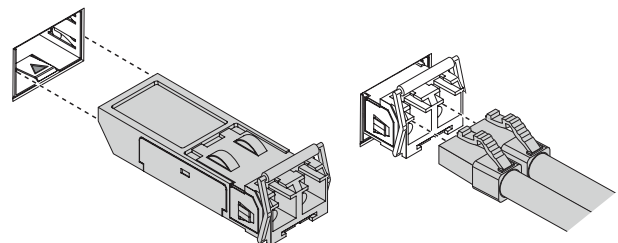
- Features a duplex LC connector; one connection for transmit and the other for receive.
- Fits and locks into the SFP socket of the PRA-MPSx and PRA-ES8P2S.
- SFP is the popular industry format jointly developed and supported by many network component vendors, providing a connection to different types of optical fiber.
- The PRA-SFPSX supports multi-mode fiber for distances up to 550 m.
- Wide temperature range for maximum reliability.
- Certified for EN 54-16 in combination with PRAESENSA systems.

Connection and functional diagram



LC	Dual lockable transmitter and receiver connector	T	Transmitter
R	Receiver		Controller

Physical connections



Architects' and engineers' specifications

The SX fiber transceiver shall be a wide temperature Small Form-factor Pluggable (SFP) for use with multi-mode fiber and IR light with a wavelength of 850 nm, to cover glass fiber link lengths of up to 550 m. It shall be certified for EN 54-16 in combination with Bosch PRAESENSA systems for public address and voice alarm purposes. The transceiver shall be marked for UL and CE and be compliant with the RoHS directive. Warranty shall be three years minimum. The SX-transceiver shall be a Bosch PRA-SFPSX.

Certifications and approvals

Emergency standard certifications

Europe	EN 54-16
International	ISO 7240-16
Maritime applications	DNV GL Type Approval

Emergency standard compliance

Europe	EN 50849
UK	BS 5839-8

Regulatory areas

Safety	Laser Class I IEC 60825-1
Environment	EN 50581

Conformity declarations

Europe	CE/CPR
USA/Canada	FCC/c-UL

Parts included

Quantity	Component
1	SFP fiber transceiver

Technical specifications

Quick overview

Operating voltage (VDC)	3,3 VDC
Power consumption (W)	0,50 W maximum
Transmitter power	-9,5 dBm minimum

Receiver sensitivity	-18 dBm maximum
Connector type	Dual LC
Wavelength (nm)	850 nm
Optical fiber	Multi-mode
Core size	50 µm; 62,5 µm
Cable length (m) (50 µm)	550 m maximum
Cable length (m) (62,5 µm)	220 m maximum
Additional options	Hot pluggable; Lockable
Ethernet type	1000BASE-SX
Compatibility	MSA standard
Wi-Fi standard	IEEE 802.3z
Operating temperature (°C)	-40 - 85 °C
Operating relative humidity, non-condensing (%)	5 - 95%
Storage temperature (°C)	-40 - 85 °C
Dimension (H x W x D) (mm)	13,4 x 8,5 x 56,5 mm
Weight (g)	75 g

Electrical

Interface

Supply voltage	3.3 V
Power consumption	0.5 W
Speed	IEEE 802.3z 1000BASE-SX
Transmitter power	-4 to -9.5 dBm
Receiver sensitivity	< -18 dBm
Connection	Hot swappable, Locking

Optical

Interface

Connector type	Dual LC
Wave length	850 nm
Fiber length	
50 µm core	< 550 m (1.804 ft)
62.5 µm core	< 220 m (722 ft)

Interface	
Optical fiber	Multi-mode
Core size	50 μm / 62.5 μm

Environmental

Climatic conditions	
Temperature	
Operating	-40 to +85 °C (-40 to 185 °F)
Storage and transport	-40 to +85 °C (-40 to 185 °F)
Humidity (non condensing)	5 to 95 %

Mechanical

Enclosure	
Dimensions (HxWxD)	13.4 x 8.5 x 56.5 mm (0.53 x 0.33 x 2.2 in)
Weight	75 g (0.17 lbs)

Ordering information

PRA-SFPSX Fiber transceiver, multimode

1000BASE-SX SFP module for multi-mode fiber (550 m)

Order number **PRA-SFPSX | F.01U.352.104**

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