

# PRA-SFPLX Fiber transceiver, single mode

## PRAESENSA



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

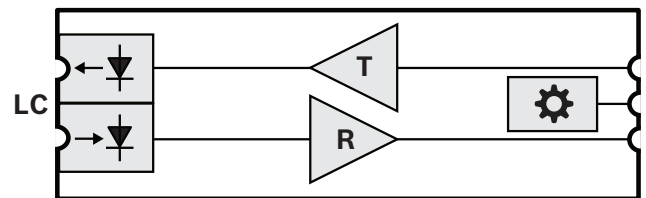
The PRA-SFPLX is a compact fiber transceiver for single mode fibers, covering distances up to 10 km. This fiber transceiver is an OEM transceiver, made for Bosch by Advantech for use in Bosch Public Address and Voice Alarm systems. It locks into the SFP socket of the PRAESENSA multifunction power supply and Ethernet switch. It is compliant with Fast Ethernet and IEEE 802.3z Gigabit Ethernet standards for maximum performance, reliability and flexibility. The PRA-SFPLX is certified for EN 54-16 in combination with PRAESENSA systems.


### Functions

#### Features

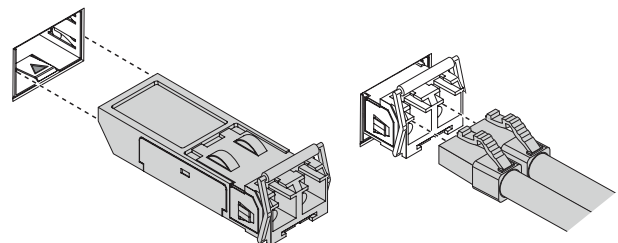
- Features a duplex LC connector; one connection for transmit and the other for receive.
- Fits and locks into the SFP socket of the PRA-MPSx and PRA-ES8P2S.
- SFP is the popular industry format jointly developed and supported by many network component vendors, providing a connection to different types of optical fiber.
- The PRA-SFPLX supports single-mode fiber for distances up to 10 km.
- Wide temperature range for maximum reliability.
- Certified for EN 54-16 in combination with PRAESENSA systems.

### Connection and functional diagram



<b>LC</b>	Dual lockable transmitter and receiver connector	<b>T</b>	Transmitter
<b>R</b>	Receiver		Controller

### Physical connections



### Architects' and engineers' specifications

The LX fiber transceiver shall be a wide temperature Small Form-factor Pluggable (SFP) for use with single-mode fiber and IR light with a wavelength of 1310 nm, to cover glass fiber link lengths of up to 10 km. 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 LX-transceiver shall be a Bosch PRA-SFPLX.

### 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)	0,70 W maximum
Transmitter power	-9,5 dBm minimum

Receiver sensitivity	-20dBm maximum
Connector type	Dual LC
Wavelength (nm)	1310 nm
Optical fiber	Single mode
Core size	8,6 µm - 9,5 µm
Cable length (m)	10000 m maximum
Additional options	Hot pluggable; Lockable
Ethernet type	1000BASE-LX
Compability	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	0.7 W
Speed	IEEE 802.3z 1000BASE-LX
Transmitter power	-3 to -9.5 dBm
Receiver sensitivity	< -20 dBm
Connection	Hot swappable, Locking

### Optical

Interface	
Connector type	Dual LC
Wave length	1310 nm
Fiber length	< 10 km (32,821 ft)
Optical fiber	Single-mode
Core size	ITU-T G.652 SMF

## 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-SFPLX Fiber transceiver, single mode**  
1000BASE-LX SFP module for single mode fiber (10 km).  
Order number **PRA-SFPLX | F.01U.352.103**

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