iConverter® GX AN

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

The iConverter Gx AN 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 GX AN fixed fiber models support 1000BASE-X over multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors. The Gx AN Small Form Pluggable (SFP) model enables adaptability to different fiber types and distances. The SFP model also supports Coarse Wave Division Multiplexing (CWDM) and Dense Wave Division Multiplexing (DWDM) technologies to increase the bandwidth capacity of fiber infrastructure.

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.

iConverter Gx AN media converters are available as compact, unmanaged standalone units, or chassis plug-in modules that can be managed with a Management Module (NMM2) or Network Interface Device (NID) installed in the chassis. The management module provides access to all the advanced features on the module.

The Gx AN standalone models are available with an external AC to DC power adapter or with a 2-pin terminal connector for direct connection to DC power. The standalone module can be DIN-Rail mounted using the optional DIN-Rail mounting bracket (8250-0) or mounting clips (8251-0).

The hot-swappable plug-in module can be mounted in a 19 or 5-Module iConverter 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 iConverter Multi-Service Platform consists of Network Interface Devices, T1/E1 multiplexers, CWDM/DWDM multiplexers and managed media converters that combine to deliver Carrier Ethernet and TDM services over fiber or CWDM/DWDM 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, CWDM or DWDM 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
- Made in the USA
- 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	
Environmental	RoHS, WEEE, REACH	
Frame Size	Supports frame sizes up to 10K bytes	
Port Types	Copper: Fiber:	1000BASE-T (RJ-45) 1000BASE-SX (ST, SC, LC, SFP) 1000BASE-LX (ST, SC, LC, SFP) 1000BASE-ZX (SC, SFP) 1000BASE-BX (SC, SFP)
Cable Types	Copper: Fiber:	EIA/TIA 568A/B, Cat 5 UTP and higher Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm
AC Power Requirements	AC Adapter: (US)	100 - 240VAC/50 - 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 W x D x H	Plug-in: Standalone: Standalone: (Wall-Mount)	0.85" x 4.5" x 2.8" (21.6 mm x 114.3 mm x 71.1 mm) 3.1" x 4.8" x 1.0" (78.7 mm x 121.9 mm x 25.4 mm) 3.8" x 4.8" x 1.0" (96.5 mm x 121.9 mm x 25.4 mm)
Weight	Plug-in: Standalone w/o Adapter: Standalone w Adapter:	8 oz. (226.8 grams) 1.0 lb.; 453.6 grams 1.5 lbs.; 680.4 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)	Plug-in: Standalone w/o Adapter: Standalone w/ US Adapter: Standalone w/ Uni Adapter:	870,000 1,100,000 250,000 100,000
Warranty	Lifetime warranty with 24/7/365 free Technical Support	

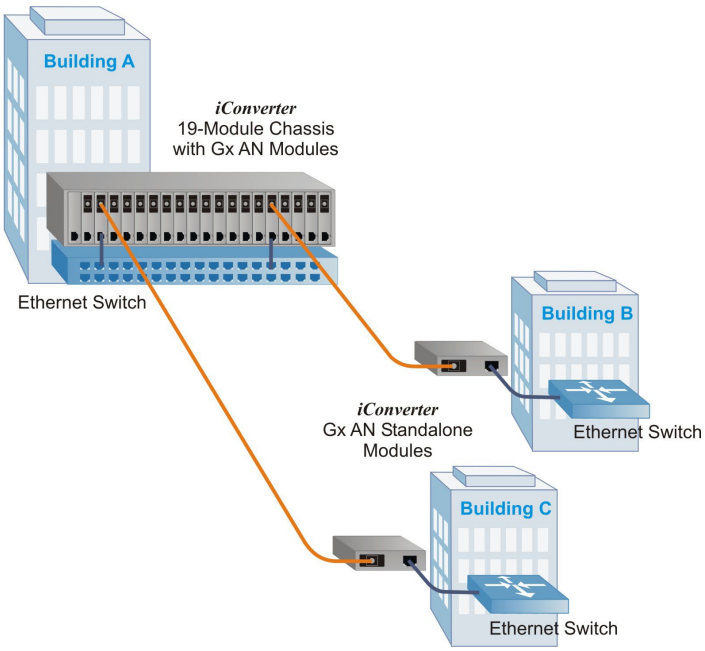
APPLICATION

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.



ORDERING INFORMATION

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)
		ST	SC	LC	SFP							
-	-	-	-	-	8519N-0-pt	-	-	-	-	-	-	-
MM/DF	220 / 550m[1]	8500N-0-pt	8502N-0-pt	8506N-0-pt	-	850 / 850	-10	-4	-17	-3	-	7
MM/DF	2km	-	8502N-6-pt	-	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
SM/DF	12km	8501N-1-pt	8503N-1-pt	8507N-1-pt	-	1310 / 1310	-9.5	-3	-19.5	-3	-	10
SM/DF	34km	-	8503N-2-pt	8507N-2-pt	-	1310 / 1310	-5	0	-23	-3	3	18
SM/DF	80km	-	8503N-3-pt	8507N-3-pt	-	1550 / 1550	-5	0	-23	-3	3	18
SM/DF	110km	-	8503N-4-pt	-	-	1550 / 1550	0	5	-24	-3	8	24
SM/DF	140km	-	8503N-5-pt	-	-	1550 / 1550	2	5	-28	-8	13	30
MM/SF[2]	550m	-	8510N-0-pt	-	-	1310 / 1550	-9	-3	-18	-3	-	9
MM/SF[2]	550m	-	8511N-0-pt	-	-	1550 / 1310	-9	-3	-18	-3	-	9
SM/SF[2]	20km	-	8510N-1-pt	-	-	1310 / 1550	-9.5	-3	-20	-3	-	10.5
SM/SF[2]	20km	-	8511N-1-pt	-	-	1550 / 1310	-9.5	-3	-20	-3	-	10.5
SM/SF[2]	40km	-	8510N-2-pt	-	-	1310 / 1550	-3	0	-20	-3	3	17
SM/SF[2]	40km	-	8511N-2-pt	-	-	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.

MM = Multimode, SM = Single-mode, DF = Dual Fiber, SF = Single-fiber

Base Model Number: 85xx-x-pt

Select the model from ordering table above.

Add power option (**p**) and operating temperature range (**t**) to the model type selected.

Power Options (p):

<leave blank> = Plug-in module

A = Barrel Connector and AC/DC Power Adapter, 100-240VAC, 50-60Hz, with US power cord without integrated mounting brackets	**D** = Barrel Connector and AC/DC Power Adapter, 100-240VAC, 50-60Hz, with US power cord with integrated mounting brackets
B = Barrel Connector and Universal AC/DC Adapter, 100-240 VAC, 50-60Hz, No Power Cord, without integrated mounting brackets	**E** = Barrel Connector and Universal AC/DC Adapter, 100-240 VAC, 50-60Hz, No Power Cord, with integrated mounting brackets
C = Direct DC input, 2 pin terminal connector, no AC/DC power adapter, without integrated mounting brackets	**F** = Direct DC input, 2 pin terminal connector, no AC/DC power adapter, with integrated mounting brackets

Operating Temperature Options (t):

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

Contact Omnitron for other configurations, extended temperature (-40 to 75°C) and RoHS (5/6) compliant models.
Order the appropriate Gigabit SFPs separately. Visit the Omnitron Optical Transceivers web page.
For chassis options, see iConverter Chassis Overview web page.

Accessories	
Model Number	**Description**
8250-0	DIN Rail Mounting Bracket for standalone modules without integrated mounting brackets (power option -A, -B, -C)
8251-0	DIN Rail Mounting Clip for standalone models with integrated mounting brackets (power options -D, -E, -F)
8260-0	1U Rack Mount Shelf for standalone models

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