

iConverter

iConverter® XG 10Gbps Protocol-Transparent Media Converter



SFP+/XFPs not included

- Protocol-transparent 10G media converter
- Compatible with 10G Ethernet, 10G SONET/SDH, 10G Fibre Channel and 10G OTN (G.709)
- Supports pluggable 10G transceivers:
 - > XFP to XFP
 - > XFP (fiber and CX4 copper) to SFP+
 - > SFP+ to SFP+
- Supports multimode to multimode, multimode to single-mode, single-mode to single-mode and copper to fiber conversion
- Supports SFP and XFP Digital Diagnostic Monitoring Interface (DDMI) bus
- Built-in loopback mode for installation verification and troubleshooting
- Link fault detection modes facilitate quick fault detection, isolation and reporting
- LED displays for immediate visual status of each port
- Lifetime Warranty and free 24/7 Technical Support

The *iConverter* XG is a 10 Gigabit, protocol-transparent media converter with two pluggable transceiver ports. The *iConverter* XG can be used as a copper-to-fiber converter, a fiber mode converter, a WDM transponder or a fiber repeater supporting the three Rs (regeneration, retiming and reshaping).

The XG can be used in Telecom or Enterprise applications where 10 Gigabit media conversion and fiber extension is required. The product supports 100% traffic throughput and has no packet size restrictions. It is protocol transparent within the range of 9.95Gbps to 11.32Gbps, providing interoperability with common protocols including 10G Ethernet, 10G SONET/SDH, 10G Fibre Channel and 10G OTN (G.709).

Three interface configurations of the XG are available, supporting XFP to XFP, XFP to SFP+, and SFP+ to SFP+. Pluggable XFP and SFP+ transceivers can be used for multimode and single-mode applications, supporting short haul and long haul distances. The XFP interface is compatible with copper (10GBASE-CX4) transceiver modules, making it an ideal solution for converting 10G copper to fiber.

The standalone *iConverter* XG is available as a compact, unmanaged tabletop or wallmount unit. The tabletop model can be DIN-rail mounted using an optional DIN-rail mounting kit. Both the tabletop and the wallmount models are DC powered and are available with an external AC/DC power adapter, or a terminal connector for DC power.

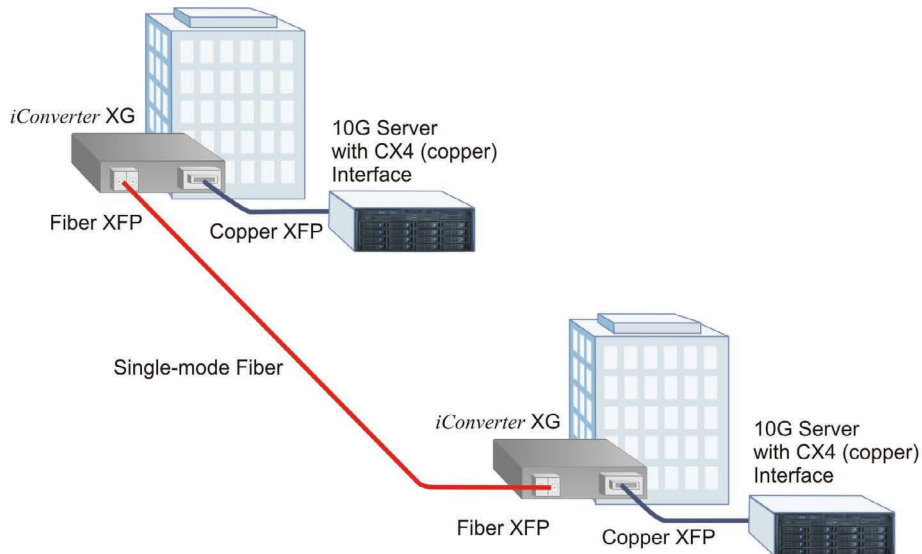
Built-in loopback functions, on-board status LEDs and link fault propagation modes facilitate easy setup and quick troubleshooting. Pluggable transceiver alarm conditions reported through the digital diagnostic monitoring interface are displayed by the on-board status LEDs.

APPLICATION

Copper to Fiber Conversion Application

This application shows two 10G servers with copper CX4 interfaces located in two different buildings. The servers

are connected via fiber with a pair of *iConverter* XG media converters.



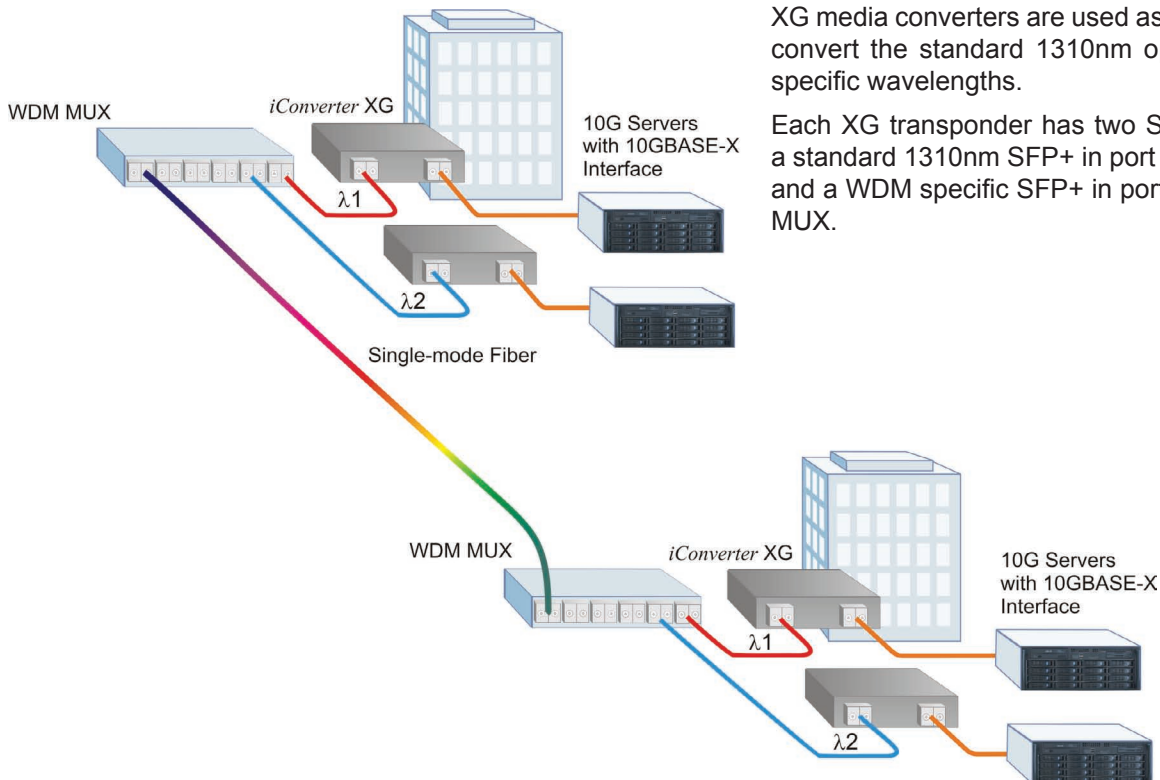
WDM Application

The following application shows multiple 10G servers connected through a WDM network. In this application, fiber availability is limited and the network engineer is using WDM

multiplexers to increase the fiber's capacity.

Since the native 1310nm interfaces from each 10G server are not compatible with the WDM multiplexers, *iConverter* XG media converters are used as WDM transponders, which convert the standard 1310nm optical wavelength to WDM specific wavelengths.

Each XG transponder has two SFP+ transceivers installed, a standard 1310nm SFP+ in port 2, connecting to the server, and a WDM specific SFP+ in port 1, connecting to the WDM MUX.



ORDERING INFORMATION

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<Blank>	Standard Operating Temperature Range Model
W	Wide Operating Temperature Range Model
Z	Extended Operating Temperature Range Model
A	Tabletop with External US AC Power Supply
B	Tabletop with External Universal AC Power Supply
C	Tabletop with DC Terminal Power
D	Wall-Mount with External US AC Power Supply
E	Wall-Mount with External Universal AC Power Supply
F	Wall-Mount with DC Terminal Power

10Gigabit Protocol Transparent Media Converter		
Port 1	Port 2	Model Number
SFP+	SFP+	8599-00
SFP+	XFP	8599-01
XFP	XFP	8599-11

XFP/SFP+ Ordering Information

Fiber Type	Distances	Model	Description	Tx λ (nm)	Rx λ (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Sensitivity (dBm)	Max. Rx Power (dBm)	Min Attenuation (dB)	Link Budget (dB)	Calculated Distance (km)
10 Gigabit SFP+ with Digital Diagnostics												
MM	300m*	7406-0	10GBASE-SR SFP+, LC Connectors	850	850	-2.8	-1	-7.5	0.5	-	4.7	1.0
SM	10km	7407-1	10GBASE-LR SFP+, LC Connectors	1310	1310	-8.2	0.5	-14.4	0.5	-	6.2	11.1
SM	40km	7407-2	10GBASE-ER SFP+, LC Connectors	1550	1550	-4.7	4	-15.8	-1	5	11.1	45.5
SM	80km	7407-3	10GBASE-ZR SFP+, LC Connectors	1550	1550	0	4	-23	-7	11	23	105.5
10 Gigabit XFP with XFI-side Loop-back and Digital Diagnostics												
MM	300m*	7426-0	10GBASE-SR XFP, LC Connectors	850	850	-2.8	-1	-7.5	0.5	-	4.7	1.0
SM	10km	7427-1	10GBASE-LR XFP, LC Connectors	1310	1310	-8.2	0.5	-14.4	0.5	-	6.2	11.1
SM	40km	7427-2	10GBASE-ER XFP, LC Connectors	1550	1550	-4.7	4	-15.8	-1	5	11.1	45.5
SM	80km	7427-3	10GBASE-ZR XFP, LC Connectors	1550	1550	0	4	-23	-7	11	23	105.5
10 Gigabit Copper XFP												
N/A	15m	7499-CX4	10GBASE-CX4 XFP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Distance obtained with OM3 multimode cable

SPECIFICATIONS

Model Type	<i>iConverter</i> XG
Protocols	10G Ethernet, 10G SONET/SDH, 10G Fiber Channel and 10G OTN (G.709)
Fiber Connectors	LC (via XFP or SFP+)
Copper Connector	CX4 (via XFP)
Controls	LP, RFD, SFD
LED Displays	Power, link/activity, status/loopback
Compliance ¹	UL, FCC Class A, CE, NEBS 3
Standalone Power Requirements	
DC Power Input Connector	2.5mm Barrel Connector or 2-Pin Terminal Connector
DC Power	7 - 60VDC 1.2A @ 9VDC 0.9A @ 12VDC
AC Power Adapter (US) via 2.5mm Barrel Connector	100 - 120VAC/60Hz 0.20A @ 120VAC
AC Power Adapter (Universal) via 2.5mm Barrel Connector	100 - 240VAC/50 - 60Hz 0.20A @ 120VAC

¹ Pending

Temperature	
Standard	0 to 50° C
Wide	-40 to 60° C
Extended	-40 to 75° C
Storage	-40 to 80° C
Weight	
Standalone without power adapter	1.0 lb.
Standalone with power adapter	1.5 lb.
Humidity	5 to 95% (non-condensing)
Altitude	-100m to 4000m
MTBF (hrs)	
Standalone without power adapter	TBD
Standalone with US power adapter	250,000 hrs
Standalone with Universal power adapter	100,000 hrs

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