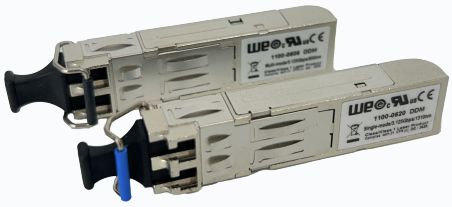
SFP with PHY

SGMII Transceivers with PHY

- **Designed for Lynx-3000 Series**
  - Available in both single-mode and multimode configurations
  - Real-time SFP monitoring via Digital Diagnostics Monitoring (DDM), fully integrated with WeOS
  - Offered in 2 km, 15 km, 40 km, and 80 km distance variants
- **Robust and reliable**
  - Rigorously tested to meet high industrial quality standards
  - Operates in extreme environments with a temperature range of -40°C to +85°C
  - Proven performance in mission-critical and demanding applications
- **Full WeOS support**
  - Co-developed with WeOS for seamless integration and optimal performance
  - Fully compatible with all WeOS features and devices
  - Supported by expert technical assistance and deep application expertise



CE EN 50121-4 Railway Trackside · EN 60825-1 Safety of Laser Products · EN 60825-2 Safety of Laser Products · Pb lead-free · RoHS 2002/95/EC

The transceivers designed for the Lynx-3000 series deliver high-performance connectivity with full integration into WeOS-based networks. Offering both single-mode and multimode options, they support a wide range of deployment scenarios with variants available for 2 km, 15 km, 40 km, and 80 km transmission distances. These transceivers feature real-time monitoring via Digital Diagnostics Monitoring (DDM), providing instant access to key operational parameters such as temperature, voltage, and optical power—fully integrated into the WeOS interface for seamless diagnostics and maintenance.

Built for robustness and reliability, each unit is thoroughly tested to meet stringent quality standards and is validated for use in mission-critical applications. With a wide operating temperature range of -40°C to +85°C, they are ideal for harsh industrial environments and outdoor installations.

Developed in perfect synergy with WeOS, these transceivers ensure full feature compatibility across all WeOS-enabled devices. This tight integration guarantees consistent performance and simplifies network management. Backed by expert technical support and deep application know-how, they provide a dependable solution for demanding networking environments.

Specifications - SGMII Transceivers with PHY

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

[a.] Case operating temperature

Interface				
Model	**MLC2-PHY-DDM**	**SLC15-PHY-DDM**	**SLC40-PHY-DDM**	**SLC80-PHY-DDM**
Connector type	Duplex LC			
Transceiver type	Multimode	Singlemode		
Transmission speed	100 Mbit/s			
Transmit wavelength	1310 nm			1550 nm
Transmit power (max)	-14 dBm	-8 dBm	0 dBm	-3 dBm
Transmit power (min)	-23.5 dBm	-15 dBm	-5 dBm	-10 dBm
Receive wavelength	1310 nm			1550 nm
Receiver power/sensitivity (min)	-31 dBm		-34 dBm	
Receiver power (max)	0 dBm			
Power budget	7.5 dBm	16 dBm	29 dBm	24 dBm
Min attentuation	-14 dBm	-8 dBm	0 dBm	-3 dBm
Indicative range	2 km	15 km	40 km	80 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**
1100-0902	MLC2-PHY-DDM
1100-0915	SLC15-PHY-DDM
1100-0940	SLC40-PHY-DDM
1100-0980	SLC80-PHY-DDM