

### **iConverter® GXIX** **Gigabit Fiber-to-Fiber Managed Converter/Transponder**

The iConverter GXIX managed fiber-to-fiber Gigabit Ethernet fiber converter/transponder is a member of the modular iConverter product family. The GXIX provides a cost-effective solution to extend fiber network distances.

The GXIX also functions as a fiber repeater supporting the three Rs (regeneration, retiming and reshaping). Multiple GXIX modules can be cascaded to extend total network distances.

iConverter GXIX models support multimode and single-mode dual fiber with SC and LC connectors; and single-mode single-fiber with SC connectors.

The iConverter GXIX features two 10/100 Ethernet backplane ports to provide connectivity to adjacent modules for network expansion and for in-band connectivity to an iConverter Network Management Module.

The iConverter GXIX advanced features include IEEE 802.1Q VLAN, 802.1p Quality of Service prioritization and Port Access Control, which provides the ability to enable or disable individual ports to control delivery of services. The GXIX also supports port-level MIB statistics reporting real-time packet statistics, performance and operational monitoring.

The GXIX features user-selectable Link Propagate, Link Segment, Remote Fault Detection and Symmetrical Fault Detection modes to facilitate quick fault detection, isolation and reporting.

The iConverter GXIX can be used in managed or unmanaged applications. Management is accomplished by installing an iConverter Management Module (NMM2) or Network Interface Device (NID) in the same chassis. The management module provides access to all the advanced features available on the module.

The management software can override the physical DIP-switch settings such as auto-negotiation, Backplane Selection, remotely configure additional parameters including VLAN, Port VLAN and Port Access Control. Some of the real-time GXIX parameters that can be monitored include duplex mode, link and data status. The port MIB statistics include transmit packet counts, receive packet counts and error counts.

The hot-swappable plug-in module can be mounted in a high-density 19 or 5-Module chassis with redundant AC and DC power supplies. It can also be mounted in a 2-Module or in a 1-Module chassis with AC or DC power input.



### **KEY FEATURES**

- Gigabit fiber-to-fiber converter/transponder supporting:
  - Multimode dual fiber to multimode dual fiber
  - Multimode dual fiber to single-mode dual fiber
  - Single-mode single-fiber to single-mode single-fiber
  - Wavelength conversion
- Conforms to IEEE 802.3 and 1000BASE-X specifications
- Supports multimode, single-mode dual fiber with SC and LC connectors, and single-mode single-fiber with SC connectors
- Features Port VLAN, Tag VLAN, Port Access Control and MIB statistics
- Full-Duplex auto-negotiation or manual negotiation
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- Automatic Link Recovery
- Modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis
- Management is available with the addition of a management module to the chassis
- SNMP management via NetOutlook
- Commercial (0 to 50°C) and wide (-40 to 60°C) temperature ranges
- TAA, BAA and NDAA compliant, and Made in the USA
- Lifetime Warranty and free 24/7 Technical Support

# SPECIFICATIONS

<b>Description</b>	<i>iConverter GX/X</i> Gigabit Ethernet Converter/Transponder	
<b>Standard Compliances</b>	IEEE 802.3, 802.1Q, 802.1p, 802.1ad RFC 2819 (RMON)	
<b>Regulatory Compliances</b>	Safety: EMI: ACT:	UL, cUL, CE, UKCA FCC Class A TAA, BAA, NDA
<b>Environmental</b>	RoHS, WEEE, REACH	
<b>Frame Size</b>	Up to 1,536 bytes	
<b>Port Types</b>	Fiber:	1000BASE-SX (SC) 1000BASE-LX (SC, LC) 1000BASE-ZX (SC, LC) 1000BASE-BX (SC)
<b>Cable Types</b>	Fiber:	Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm

<b>DC Power Requirements</b>	DC Input: (Backplane)	3.3VDC, 2.2A @ 3.3VDC
<b>Dimensions W x D x H</b>	0.85" x 4.5" x 2.8" (21.6 mm x 114.3 mm x 71.1 mm)	
<b>Weight</b>	8 oz. (226.8 grams)	
<b>Temperature</b>	Commercial: Wide: Storage:	0 to 50°C -40 to 60°C -40 to 80°C
<b>Humidity</b>	5 to 95% (non-condensing)	
<b>Altitude</b>	-100m to 4,000m	
<b>MTBF (hrs)</b>	640,000	
<b>Warranty</b>	Lifetime warranty with 24/7/365 free Technical Support	

# ORDERING INFORMATION

## Step 1: Choose a Base Part Number (xxxx-xtt)

Port	Fiber Type	Distance	Connector Type		Tx / Rx Lambda (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Power (dBm)	Max. Rx Power (dBm)	Min. Attenuation (dB)	Link Budget (dB)
			SC	LC							
Port 1	MM/DF	220 / 550m <sup>1</sup>	8542-00t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	MM/DF	220 / 550m <sup>1</sup>			850 / 850	-10	-4	-17	-3	-	7
Port 1	SM/DF	12km	8543-10t	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	MM/DF	220 / 550m <sup>1</sup>			850 / 850	-10	-4	-17	-3	-	7
Port 1	SM/DF	12km	8543-11t	8547-11t	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/DF	12km			1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 1	SM/DF	34km	8543-22t	8547-22t	1310 / 1310	-5	0	-23	-3	3	18
Port 2	SM/DF	34km			1310 / 1310	-5	0	-23	-3	3	18
Port 1	SM/DF	80km	8543-33t	8547-33t	1550 / 1550	-5	0	-23	-3	3	18
Port 2	SM/DF	80km			1550 / 1550	-5	0	-23	-3	3	18
Port 1	SM/SF <sup>2</sup>	20km	8554-11t	-	1310 / 1550	-9.5	-3	-20	-3	-	10.5
Port 2	SM/SF <sup>2</sup>	20km			1310 / 1550	-9.5	-3	-20	-3	-	10.5
Port 1	SM/SF <sup>2</sup>	20km	8557-11t	-	1550 / 1310	-9.5	-3	-20	-3	-	10.5
Port 2	SM/SF <sup>2</sup>	20km			1550 / 1310	-9.5	-3	-20	-3	-	10.5

<sup>1</sup> 62.5/125µm, 100/140µm multimode fiber up to 220m. 50/125µm multimode fiber up to 550m. Refer to the fiber cable manufacturer for multimode distance specifications.  
<sup>2</sup> When using single-fiber (SF) media converter 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  
Contact Omnitron for other configurations and extended temperature (-40 to 75°C) models.  
For chassis options, see [iConverter Chassis and Mounting Options web page](#).

## Step 2: Choose an Operating Temperature Range (xxxx-xtt)

<leave blank> = Commercial temperature (0 to 50°C)
W = Wide temperature (-40 to 60°C)

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