

Singlemode SFP Transceivers 10 Gbit Fibre Optic Transceivers



- **Short and long range fibre optic communication**
 - Short- and longrange installations on 9/125 μm fibre cables
 - Real time monitoring of the SFP using DDM, integrated with WeOS
- **High bandwidth with 10 Gbit**
 - Utilize high bandwidth fibre connectivity
 - Suitable for use with the RedFox-7500 series
 - Available in 10, 40 and 80 km variants
- **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 knowhow



10 Gbit Singlemode SFPs are suitable for short- and longrange applications requiring high bandwidth. The available models can use singlemode fibre cables with a core of 9 μm . 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 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 with the RedFox-7500 series platform and are offered in multiple different variants, with indicative ranges from 10 to 80 km.

All SFP transceivers are thoroughly tested in accordance with high demands. Each model has gone through rigorous environmental testing, to ensure that it can perform according to specification even in the harshest environments. Furthermore, functionality is validated and pushed to the limit, securing availability and reliability in mission critical applications.

WeOS, the Westermo operating system, is developed according to firm requirements, and support for the full range of transceivers offered is an important part. All features of WeOS are developed and verified to be fully supported on all WeOS devices with any Westermo transceiver installed.

Specifications - Singlemode SFP Transceivers

Housing	
Dimensions device (W x H x D)	14 x 13 x 57 mm (0.55 x 0.51 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	-40 to +85°C (-40 to +185°F)
Humidity (operating)	5-95% relative humidity

Interface			
Connector type	Duplex LC		
Transceiver type	Singlemode		
Model	10GSLC10	10GSLC40	10GSLC80
Clasp colour	Blue		
Transmission speed	10 Gbit/s		
Transmit wavelength	1310 nm	1550 nm	1550 nm
Transmit power (max)	+0.5 dBm	+4 dBm	+4 dBm
Transmit power (min)	-6/-8.2 dBm	-4.7 dBm	-0 dBm
Receive wavelength	1310 nm	1550 nm	1550 nm
Receiver power/ sensitivity (min)	-14.4 dBm	-15.8 dBm	-23 dBm
Receiver power (max)	+0.5 dBm	-1 dBm	-7 dBm
Power budget	8.4/6.2 dB	11.1 dB	23 dB
Min attenuation	0 dB	5 dB	11 dB
Indicative range	10 km	40 km	80 km

Diagnostics (DDM)	
Parametres	Accuracy
Temperature	±3°C
Voltage	± 3 % or 0.1 VDC
Bias current	± 10%
TX power	± 3 dB
RX power	± 3 dB

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
1100-0810	10GSLC10
1100-0814	10GSLC40
1100-0818	10GSLC80