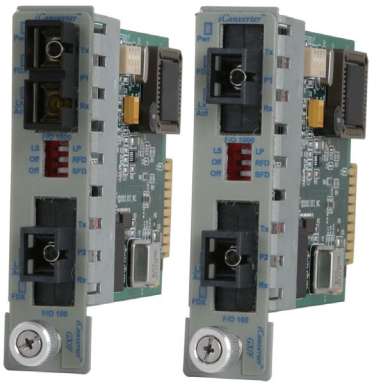
iConverter® GX/F

Gigabit to Fast Ethernet Managed Fiber-to-Fiber Converter/Transponder



The iConverter GX/F managed fiber-to-fiber Gigabit to Fast Ethernet converter/transponder is a member of the modular iConverter product family. The GX/F provides fiber and rate conversion between Gigabit Ethernet fiber and Fast Ethernet fiber, enabling seamless integration between Gigabit Ethernet and legacy Fast Ethernet networks.

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

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

The iConverter GX/F 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 GX/F 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 GX/F also supports port-level MIB statistics reporting real-time packet statistics, performance and operational monitoring.

The GX/F 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 GX/F 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 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 to Fast Ethernet fiber-to-fiber converter/transponder supporting:
  - Multimode dual fiber to multimode dual fiber
  - Multimode dual fiber to single-mode dual fiber
  - Single-mode dual fiber to multimode dual fiber
  - Single-mode dual fiber to single-mode dual fiber
  - Multimode dual fiber to single-mode single-fiber
  - Single-mode dual fiber to single-mode single-fiber
  - Wavelength and rate conversion
- Conforms to IEEE 802.3z and 802.3u 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
- 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

Description	***iConverter* GX/F** Gigabit to Fast Ethernet Converter/Transponder	
Standard Compliances	IEEE 802.3, 802.1Q, 802.1p, 802.1ad RFC 2819 (RMON)	
Regulatory Compliances	Safety: EMI: ACT:	UL, cUL, CE, UKCA FCC Class A TAA, BAA,NDAA
Environmental	RoHS, WEEE, REACH	
Frame Size	Up to 1,536 bytes	
Port Types	Fiber:	100BASE-FX (SC) 100BASE-LX (SC, LC) 100BASE-ZX (SC, LC) 100BASE-BX (SC) 1000BASE-SX (SC) 1000BASE-LX (SC, LC) 1000BASE-ZX (SC, LC) 1000BASE-BX (SC)
Cable Types	Fiber:	Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm

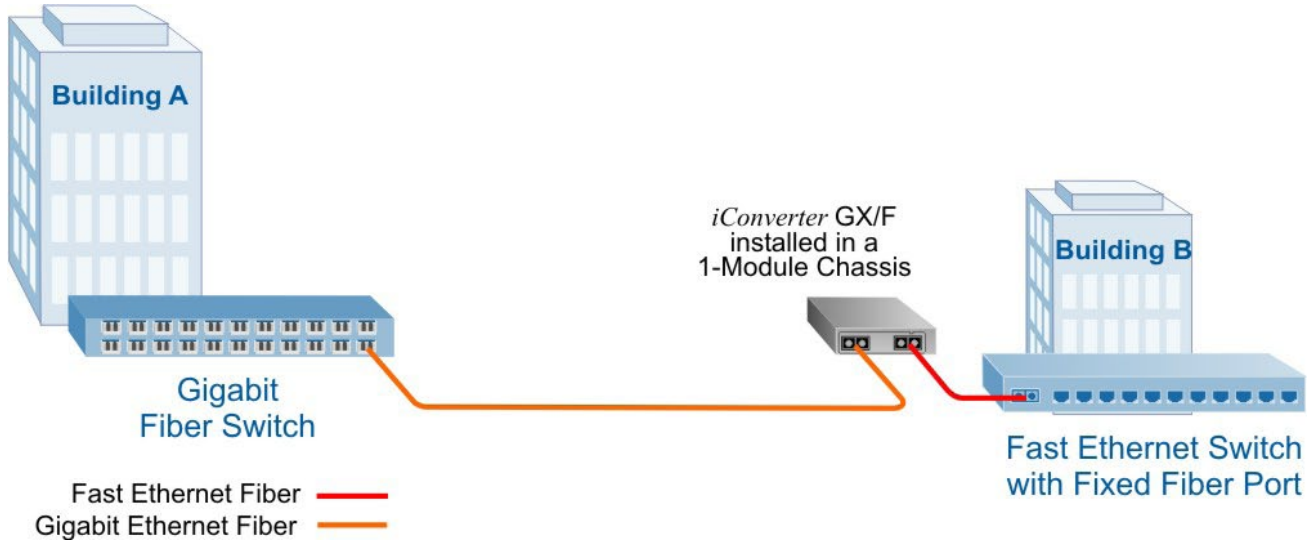
DC Power Requirements	DC Input: (Backplane)	3.3VDC, 1.5A @ 3.3VDC
Dimensions W x D x H	0.85" x 4.5" x 2.8" (21.6 mm x 114.3 mm x 71.1 mm)	
Weight	8 oz. (226.8 grams)	
Temperature	Commercial: Wide: Storage:	0 to 50°C -40 to 60°C -40 to 80°C
Humidity	5 to 95% (non-condensing)	
Altitude	-100m to 4,000m	
MTBF (hrs)	730,000	
Warranty	Lifetime warranty with 24/7/365 free Technical Support	

APPLICATION

In this application example, a new Gigabit Ethernet fiber switch needs to be connected to a legacy fixed fiber Fast Ethernet switch located across the campus.

At Building A, a single-mode gigabit fiber is connected to a fiber port on the new Gigabit Ethernet fiber switch. The fiber is terminated at Building B, where an iConverter GX/F media converters provides the Gigabit to Fast Ethernet conversion to the legacy fast Ethernet switch.

The iConverter GX/F supports Link Modes used to provide network notification of fiber and copper faults. Link failures on any port are propagated to managed network switches, notifying network administrators of link failure.



ORDERING INFORMATION

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

Port [1]	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[2]	8562-00t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	MM/DF	5km			1310 / 1310	-24	-14	-31	-14	-	7
Port 1	MM/DF	220 / 550m[2]	8562-01t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	SM/DF	30km			1310 / 1310	-15	-8	-31	-8	-	16
Port 1	MM/DF	220 / 550m[2]	8562-02t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	SM/DF	60km			1310 / 1310	-5	0	-31	-3	3	26
Port 1	MM/DF	220 / 550m[2]	8562-03t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	SM/DF	120km			1550 / 1550	-5	0	-31	-3	3	26
Port 1	SM/DF	12km	8563-10t	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	MM/DF	5km			1310 / 1310	-24	-14	-31	-14	-	7
Port 1	SM/DF	12km	8563-11t	8567-11t	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/DF	30km			1310 / 1310	-15	-8	-31	-8	-	16
Port 1	SM/DF	12km	8563-12t	8567-12t	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/DF	60km			1310 / 1310	-5	0	-31	-3	3	26
Port 1	SM/DF	12km	8563-13t	8567-13t	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/DF	120km			1550 / 1550	-5	0	-31	-3	3	26
Port 1	MM/DF	220 / 550m[2]	8562-05t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	SM/SF[3]	20km			1310 / 1550	-15	-5	-30	-3	-	15
Port 1	MM/DF	220 / 550m[2]	8562-07t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	SM/SF[3]	20km			1550 / 1310	-15	-5	-30	-3	-	15
Port 1	MM/DF	220 / 550m[2]	8562-06t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	SM/SF[3]	40km			1310 / 1550	-8	0	-30	-3	3	22
Port 1	MM/DF	220 / 550m[2]	8562-08t	-	850 / 850	-10	-4	-17	-3	-	7
Port 2	SM/SF[3]	40km			1550 / 1310	-8	0	-30	-3	3	22
Port 1	SM/DF	12km	8563-15t	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/SF[3]	20km			1310 / 1550	-15	-5	-30	-3	-	15
Port 1	SM/DF	12km	8563-17t	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/SF[3]	20km			1550 / 1310	-15	-5	-30	-3	-	15
Port 1	SM/DF	12km	8563-16t	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/SF[3]	40km			1310 / 1550	-8	0	-30	-3	3	22
Port 1	SM/DF	12km	8563-18t	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
Port 2	SM/SF[3]	40km			1550 / 1310	-8	0	-30	-3	3	22

[1] Port 1 is Gigabit Ethernet and Port 2 is Fast Ethernet.
[2] 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.
[3] 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 (xxxxx-xxt)

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