# *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.

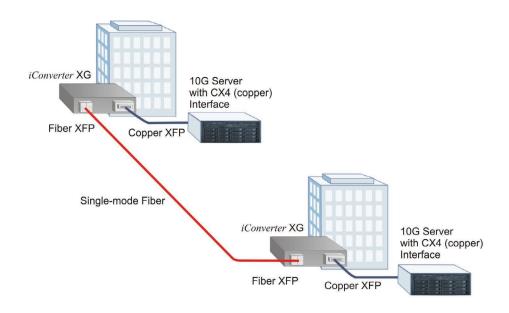
Built-in loopback functions, on-board status LEDs and link fault propagation modes facilitate easy setup and quick trouble-shooting. Pluggable transceiver alarm conditions reported through the digital diagnostic monitoring interface are displayed by the on-board status LEDs.



## **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

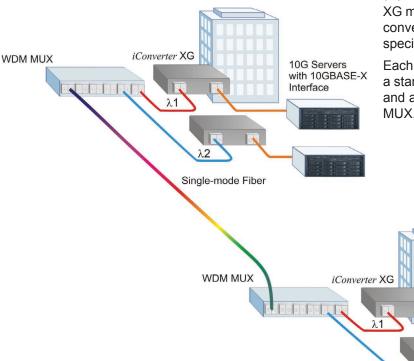
connected through a WDM network. In this application, fiber availability is limited and the network engineer is using WDM

multiplexers to increase the fiber's capacity.

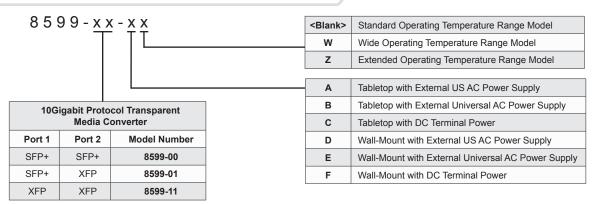
Since the native 1310nm interfaces from each 10G server are not compatible with the WDM multiplexers, iConverter XG media converters are used as WDM transponders, which convert the standard 1310nm optical wavelength to WDM specific wavelengths.

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.

> 10G Servers with 10GBASE-X Interface



## ORDERING INFORMATION



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	Distance obtained with OM3 multimode cable											

### **SPECIFICATIONS**

Model Type	iConverter XG					
model type	iconverter AG					
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 <sup>1</sup>	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)	100 - 120VAC/60Hz					
via 2.5mm Barrel Connector	0.20A @ 120VAC					
AC Power Adapter (Universal)	100 - 240VAC/50 - 60Hz					
via 2.5mm Barrel Connector	0.20A @ 120VAC					
¹Pending						

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

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