Singlemode CWDM SFP Transceivers

Fast Ethernet Fibre Optic Transceivers with Coarse Wave Dimension Multiplexing

- **Increased network capacity**
  - Send up to 8 optical signals on a single fibre core with CWDM SFPs
  - Each signal operates at a specific wavelength allowing simultaneous transmission
  - Real time monitoring of the SFP using DDM, integrated with WeOS
- **Robust and reliable**
  - Thoroughly tested to high standards
  - Wide operating temperature range, -30 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

Westermo's range of 100 Mbit singlemode SFPs with CWDM are suitable for long-range applications. A CWDM transceiver enables increased network capacity by sending up to 8 optical signals on a single fibre core where each signal operates at a specific wavelength, allowing simultaneous transmission. 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, 100 Mbit/s fibre links can be used to link sites across long distances. Setting up network backbones over long distances is now possible and CWDM transceivers can increase the capacity by using different wavelengths for data communication over the same fibre link. The SFPs are tested and optimized for compatibility with the WeOS platform and are offered in multiple different variants with an indicative range of 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 - Singlemode CWDM 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	-30 to +85°C (-22 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	**SLC80-CWDM-1470**	**SLC80-CWDM-1490**	**SLC80-CWDM-1510**	**SLC80-CWDM-1530**	**SLC80-CWDM-1550**	**SLC80-CWDM-1570**	**SLC80-CWDM-1590**	**SLC80-CWDM-1610**
Connector type	Duplex LC							
Transceiver type	Singlemode							
Clasp colour	Green							
Transmission speed	100 Mbit/s							
Transmit wavelength	1470 nm	1490 nm	1510 nm	1530 nm	1550 nm	1570 nm	1590 nm	1610 nm
Transmit power (max)	0 dBm							
Transmit power (min)	-6 dBm							
Receive wavelength	Min: 1260 nm Max: 1600 nm							
Receiver power/ sensitivity (min)	-32 dBm							
Receiver power (max)	0 dBm							
Power budget	26 dBm							
Indicative range	80 km							

Diagnostics (DDM)	
Parametres	**Accuracy**
Temperature	±3°C
Voltage	± 0.1 VDC
Bias current	± 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**
1100-1500	SLC80-CWDM-1470
1100-1501	SLC80-CWDM-1490
1100-1502	SLC80-CWDM-1510
1100-1503	SLC80-CWDM-1530
1100-1504	SLC80-CWDM-1550
1100-1505	SLC80-CWDM-1570
1100-1506	SLC80-CWDM-1590
1100-1507	SLC80-CWDM-1610