10 Gbit/s SFP Transceivers

Multi- & Singlemode Fibre Optic Transceivers

- **High bandwidth with 10 Gbit/s**
  - Utilize high bandwidth fibre connectivity
  - Suitable for use with the RedFox 7500 series
  - Available in 0.4, 10, 40 and 80 km variants
- **Short and long range fibre optic communication**
  - Cost-effective installations over 50/125 or 62,5/125 µm fibre cables for multimode installations
  - Short- and long-range installations on 9/125 µm fibre cables for singlemode installations
  - Real time monitoring of the SFP using DDM, integrated with WeOS
- **Robust and reliable**
  - Thoroughly tested to high standards
  - Wide operating temperature range, -40 to +85°C
  - Functionality validated for mission critical applications
- **Full WeOS support**
  - Transceivers and WeOS developed in symbiosis
  - All functionality available
  - Technical support and know-how

EN 50121-4 Railway Trackside

EN 60825-1 Safety of Laser Products

EN 60825-2 Safety of Laser Products

lead-free

RoHS 2002/95/EC

10 Gbit/s SFPs are suitable for short- and long-range applications requiring high bandwidth. The available models can use both multimode and singlemode fibre cables. Using the DDM functionality, which is fully integrated into WeOS, it is possible to monitor parameters such as temperature, TX/RX power and voltage, ensuring correct operation.

As industrial networks transmit more data, 10 Gbit/s fibre links can be used to link data-intensive sites across long distances. Setting up high bandwidth network backbones over long distances is now possible. The SFPs are tested and optimized for compatibility with the RedFox 7500 series platform and are offered in multiple different variants, with indicative ranges from 400 m to 80 km.

To meet the high demands of mission-critical applications, all SFP transceivers undergo thorough environmental testing to ensure they can perform under the harshest conditions. Additionally, their functionality is pushed to the limit to guarantee availability and reliability.

WeOS, the Westermo operating system, is designed to meet the toughest requirements, and full support for all offered transceivers is a crucial aspect. All features of WeOS are extensively tested and verified to be fully supported on any WeOS device with a Westermo transceiver installed.

Specifications - 10 Gbit/s SFP Transceivers

Housing	
Dimensions device (W x H x D)	14 x 12 x 57 mm (0.55 x 0.47 x 2.24 inches)
Dimensions protrosion (W x H x D)	14 x 13 x 9 mm (0.55 x 0.51 x 0.35 inches)

Environmental	
Operating temperature	-40 to +85°C (-40 to +185°F)
Storage and transport temperatures[a.]	-40 to +85°C (-40 to +185°F)
Humidity (operating)	5-95% relative humidity

[a.] Case operating temperature

Interface				
Model	**10GMLC.4**	**10GSLC10**	**10GSLC40**	**10GSLC80**
Connector type	Duplex LC			
Transceiver type	Multimode	Singlemode		
Clasp colour	Black	Blue		
Transmission speed	10 Gbit/s			
Transmit wavelength	850 nm	1310 nm	1550 nm	1550 nm
Transmit power (max)	-1 dBm	0.5 dBm	4 dBm	4 dBm
Transmit power (min)	-7.1 dBm	-6 dBm	-4.7 dBm	0 dBm
Receive wavelength	850 nm	1310 nm	1550 nm	1550 nm
Receiver power/sensitivity (min)	-9.9 dBm	-14.4 dBm	-15.8 dBm	-23 dBm
Receiver power (max)	-1 dBm	0.5 dBm	-1 dBm	-7 dBm
Power budget	2.8 dBm	8.4 dBm	11.1 dBm	23 dBm
Indicative range	OM1: 33 m OM2: 82 m OM3: 300 m OM4: 400 m	10 km	40 km	80 km

Diagnostics (DDM)	
Parametres	**Accuracy**
Temperature	±3°C
Voltage	± 3 VDC
Bias current	± 10%
TX power	± 3 dBm
RX power	± 3 dBm

Approvals	
EMC	EN 50121-4/IEC 62236-4, Railway signalling and telecommunications apparatus
Safety	EN/IEC 60825-1, Laser products - part 1: Equipment classification and requirement EN/IEC 60825-2, Laser products - part 2: Safety of optical fibre communication systems EN/IEC/UL 62368-1, Audio/video, information and communication technology equipment

Warranty	
Validity	5 years

Ordering information	
Art. no.	**Description**
1100-0808	10GMLC.4
1100-0810	10SLC10
1100-0140	10SLC40
1100-0818	10SLC80