iConverter **GX AN**
1000BASE-T to 1000BASE-SX/LX Managed Media Converter

The *iConverter* Gx AN Media Converter is a managed media converter that provides 1000BASE-T UTP to 1000BASE-X fiber conversion between Gigabit networking devices.

The UTP port supports auto-negotiation or forced negotiation of duplex modes and pause capability while the fiber port supports both manual or auto-negotiation.

The *iConverter* Gx AN features user-selectable link fault detection modes, including Link Propagate, Link Segment and Remote Fault Detection. These Link Modes provide rapid fault detection and isolation by monitoring the state of the cabling hardware, and operate independently of the network management.

Fixed-fiber connectors are available with multimode (MM) dual fiber, single-mode (SM) dual fiber and single-mode single-fiber (SF) options. They support ST, SC, LC and MT-RJ connectors with distances up to 220/550m over MM fiber, 140km over SM fiber and 40km over SF. The Gx AN Small Form Pluggable (SFP) model supports a wide variety of 1000BASE-X SFP transceivers.

The *iConverter* Gx AN is available as a compact, unmanaged standalone unit or as a chassis managed plug-in module. The hot-swappable plug-in module can be mounted in a 19 or 5-Module chassis with any combination of redundant AC and DC power supplies. It can also be mounted in a 2-Module AC or DC powered chassis, or in a 1-Module chassis with AC or DC power input.

As a standalone unit, the Gx AN is available as a tabletop or wall-mount unit. The tabletop model can be DIN-rail mounted using an optional DIN-rail mounting kit. Both the tabletop and the wall-mount models are DC powered and are available with an external AC/DC power adapter or a terminal connector for DC power.

The *iConverter* Multi-Service Platform consists of Network Interface Devices, T1/E1 multiplexers, CWDM multiplexers and managed media converters that combine to deliver Carrier Ethernet and TDM services over fiber or CWDM wavelengths. This flexible architecture supports a wide variety of configurations for scalable and reliable fiber connectivity in Service Provider and Enterprise networks.

KEY FEATURES

■ The *iConverter* Gx AN is an IEEE 802.3ab compatible 1000BASE-T UTP to 1000BASE-X fiber converter

■ Small Form Pluggable (SFP) transceivers with Optical Statistics for standard or CWDM applications

■ Fixed-fiber connectors available for multimode and single-mode dual fiber and single-mode single-fiber

■ UTP auto or forced negotitaion of duplex modes and pause capabilities

■ Fiber port supports auto or manual negotiation

■ User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting

■ Management of the plug-in module is available with the addition of a management module to the chassis

■ SNMP management via *NetOutlook*® provides module information, remote parameter configuration and trap notification

■ Plug-in modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis

■ LED displays for immediate visual status of each port

■ Lifetime Warranty and free 24/7 Technical Support

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SPECIFICATIONS

Model Type	Gx AN
Protocols	1000BASE-SX/LX,1000BASE-T with unlimited frame size
UTP Connectors	RJ-45
Fiber Connectors	Small Form Pluggable (SFP) Fixed-Fiber Connectors: Dual-Fiber: ST, SC, LC, MT-RJ Single-Fiber: SC
Controls	DIP-switches and LEDs
DC Power	Plug-in: 0.7A @ 3.3VDC (typical) Standalone: Voltage Range: 8 - 15VDC 0.3A @ 9VDC
DC Power Connector	Plug-in: Power supllied by backplane Standalone: 2.5mm Barrel Connector or Terminial Connector
AC Power Adapter [US]	Plug-in: N/A Standalone: 120VAC/60Hz 0.04A @ 120VAC
AC Power Adapter [International]	Plug-in: N/A Standalone: 100-240VAC/50 to 60Hz 0.04A @ 120VAC
Dimensions	Plug-in: W:0.85" x D:4.5" x H:2.8" Standalone: W:3.1" x D:4.8" x H:1.0" Wall-Mount: W:3.8" x D:4.8" x H:1.0"
Weight	Plug-in: 8 oz. Standalone: 1lb
Compliance	UL, CE, FCC Class A
Temperature	Standard: 0 to 50º C Wide: -40 to 60º C Storage: -40 to 80º C
Humidity	5 to 95% (non-condensing)
Altitude	-100m to 4000m
MTBF (hrs)	
without power adapter	Plug-in: 870,000 Standalone: 1,100,000
with power adapter	Standalone: US: 250,00 Intl: 100,000

MANAGEMENT

Management of the plug-in module is accomplished by using a Network Management Module (NMM2) 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 AN parameters that can be monitored include power, link and data receive status. Other parameters include module type and model, hardware and software revisions, serial numbers and a user-defined identifier.

The user can override the Gx AN plug-in module's physical switch settings using SNMP or Telnet to remotely configure switch-selectable parameters such as UTP Duplex Mode.

Gx AN plug-in modules can generate SNMP traps for module insertion or removal, and port state changes including link-up and link-down. Trap monitoring of specific events can be selectively enabled or disabled by the network administrator.

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00	Dual-Fiber ST Connector Multimode
01	Dual-Fiber ST Connector Single-Mode
02	Dual-Fiber SC Connector Multimode
03	Dual-Fiber SC Connector Single-Mode
04	Dual-Fiber MT-RJ Connector Multimode
05	Dual-Fiber MT-RJ Connector Single-Mode
06	Dual-Fiber LC Connector Multimode
07	Dual-Fiber LC Connector Single-Mode
10	Single-Fiber SC Connector Tx1310 / Rx1550
11	Single-Fiber SC Connector Tx1550 / Rx1310
19	Small Form Pluggable (SFP)

0	For Dual-Fiber: 550m
1	For Single-Fiber: 20km / For Dual-Fiber: 12km
2	For Single-Fiber: 40km / For Dual-Fiber: 34km
3	For Dual-Fiber: 80km
4	For Dual-Fiber: 110km
5	For Dual-Fiber: 140km

<Blank>	Standard Operating Temperature Range Model
W	Wide Operating Temperature Range Model
Z	Extended Operating Temperature Range Model

<Blank>	Plug-In Module
A	Tabletop with External US AC Power Supply
B	Tabletop with External Universal AC Power Supply
C	Tabletop with DC Terminal Power
D	Wall-Mount with External US AC Power Supply
E	Wall-Mount with External Universal AC Power Supply
F	Wall-Mount with DC Terminal Power

For more information on the variety of SFPs available, visit Omnitron's web site at: www.omnitron-systems.com

Model Type	Fiber 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)
			ST	SC	MT-RJ	LC	SFP							
SFP	-	-	-	-	-	-	8519N-0							
Gx AN Dual Fiber	MM	220 / 550m [1]	8500N-0	8502N-0	8504N-0	8506N-0	-	850	850	-10	-4	-17	-3	7
	SM	12km	8501N-1	8503N-1	8505N-1	8507N-1	-	1310	1310	-9.5	-3	-19.5	-3	10
	SM	34km	-	8503N-2	-	8507N-2	-	1310	1310	-5	0	-23	-3*	18
	SM	80km	-	8503N-3	-	8507N-3	-	1550	1550	-5	0	-23	-3*	18
	SM	110km	-	8503N-4	-	-	-	1550	1550	0	5	-24	-3**	24
	SM	140km	-	8503N-5	-	-	-	1550	1550	2	5	-28	-8***	30
Gx AN Single-Fiber	SM	20km	-	8510N-1	-	-	-	1310	1550	-9.5	-3	-20	-3	10.5
	SM	20km	-	8511N-1	-	-	-	1550	1310	-9.5	-3	-20	-3	10.5
	SM	40km	-	8510N-2	-	-	-	1310	1550	-3	0	-20	-3	17
	SM	40km	-	8511N-2	-	-	-	1550	1310	-3	0	-20	-3	17

For wide temperature modules (-40 to 60ºC), add a "W" to the end of the model number. Consult factory for extended temperature (-40 to +75º C) models.
*A minimum of 3dB of attenuation is required for these models.
**A minimum of 8dB of attenuation is required for this model.
***A minimum of 13dB of attenuation is required for this model.
When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other.
[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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