SFP Optical Transceivers

Omnitron Small Form Pluggable (SFP) Optical 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 Optical Transceivers are used to customize iConverter®, FlexPoint™, OmniConverter®, RuggedNet®, miConverter™ and most 3rd party 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 Unshielded Twisted Pair copper cabling.

SFP Optical 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-8074i-1 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 Optical Transceivers enable flexible fiber and copper connectivity

■ Compatible with iConverter media converter modules, T1/E1 Multiplexers and Network Interface Devices that support SFP transceivers

■ Compatible with FlexPoint, OmniConverter, RuggedNet and miConverter media converter modules that support SFP transceivers

■ Compliant with IEEE 802.3u Fast Ethernet and 802.3z Gigabit Ethernet specifications

■ Supports operational data rates for SONET OC-3/12/48, SDH STM-1/4/16, and Fiber Channel x1/x2

■ Compliant with MSA SFF-8472 and INF-8074i-1 standard, which provides interoperability with other network devices

■ 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) and
Industrial (-40° C to +85° C)

■ One (1) Year Warranty and free 24/7 Technical Support

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ORDERING INFORMATION

				Fiber SFPs supporting Fast Ethernet, SONET OC-3 and SDH STM-1 network protocols.					
Model	Fiber Type	Spec. Distance (km)	Wavelength Tx / Rx (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Power (dBm)	Max. Rx Power (dBm)	Min. Attenuation (dB)	Link Budget (dB)
7006-0t	MM/DF	5	1310 / 1310	-20	-14	-31	-14	-	11
7007-1t	SM/DF	30	1310 / 1310	-15	-8	-32	-8	-	17
7007-2t	SM/DF	60	1310 / 1310	-5	0	-35	-3	3	30
7007-3t	SM/DF	120	1550 / 1550	-5	0	-35	-3	3	30
7014-0t	MM/SF[1]	5	1310 / 1550	-15	0	-28	-3	3	13
7015-0t	MM/SF[1]	5	1550 / 1310	-15	0	-28	-3	3	13
7014-1t	SM/SF[1]	30	1310 / 1550	-14	-8	-32	-3	-	18
7015-1t	SM/SF[1]	30	1550 / 1310	-14	-8	-32	-3	-	18
7014-2t	SM/SF[1]	50	1310 / 1550	-8	0	-34	-3	3	26
7015-2t	SM/SF[1]	50	1550 / 1310	-8	0	-34	-3	3	26
7014-3t	SM/SF[1]	80	1310 / 1550	0	5	-34	-3	8	34
7015-3t	SM/SF[1]	80	1550 / 1310	0	5	-34	-3	8	34

				Fiber SFPs supporting Gigabit Ethernet, 1G Fiber Channel, SONET OC-12 and SDH STM-4 network protocols.					
Model	Fiber Type	Spec. Distance (km)	Wavelength Tx / Rx (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Power (dBm)	Max. Rx Power (dBm)	Min. Attenuation (dB)	Link Budget (dB)
7206-0t	MM/DF[2]	0.22 / 0.55	850 / 850	-9.5	-4	-17	-3	-	7.5
7206-6t	MM/DF	2	1310 / 1310	-9.5	-3	-19.5	-3	-	10
7207-1t	SM/DF	10	1310 / 1310	-9.5	-3	-21	-3	-	11.5
7207-2t	SM/DF	34	1310 / 1310	-5	0	-24	-3	3	19
7207-3t	SM/DF	80	1550 / 1550	-4	1	-24	-3	4	20
7207-4t	SM/DF	110	1550 / 1550	0	5	-24	-3	8	24
7207-5t	SM/DF	140	1550 / 1550	2	5	-30	-8	13	32
7207-6t	SM/DF	160	1550 / 1550	1	5	-33	-8	13	34
7214-0t	MM/SF[1]	0.55	1310 / 1550	-9	-3	-18	-3	-	9
7215-0t	MM/SF[1]	0.55	1550 / 1310	-9	-3	-18	-3	-	9
7214-1t	SM/SF[1]	20	1310 / 1550	-9	-3	-21	-3	-	12
7215-1t	SM/SF[1]	20	1550 / 1310	-9	-3	-21	-3	-	12
7214-2t	SM/SF[1]	40	1310 / 1550	-3	2	-23	-3	5	20
7215-2t	SM/SF[1]	40	1550 / 1310	-3	2	-23	-3	5	20
7214-3t	SM/SF[1]	60	1310 / 1550	0	5	-24	-1	6	24
7215-3t	SM/SF[1]	60	1550 / 1310	-2	4	-25	-1	5	23
7216-1t	SM/SF[1]	20	1310 / 1490	-9	-3	-21	-3	-	12
7217-1t	SM/SF[1]	20	1490 / 1310	-9	-3	-21	-3	-	12
7216-2t	SM/SF[1]	40	1310 / 1490	-3	0	-20	-3	3	17
7217-2t	SM/SF[1]	40	1490 / 1310	-3	0	-20	-3	3	17
7218-4t	SM/SF[1]	80	1510 / 1570	-4	1	-26	0	1	22
7219-4t	SM/SF[1]	80	1570 / 1510	-4	1	-26	0	1	22

[1] When using single-fiber (SF) transceiver models, the Tx wavelength on one end has to match the Rx wavelength on the other.
[2] 62.5/125μm (OM1) multimode fiber up to 220m. 50/125μm (OM2) multimode fiber up to 550m.
MM = Multimode, SM = Single-mode, DF = Dual Fiber, SF = Single-fiber

Base Model Number: 7xxx-xt

Select the model from ordering table above.

Add operating temperature range (**t**) to the model type selected.

Case Operating Temperature Options (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.

End user needs to ensure case temperature is not exceeded for the model purchased.

Contact Omnitron for other fiber options.

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ORDERING INFORMATION

Fiber SFPs for devices that support 2G Fiber Channel, SONET OC-48 and STM-16 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)
7226-0t	MM/DF	0.30	850 / 850	-9	-3	-17	0	-	8
7227-1t	SM/DF	15	1310 / 1310	-10	-3	-18	-3	-	8
7227-2t	SM/DF	40	1310 / 1310	-2	3	-27	-9	12	25
7227-3t	SM/DF	80	1550 / 1550	-2	4	-20	0	4	18
MM = Multimode, SM = Single-mode, DF = Dual Fiber									
Base Model Number: 72xx-xt									
Select the model from ordering table above.									
Add operating temperature range (**t**) to the model type selected.									
Case Operating Temperature Options (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.				
End user needs to ensure case temperature is not exceeded for the model purchased. Contact Omnitron for other fiber options.									

Fiber SFPs for devices that support 8G Fiber Channel.									
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)
7287-1t	SM/DF	10	1310 / 1310	-8	0	-16	0.5	-	8
MM = Multimode, SM = Single-mode, DF = Dual Fiber									
Base Model Number: 72xx-xt									
Select the model from ordering table above.									
Add operating temperature range (**t**) to the model type selected.									
Case Operating Temperature Options (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.				
End user needs to ensure case temperature is not exceeded for the model purchased. Contact Omnitron for other fiber options.									

Copper SFPs for Gigabit Ethernet		
Model	Date Rate	Distance
7299-RJt	1000Mbps	100m
7299-RJ-Glt	10/100/1000Mpbs	100m
Base Model Number: 7299-RJt or 7299-RJ-Glt		
Select the model from ordering table above.		
Add operating temperature range (**t**) to the model type selected.		
Case Operating Temperature Options (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.	
End user needs to ensure case temperature is not exceeded for the model purchased. Contact Omnitron for other fiber options.		

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