

iConverter GX/T

10/100/1000 Copper to 1000X Managed Ethernet Media Converter

The iConverter GX/T media converters are members of the modular iConverter product family. The GX/T provides 10/100/1000 RJ-45 copper to Gigabit Ethernet fiber conversion and can be used in a managed or unmanaged fashion.

The GX/T is a chassis-based module that provides high-density fiber distribution from copper network switches.

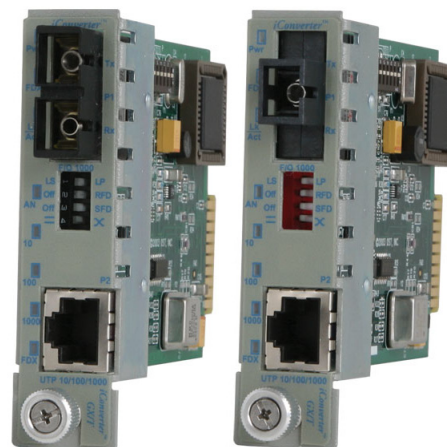
The GX/T models support multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors. The RJ-45 port supports 10/100/1000 and Half/Full-Duplex auto-negotiation with both hardware and software manual override controls.

The GX/T 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 (NMM2).

Advanced features include VLAN, which allows network managers control the traffic flow between the copper, fiber and backplane ports to enhance security, and Port Access Control, which provides the ability to enable or disable individual ports to control delivery of services to customers. The GX/T also supports port level MIB statistics reporting a real-time packet statistics to provide performance and operational monitoring.

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

iConverter GX/T modules are hot-swappable and can be mounted in a 19-Module (2U high) or 5-Module (1U high) rack-mountable chassis (19-inch or 23-inch) with any combination of redundant AC, 24VDC or 48VDC power supplies. They can also be mounted in a 2-Module AC or 18 to 60VDC powered chassis, or in a 1-Module AC or DC powered chassis.



KEY FEATURES

- 10/100/1000 copper to Gigabit fiber media converter
- Conforms to 10BASE-T, 100BASE-TX, 1000BASE-T and 1000BASE-X specifications
- Supports VLANs, Port Access Control and MIB statistics
- Supports multimode, single-mode dual fiber with ST, SC and LC connectors, and single-mode single-fiber with SC connectors
- RJ-45 port supports 10/100/1000 and Half/Full-Duplex auto-negotiation and MDI/MDIX auto-crossover
- Ethernet backplane ports for connectivity to adjacent modules
- 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® provides real-time port and module status information, remote parameter configuration and trap notification
- Commercial (0 to 50°C) and wide (-40 to 60°C) temperature ranges
- Lifetime Warranty and free 24/7 Technical Support

SPECIFICATIONS

Description	<i>iConverter GX/T</i> 10/100/1000BASE-T to 1000BASE-X Fiber Media Converter	
Standard Compliances	IEEE 802.3, 802.1Q, 802.1p, 802.1ad RFC 2819 (RMON)	
Regulatory Compliances	UL, CE, FCC Class A, RoHS2, WEEE, REACH	
Frame Size	Up to 1,536 bytes	
Port Types	Copper:	10/100/1000BASE-T (RJ-45)
	Fiber:	1000BASE-SX (ST, SC, LC) 1000BASE-LX (SC, LC) 1000BASE-ZX (SC, LC) 1000BASE-BX (SC)
Cable Types	Copper:	EIA/TIA 568A/B, Cat 5 UTP and higher
	Fiber:	Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm
DC Power Requirements	DC Input: (Backplane)	3.3VDC, 1.4A @ 3.3VDC
Dimensions	W: 0.85" x D: 4.5" x H: 2.8" L: 21.6 mm x B: 114.3 mm x H: 71.1 mm	
Weight	8 oz.; 226.8 grams	
Temperature	Commercial:	0 to 50°C
	Wide:	-40 to 60°C
	Storage:	-40 to 80°C
Humidity	5 to 95% (non-condensing)	
Altitude	-100m to 4,000m	
MTBF (hrs)	830,000	
Warranty	Lifetime warranty with 24/7/365 free Technical Support	

MANAGEMENT

The iConverter GX/T can be used in managed or unmanaged applications. Management provides remote configuration, monitoring and trap notification. Management of the GX/T is accomplished by installing an iConverter Management Module (NMM2) or Network Interface Device (NID) in the same chassis.

The Management Module can be accessed via SNMP, Telnet, and serial port. The GX/T can be managed with Omnitron's intuitive, graphic-oriented NetOutlook SNMP Management Software or third party SNMP management software. Management via the Telnet and the serial interfaces have an easy-to-use, menu-driven interface.

The management software can override the physical DIP-switch settings such as auto-negotiation, Half or Full-Duplex, and backplane selection, and remotely configure additional parameters including Port VLAN and Port Access Control. Some of the real-time GX/T parameters that can be monitored include duplex mode, link and data activity status. Other parameters include module type and model, hardware and software revisions, serial numbers and a user-defined identifier. The port MIB statistics include transmit and receive packet counts and error counts.

The iConverter GX/T supports SNMP trap notification for the monitoring and notification of different network events. Specific events that generate traps include module insertion and removal, and port link-up and link-down. Trap monitoring of specific events can be selectively enabled or disabled by the network management software.

ORDERING INFORMATION

Fiber Type	Distance	Connector Type			Tx Lambda (nm)	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)
		ST	SC	LC								
MM/DF	220 / 550m ¹	8520-0	8522-0	8526-0	850	850	-10	-4	-17	-3	-	7
SM/DF	12km	8521-1	8523-1	8527-1	1310	1310	-9.5	-3	-19.5	-3	-	10
SM/DF	34km	-	8523-2	8527-2	1310	1310	-5	0	-23	-3	3	18
SM/DF	80km	-	8523-3	8527-3	1550	1550	-5	0	-23	-3	3	18
SM/DF	110km	-	8523-4	-	1550	1550	0	5	-24	-3	8	24
SM/DF	140km	-	8523-5	-	1550	1550	2	5	-28	-8	13	30
SM/SF ²	20km	-	8530-1	-	1310	1550	-9.5	-3	-20	-3	-	10.5
SM/SF ²	20km	-	8531-1	-	1550	1310	-9.5	-3	-20	-3	-	10.5
SM/SF ²	40km	-	8530-2	-	1310	1550	-3	0	-20	-3	3	17
SM/SF ²	40km	-	8531-2	-	1550	1310	-3	0	-20	-3	3	17

¹ 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.

² When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other.

For wide temperature (-40 to 60°C), add a "W" to the end of the model number. Contact Omnitron for extended temperature (-40 to 75°C) models.

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