

iConverter

iConverter® GX/T 10/100/1000 UTP 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 UTP copper to GigE fiber conversion and can be used in a managed or unmanaged fashion.

The GX/T is ideal in network core or Central Office (CO) applications when conversion is required from a 10/100/1000 core switch to GigE fiber, and in edge applications when the GigE fiber is converted back into 10/100/1000 copper and delivered to a departmental or Customer Premise (CPE) switch.

The fiber port of the GX/T is available with multimode, single-mode and single-fiber and supports SC, MT-RJ and LC connectors.

The UTP 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 (NMM).

Advanced features include VLAN, which allows network managers control the traffic flow between the UTP, 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/DC powered chassis.



- 10/100/1000 UTP 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
- Fiber port supports multimode, single-mode, and single-fiber with SC, LC and MT-RJ connectors
- UTP port supports 10/100/1000 and Half/Full-Duplex auto-negotiation
- Ethernet backplane ports for connectivity to adjacent modules
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- Management is available with the addition of a management module to the chassis
- SNMP management via *NetOutlook*™ provides real-time port and module information, remote parameter configuration and trap notification
- Modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis
- Lifetime Warranty and free 24/7 Technical Support

SPECIFICATIONS

Model Type	GX/T
Protocols	10BASE-T, 100BASE-TX, 1000BASE-T, 1000BASE-SX/LX
UTP Connectors	RJ-45
Fiber Connectors	SC, MT-RJ, LC, Single-Fiber SC
Controls	BP Enable, X-Over, LS/LP, RFD, SFD, UTP Auto/Man, 10/100/1000, UTP FDX/HDX, F/O Auto/Man
LED Displays	Power, FO link, UTP link, Auto, FDX/HDX, 10/100/1000
Dimensions	W:0.85" x D:4.5" x H:2.8"
Weight	8 oz.
Compliance	UL, CE, FCC Class A
Power Requirement	1.4A @ 3.3VDC (typical)
Temperature	Standard: 0 to 50° C Wide: -40 to 60° C Storage: -40 to 80° C
Humidity	5 to 95% (non-condensing)
Altitude	-100m to 4000m
MTBF (hrs)	830,000

MANAGEMENT

Management is accomplished by using a Network Management Module (NMM) or a media converter with integrated management (such as an *iConverter* 10/100M2) that provides monitoring, remote configuration and trap notification. The management module can be accessed via SNMP, Telnet, and via a serial port. The SNMP-based management is accomplished via Omnitron's intuitive, graphic-oriented *NetOutlook* management software or third party SNMP management software. Management via the Telnet and the serial interfaces have an easy-to-use, menu-driven interface.

Some of the real-time GX/T parameters that can be monitored include duplex mode (Half, Full), link and data receive 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, error counts, etc.

The network manager can set programmable-only (Soft) parameters and override the module's physical switch (Hard) settings remotely via the management software. The Soft parameters include VLAN map setting and Port Access Control setting. Some of the Hard switch-selectable parameters include fiber or UTP auto-negotiation, UTP Half/Full-Duplex, Link modes and Port Access Control.

The *iConverter* GX/T supports SNMP trap notification for the monitoring and notification of different network events. Specific GX/T 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

Model Type	Fiber / Media Type	Distance	Connector Types			Tx Wavelength (nm)	Rx Wavelength (nm)	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Sensitivity (dBm)	Max. Rx Sensitivity (dBm)	Link Budget (dBm)
			SC	MT-RJ	LC							
GX/T Dual Fiber	MM/DF	220 / 550m ¹	8522-0	8524-0	8526-0	850	850	-10	-4	-17	-3	7
	SM	12km	8523-1	8525-1	8527-1	1310	1310	-9.5	-3	-19.5	-3	10
	SM	34km	8523-2	-	8527-2	1310	1310	-5	0	-23	-3*	18
	SM	80km	8523-3	-	8527-3	1550	1550	-5	0	-23	-3*	18
GX/T Single-Fiber	SM	20km	8530-1	-	-	1310	1550	-9.5	-3	-20	-3	10.5
	SM	20km	8531-1	-	-	1550	1310	-9.5	-3	-20	-3	10.5
	SM	40km	8530-2	-	-	1310	1550	-3	0	-20	-3*	17
	SM	40km	8531-2	-	-	1550	1310	-3	0	-20	-3*	17

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

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

*A minimum of 3dB of attenuation is required for these models.

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.

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