

iConverter GX AN

1000BASE-T to 1000BASE-SX/LX Managed Media Converter

The iConverter GxAN is a 1000BASE-T copper to 1000BASE-X fiber media converter, and is available as a compact unmanaged standalone unit or a managed chassis plug-in module.

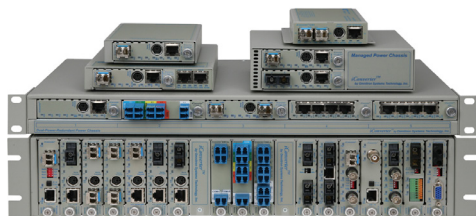
The RJ-45 port supports auto-negotiation or forced negotiation of duplex modes and pause capability. The fiber port supports both manual or auto-negotiation.

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 and LC 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 hot-swappable plug-in module can be mounted in a 19 or 5-Module chassis with 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.

The Gx AN standalone unit 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 to 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.



SFP not included

KEY FEATURES

- The iConverter Gx AN is an IEEE 802.3ab compatible 1000BASE-T copper to 1000BASE-X fiber converter
- Small Form Pluggable (SFP) transceivers with Optical Statistics for standard or CWDM applications
- Fixed-fiber connectors support multimode, single-mode dual fiber with ST, SC and LC connectors, and single-mode single-fiber with SC connectors
- Fiber port supports auto or manual negotiation
- RJ-45 auto or forced negotiation of duplex modes and pause capabilities
- RJ-45 supports MDI/MDIX auto-crossover
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- LED displays for immediate visual status of each port
- Plug-in modules are hot-swappable in 19-Module, 5-Module, 2-Module or 1-Module chassis
- Management of the plug-in module is available with the addition of a management module to the chassis
- SNMP management via NetOutlook® provides 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	iConverter Gx AN 1000BASE-T Copper to 1000BASE-X Fiber Media Converter	
Standard Compliances	IEEE 802.3	
Regulatory Compliances	UL, CE, FCC Class A, RoHS2 (6/6), WEEE, REACH	
Frame Size	Supports frame sizes up to 10K bytes	
Port Types	Copper:	1000BASE-T (RJ-45)
	Fiber:	1000BASE-SX (ST, SC, LC, SFP) 1000BASE-LX (ST, SC, LC, SFP) 1000BASE-ZX (SC, SFP) 1000BASE-BX (SC, SFP)
Cable Types	Copper:	EIA/TIA 568A/B, Cat 5 UTP and higher
	Fiber:	Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm
AC Power Requirements	AC Adapter: (US)	100 - 120VAC/60Hz 0.04A @ 120VAC (max)
	AC Adapter: (Universal)	100 - 240VAC/50 - 60Hz 0.04A @ 120VAC (max)
DC Power Requirements	DC Input: (Backplane)	3.3VDC, 0.7A @ 3.3VDC (typical)
	DC Input: (Terminal Block)	8 - 15VDC, 0.3A @ 9VDC (max) 2-Pin Terminal (non-isolated)
	DC Input: (AC Adapter)	8 - 15VDC, 0.3A @ 9VDC (max) 2.5mm Barrel Connector
Dimensions	Plug-in:	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
	Standalone:	W: 3.1" x D: 4.8" x H: 1.0" L: 78.7 mm x B: 121.9 mm x H: 25.4 mm
	Standalone:	W: 3.8" x D: 4.8" x H: 1.0"
	(Wall-Mount)	L: 96.5 mm x B: 121.9 mm x H: 25.4 mm
Weight	Plug-in:	8 oz.; 226.8 grams
	Standalone w/o Adapter:	1.0 lb.; 453.6 grams
	Standalone w Adapter:	1.5 lbs.; 680.4 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)	Plug-in:	870,000
	Standalone w/o Adapter:	1,100,000
	Standalone w/ US Adapter:	250,000
	Standalone w/ Uni Adapter:	100,000
Warranty	Lifetime warranty with 24/7/365 free Technical Support	

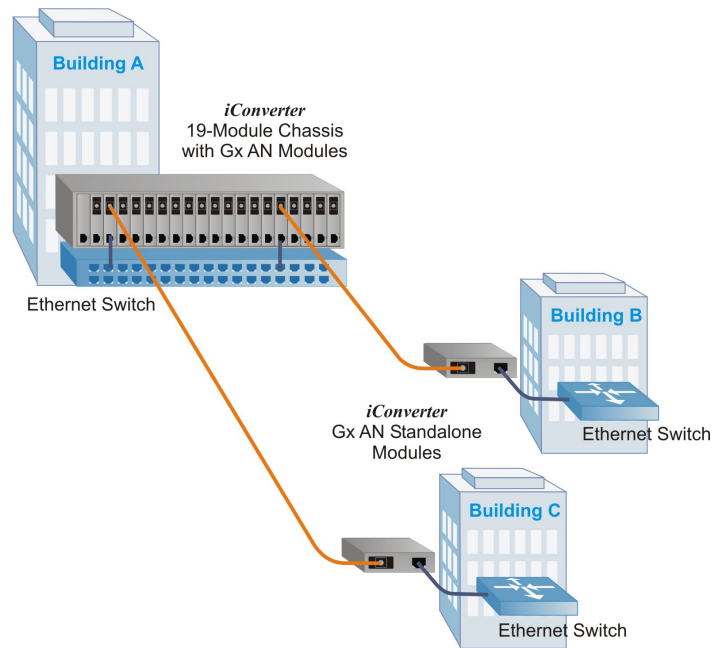
APPLICATION

In this application example, Gx AN media converters are deployed in a star topology network with fiber links distributed from a central location.

At Building A, iConverter Gx AN media converters are installed in an iConverter 19-Module providing a high density copper-to-fiber deployment. RJ-45 ports from an Ethernet switch are converted to fiber, extending the network to different locations throughout the campus.

At Buildings B and C, iConverter Gx AN standalone media converters provide copper-to-fiber connectivity to Ethernet switches in each building.

The iConverter Gx AN 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.



MANAGEMENT

The iConverter Gx AN plug-in module can be used in managed or unmanaged applications. Management provides remote configuration, monitoring and trap notification. Management of the plug-in module 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 AN 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 fiber negotiation, auto or forced negotiation of duplex modes and link modes. Some of the real-time Gx AN parameters that can be monitored include power, link and data activity status. Other parameters include module type and model, hardware and software revisions, serial numbers and a user-defined identifier.

The iConverter Gx AN 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

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<Blank>	Commercial Operating Temperature Range Model
W	Wide Operating Temperature Range Model
<Blank>	Plug-in Module
A	Standalone and External US AC Power Supply
B	Standalone and External Universal AC Power Supply
C	Standalone and DC Terminal Power
D	Standalone with w/mounting brackets and External US AC Power Supply
E	Standalone with w/mounting brackets and External Universal AC Power Supply
F	Standalone with w/mounting brackets and DC Terminal Power

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	SFP								
-	-	-	-	-	8519N-0	-	-	-	-	-	-	-	-
MM/DF	220 / 550m ¹	8500N-0	8502N-0	8506N-0	-	850	850	-10	-4	-17	-3	-	7
MM/DF	2km	-	8502N-6	-	-	1310	1310	-9.5	-3	-19.5	-3	-	10
SM/DF	12km	8501N-1	8503N-1	8507N-1	-	1310	1310	-9.5	-3	-19.5	-3	-	10
SM/DF	34km	-	8503N-2	8507N-2	-	1310	1310	-5	0	-23	-3	3	18
SM/DF	80km	-	8503N-3	8507N-3	-	1550	1550	-5	0	-23	-3	3	18
SM/DF	110km	-	8503N-4	-	-	1550	1550	0	5	-24	-3	8	24
SM/DF	140km	-	8503N-5	-	-	1550	1550	2	5	-28	-8	13	30
MM/SF ²	550m	-	8510N-0	-	-	1310	1550	-9	-3	-18	-3	-	9
MM/SF ²	550m	-	8511N-0	-	-	1550	1310	-9	-3	-18	-3	-	9
SM/SF ²	20km	-	8510N-1	-	-	1310	1550	-9.5	-3	-20	-3	-	10.5
SM/SF ²	20km	-	8511N-1	-	-	1550	1310	-9.5	-3	-20	-3	-	10.5
SM/SF ²	40km	-	8510N-2	-	-	1310	1550	-3	0	-20	-3	3	17
SM/SF ²	40km	-	8511N-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 other configurations, extended temperature (-40 to 75°C) and RoHS (5/6) compliant models. Order the appropriate Gigabit SFPs separately. Visit www.omnitron-systems.com/optical-transceivers.php