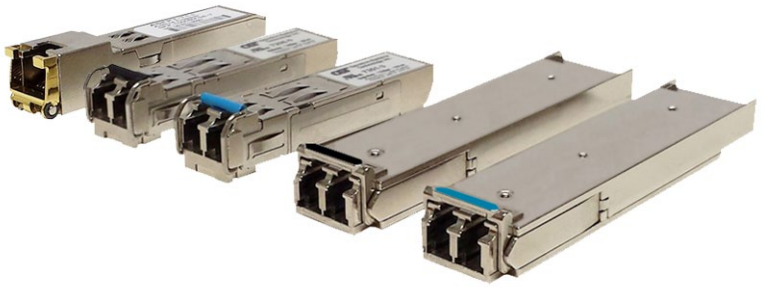
Omnitron Optical Transceivers

SFP+ and XFP Transceivers



Omnitron Small Form Pluggable SFP+ and XFP Transceivers are interchangeable, compact media connectors. They enable a single network device to connect to a wide variety of fiber and copper cable types and distances.

SFP+ and XFP Transceivers are used to customize iConverter®, OmniConverter® and RuggedNet® products to meet specific networking protocols and media requirements. They support multimode dual fiber, single-mode dual fiber, single-mode single-fiber, Coarse Wave Division Multiplexing (see the CWDM Optical Transceiver Data Sheet) and RJ-45 copper.

SFP+ and XFP Transceivers reduce network equipment inventories by eliminating the need to maintain surplus modules of various media types for network repairs or upgrades. They also enable network upgrades and growth by providing interchangeable fiber and copper connectors that can easily adapt to and modify any existing network.

Based on the MSA SFF-8472 and INF-8077i standards, Omnitron Optical Transceivers support digital diagnostic capabilities, providing enhanced diagnostic information to assist network administrators with network maintenance. When used in iConverter modules managed by SNMP management software, such as NetOutlook®, Omnitron Optical Transceivers can collect enhanced, real time transceiver diagnostic information including fiber optic TX and RX power, voltage and transceiver temperature.

By providing compact physical size and the ease of interchangeability, Omnitron Optical Transceivers provide a cost-effective and flexible solution for network designs.

KEY FEATURES

- Omnitron SFP+ and XFP Transceivers enable flexible fiber and copper connectivity
- Compatible with Omnitron's 10G media converters, switches and Network Interface Devices that support SFP+ and XFP transceivers
- Compliant with IEEE 802.3ae 10Gbps Ethernet specifications
- Copper RJ-45 SFP+ Transceivers
  - Supports 10G/5G/2.5G/1G/100Mbps data rates
  - Compliant with IEEE 802.3bz 2.5/5.0Gbps Multi-Gigabit/Multi-Rate Ethernet specification
  - SFF-8431, SFF-8432 and SFF-8472 MSA Compliant
- Fiber SFP+/XFP Transceivers
  - Supports operational data rate for 10Gbps Ethernet, SONET OC-192, SDH STM-64, and Fibre Channel x10
  - SFF-8472 and INF-8077i MSA compliant
- Compliant with RoHS, WEEE, REACH and UKCA
- Supports a wide variety of cable types
- Supports Digital Diagnostic capability
- Low EMI metal enclosure
- Case Operating Temperature:
  - Commercial (0° C to +70° C)
  - Industrial (-40° C to +85° C)
- One (1) Year Warranty and free 24/7 Technical Support

ORDERING INFORMATION

Step 1: Choose a Base Part Number (74xx-x-t)

Fiber SFP+ with Digital Diagnostics supporting 10 Gigabit Ethernet network protocols									
Model	Fiber Type	Spec. Distance (km)	Wavelength Tx / Rx (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Sensitivity (dBm)	Max. Rx Power (dBm)	Min. Attenuation (dB)	Link Budget (dB)
7406-0t	MM/DF	0.30[1]	850 / 850	-7.3	-1	-11.1	-1	-	3.8
7406-6t	MM/DF	0.22	1310 / 1310	-4.5	0.5	-6.5	0.5	-	2.0
7407-1t	SM/DF	10	1310 / 1310	-5.2	0.5	-12.6	0.5	-	7.4
7407-2t	SM/DF	40	1550 / 1550	-1	2	-15	-1	3	14
7407-3t	SM/DF	80	1550 / 1550	0	5	-23	-8	13	23
7410-0t	SM/SF[2]	10	1270 / 1330	-5	0	-14	0.5	-	9
7411-0t	SM/SF[2]	10	1330 / 1270	-5	0	-14	0.5	-	9
7410-1t	SM/SF[2]	20	1270 / 1330	-2	2	-16	0.5	2	14
7411-1t	SM/SF[2]	20	1330 / 1270	-2	2	-16	0.5	2	14
7410-2t	SM/SF[2]	40	1270 / 1330	1	5	-16	0.5	5	17
7411-2t	SM/SF[2]	40	1330 / 1270	1	5	-16	0.5	5	17

[1] Distance obtained with OM3 multimode cable
[2] When using single-fiber (SF) transceiver models, the Tx wavelength on one end has to match the Rx wavelength on the other.
MM = Multimode, SM = Single-mode, DF = Dual Fiber, SF = Single-fiber

End user needs to ensure case temperature is not exceeded for the model purchased. Contact Omnitron for other fiber options.

Step 2: Choose a Case Operating Temperature Option (74xx-x-t)

<leave blank> = Commercial temperature (0 to 70°C)
Z = Industrial temperature (-40 to 85°C) - Not available on all models. Contact Omnitron to verify.

Step 1: Choose a Base Part Number (74xx-x-t)

Fiber XFP with XFI-side Loop-back and Digital Diagnostics supporting 10 Gigabit Ethernet, 10G Fibre Channel, SONET OC-192 and SDH STM-64 network protocols.									
Model	Fiber Type	Spec. Distance (km)	Wavelength Tx / Rx (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Sensitivity (dBm)	Max. Rx Power (dBm)	Min. Attenuation (dB)	Link Budget (dB)
7426-0t	MM/DF	0.30[1]	850 / 850	-7.3	-1	-11.1	-1	-	3.8
7427-1t	SM/DF	10	1310 / 1310	-5.2	0.5	-12.6	0.5	-	7.4
7427-2t	SM/DF	40	1550 / 1550	-1	2	-15	-1	3	14
7427-3t	SM/DF	80	1550 / 1550	0	4	-23	-7	11	23
7430-0t	SM/SF[2]	10	1270 / 1330	-5	0	-14	0.5	-	9
7431-0t	SM/SF[2]	10	1330 / 1270	-5	0	-14	0.5	-	9
7430-1t	SM/SF[2]	20	1270 / 1330	-2	2	-16	0.5	2	14
7431-1t	SM/SF[2]	20	1330 / 1270	-2	2	-16	0.5	2	14
7430-2t	SM/SF[2]	40	1270 / 1330	1	5	-16	0.5	5	17
7431-2t	SM/SF[2]	40	1330 / 1270	1	5	-16	0.5	5	17

[1] Distance obtained with OM3 multimode cable
[2] When using single-fiber (SF) transceiver models, the Tx wavelength on one end has to match the Rx wavelength on the other.
MM = Multimode, SM = Single-mode, DF = Dual Fiber, SF = Single-fiber

End user needs to ensure case temperature is not exceeded for the model purchased. Contact Omnitron for other fiber options.

Step 2: Choose a Case Operating Temperature Option (74xx-x-t)

<leave blank> = Commercial temperature (0 to 70°C)
Z = Industrial temperature (-40 to 85°C) - Not available on all models. Contact Omnitron to verify.

ORDERING INFORMATION

Copper SFP+ for Multi-Gigabit/Multi-Rate Ethernet Data Rates	
Model	**Description**
7899MG-RJXC	10G/5G/2.5G/1G/100Mbps Copper SFP+, 100 meters on Cat 6a/7 Ethernet cable or better, Commercial case operating temperature (0 to 70°C)
7899MG-RJXZ	10G/5G/2.5G/1G/100Mbps Copper SFP+, 100 meters on Cat 6a/7 Ethernet cable or better, Industrial case operating temperature (-40 to 85°C)
End user needs to ensure case temperature is not exceeded for the model purchased. Contact Omnitron for other options.	