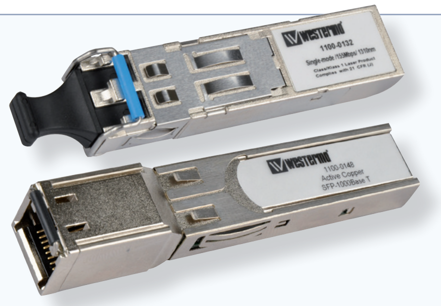
Gigabit Transceivers

RedFox, Lynx series and ODW-700 series

- Wide choice to provide optimal solution
  - 1000 Mbit/s versions
  - Standard LC connector type
- Verified to meet Westermo environmental specifications
  - Temperature range –40 to +85°C (–40 to +185°F)
  - Coded to guarantee quality
- Different transcivers for many solutions
  - Multi mode fibre up to 2 km (1.2 mi)
  - Single mode fibre up to 120 km (74.5 mi)
  - Bi-directional fibre transciversup to 120 km (74.5 mi)
  - Gbit copper transceivers



LISTED Component Recognition

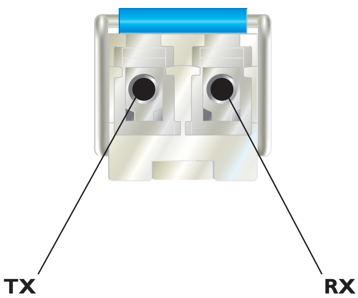
EN 60825-1
Eye Safety: Class 1 laser product complies

The Westermo range of Small Form-factor Pluggable (SFP) transceivers covers versions suitable for Gigabit applications. LC connectors are used as standard due their small size.

These transceivers have been verified to meet the Westermo environmental specification and can operate in a range of different Westermo products in harsh industrial applications. The transceivers are coded to allow confirmation that certified versions have been installed.

Versions are available with different wave length including 1550 nm for extreme distances upto 120 km (74.5 mi) and 1310 nm version for both single (9/125) and multimode cables (50/125 and 62.5/125). In applications where only a single fibre core is available a Bi-Directional (BiDi) transceiver can be used.

Interfaces



How far can we get with transceivers?

The different transceiver options are marked with an indicative range as a part of the transceiver description. This is the specified distance when the transceiver is used in Gbit applications.

For the ODW series the maximum distance (km) can be calculated with the formula:

Power budget (dB) – signal loss (dB) / fibre attenuation (db) per km.

Signal loss = splice attenuation x number of splices + connector attenuation x number of connectors + safety margin. Splice, connector and fibre attenuation can be found on article data sheets.

By calculating the maximum distance based on power budget a LC2 multimode transceiver can operate up to 5 km (3.1 mi).

Specifications Optical Transceivers

Dimensional / Temperature	
Temperature specification	–40 to +85°C (–40 to +185 °F) 0 to +70 °C (32 to +158 °F) GTX100, copper

Article number	Transceiver	Type	Link speed (Mbit/s)	Indicative range (km)	Power budget (dB)	TX/RX wavelength (nm)	WeOS	ODW series	All Gig MCW/ SDW	EX appr.
SFP, 1 Gbit										
1100-0144	GMLC550-SX**	Multimode	1000	0.55	8.5	850/850	⁘*	–	⁘	⁘
1100-0147	GMLC2-SX+***	Multimode	1000	2	10	1310/1310	⁘*	–	⁘	⁘
1100-0141	GSLC10-LX	Singlemode	1000	10	10.5	1310/1310	⁘*	–	⁘	⁘
1100-0125	GSLC30-LXH	Singlemode	1000	30	20	1310/1310	⁘*	–	⁘	–
1100-0142	GSLC50-XD	Singlemode	1000	50	20	1550/1550	⁘*	–	⁘	⁘
1100-0143	GSLCLC80-ZX	Singlemode	1000	80	24	1550/1550	⁘*	–	⁘	⁘
1100-0171	GSLC110-EZX	Singlemode	1000	120	30	1550/1550	⁘*	–	⁘	⁘
1100-0156	GSLC20-BiDi-A	Singlemode	1000	20	15	1310/1490	⁘*	–	⁘	⁘
1100-0157	GSLC20-BiDi-B	Singlemode	1000	20	15	1490/1310	⁘*	–	⁘	⁘
Copper, 1 Gbit										
1100-0148	GTX100	Copper	1000	0.1	–	–	⁘*	–	⁘	⁘
DDM SFP, 1 Gbit										
1100-0547	GMLC2-DDM***	Multimode	1000	2	10	1310/1310	⁘*	–	⁘	⁘
1100-0525	GSLC30-DDM	Singlemode	1000	30	20	1310/1310	⁘*	–	⁘	–
1100-0541	GSLC10-DDM	Singlemode	1000	10	12	1310/1310	⁘*	–	⁘	–
1100-0542	GSLC50-DDM	Singlemode	1000	50	20	1550/1550	⁘*	–	⁘	⁘
1100-0543	GSLC80-DDM	Singlemode	1000	80	24	1550/1550	⁘*	–	⁘	–
1100-0558	GSLC20-BiDi-A-DDM	Singlemode	1000	20	15	1310/1550	⁘*	–	⁘	–
1100-0559	GSLC20-BiDi-B-DDM	Singlemode	1000	20	15	1550/1310	⁘*	–	⁘	–
1100-0566	GSLC60-BiDi-A-DDM	Singlemode	1000	60	25	1310/1550	⁘*	–	⁘	–
1100-0567	GSLC40-BiDi-A-DDM	Singlemode	1000	40	20	1310/1490	⁘*	–	⁘	–
1100-0568	GSLC40-BiDi-B-DDM	Singlemode	1000	40	20	1490/1310	⁘*	–	⁘	–
1100-0569	GSLC60-BiDi-B-DDM	Singlemode	1000	60	25	1550/1310	⁘*	–	⁘	–
1100-0526	GSLC80-BiDi-A-DDM	Singlemode	1000	80	22	1510/1570	⁘*	–	⁘	–
1100-0527	GSLC80-BiDi-B-DDM	Singlemode	1000	80	22	1570/1510	⁘*	–	⁘	–

* N.B. Cannot be used in RFI-F8/F16 modules

** N.B. 300 m indicative range on 62.5/125 µm, 550 m on 50/125 µm fibre

** N.B. Minimum reach: 220 m on 62.5/125 µm, 550 m on 50/125 µm fibre dependent on fibre category OM1, 2, 3 or 4