

Singlemode SFP Transceivers

1 Gbit Fibre Optic Transceivers



- · Short and Long range fibre optic communication
 - Short and long range installations on $9/125~\mu m$ fibre cables
 - Real time monitoring of the SFP using DDM, integrated with WeOS
- · High bandwidth with 1 Gbit
 - · Utilize high bandwidth fibre connectivity
 - Suitable for use with the Lynx, RedFox, MCW/SDW platforms
 - Available in 10, 30, 50, 80 and 110 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 know-how







EN 60825-1Safety of Laser Products

EN 61000-6-2 Industrial Immunity







As industrial networks transmit more data, 1Gbit 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 WeOS platform and are offered in multiple different variants, with indicative ranges from 10 to 110 km.

All multimode 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.

Ordering information	
Art. no.	Description
1100-0525	GSLC30-DDM
1100-05 4 1	GSLC10-DDM
1100-0542	GSLC50-DDM
1100-0542	GSLC80-DDM
1100-0571	GSLC110-DDM

Specifications - Singlemode SFP Transceivers

Housing		
Dimensions device $(W \times H \times D)$	$14 \times 13 \times 57 \text{ mm } (0.55 \times 0.51 \times 2.24 \text{ inches})$	
Dimensions protrosion ($W \times H \times D$)	$14 \times 13 \times 9 \text{ mm } (0.55 \times 0.51 \times 0.35 \text{ inches})$	

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	GSLC10-DDM	GSLC30-DDM	GSLC50-DDM	GSLC80-DDM	GSLC110-DDM
Clasp colour	Blue				
Transmission speed	1 Gbit/s				
Transmit wavelength	1310 Nm	1310 Nm	1550 Nm	1550 Nm	1550 Nm
Transmit power (max)	-3 dBm	+3 dBm	+1 dBm	+5 dBm	+5 dBm
Transmit power (min)	-9 dBm	-4 dBm	-4 dBm	0 dBm	0 dBm
Receive wavelength	1310 Nm	1310 Nm	1550 Nm	1550 Nm	1550 Nm
Receiver power/ sensitivity (min)	-21 dBm	-24 dBm	-24 dBm	-24 dBm	-30 dBm
Receiver power (max)	-3 dBm	-1 dBm	-1 dBm	-1 dBm	-9 dBm
Power budget	12 dB	20 dB	20 dB	24 dB	30 dB
Min attenuation	0 dB	4 dB	2 dB	6 dB	14 dB
Indicative range	10 km	30 km	50 km	80 km	110 km

Diagnostics (DDM)	
Parametre	Accuracy
Temperature	±3°C
Voltage	± 3 % or 0.1 VDC
Bias current	± 10% or 5 mA
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