

100 Mbit/s & 1 Gbit/s Multimode SFP Transceivers

100 Mbit/s & 1 Gbit/s Multimode Fibre Optic Transceivers

- **Effective short range communication**
 - Cost-effective installations over 50/125 or 62,5/125 µm fibre cables
 - Real time monitoring of the SFP using DDM, integrated with WeOS
 - Available in 100 Mbit/s & 1 Gbit/s Ethernet and variants with BiDi-functionality
- **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



The Westermo range of Fast Ethernet and Gbit/s multimode SFPs offers cost-effective solutions for fibre installations in mission-critical OT networks. These models can use fibres with a core of either 50 or 62.5 µm, depending on the required range and fibre availability. With fully integrated DDM functionality in WeOS, it's possible to monitor parameters such as temperature, TX/RX power, and voltage, ensuring optimal performance.

The range includes options for 100 Mbit/s and 1 Gbit/s, ensuring compatibility with most of Westermo switches, routers, and modems. The Fast Ethernet and 1 Gbit/s transceivers are compatible with the Lynx, RedFox, and ODW/MCW/SDW/LRW platforms with multiple options varying from 850 nm to 1550 nm.

All Westermo's 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 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 - 100 Mbit/s & 1 Gbit/s Multimode 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^a	-40 to +85°C (-40 to +185°F)
Humidity (operating)	5-95% relative humidity

^aCase operating temperature

Interface					
Model	MLC2-DDM	MLC2-BiDi-A-DDM	MLC2-BiDi-B-DDM	GMLC550-DDM	GMLC2-DDM
Connector type	Duplex LC	Simplex LC		Duplex LC	
Transceiver type	Multimode				
Clasp colour	Black	Blue	Green	Black	
Transmission speed	100 Mbit/s			1 Gbit/s	
Transmit wavelength	1310 nm	1310 nm	1550 nm	850 nm	1310 nm
Transmit power (max)	-14 dBm	0 dBm	0 dBm	-4 dBm	-1 dBm
Transmit power (min)	-20 dBm	-10 dBm	-10 dBm	-9.5 dBm	-9 dBm
Receive wavelength	1310 nm	1550 nm	1310 nm	850 nm	1310 nm
Receiver power/sensitivity (min)	-31 dBm	-28 dBm	-28 dBm	-18 dBm	-19 dBm
Receiver power (max)	-8 dBm	0 dBm	0 dBm	0 dBm	-1 dBm
Power budget	11 dBm	18 dBm	18 dBm	8.5 dBm	10 dBm
Indicative range	2 km	2 km	2 km	62.5/125 µm: 275 m 50/125 µm: 550 m	62.5/125 µm: 2 km 50/125 µm: 1 km

Diagnostics (DDM)	
Parametres	Accuracy
Temperature	±3°C
Voltage	± 0.1 VDC
Bias current	± 10% or 5 mA
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
1100-0531	MLC2-DDM
1100-0552	MLC2-BiDi-A-DDM
1100-0553	MLC2-BiDi-B-DDM
1100-0544	GMLC550-DDM
1100-0547	GMLC2-DDM