

iConverter 100Fx/Tx

100BASE-TX to 100BASE-FX Managed Ethernet Media Converter

The iConverter 100Fx/Tx managed media converters are members of the modular iConverter product family, and provide 100BASE-TX copper to 100BASE-FX fiber conversion.

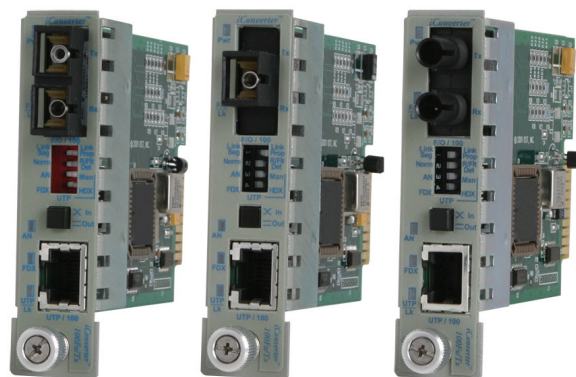
The iConverter 100Fx/Tx models support multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors. The RJ-45 port supports 100BASE-TX in either Half or Full-Duplex mode. A UTP crossover switch eliminates the need for a crossover cable and facilitates connectivity to network equipment such as hubs, switches and workstations.

The 100Fx/Tx features user-selectable Link Propagate, Link Segment, Remote Fault Detection and Symmetrical Fault Detection modes to facilitate quick fault detection, isolation and reporting.

iConverter 100Fx/Tx 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.



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 100Fx/Tx is an IEEE 802.3 compatible 100BASE-TX copper to 100BASE-FX fiber converter
- Supports multimode, single-mode dual fiber with ST, SC and LC connectors, and single-mode single-fiber with SC connectors
- RJ-45 port supports Half or Full-Duplex 100Mbps Ethernet
- UTP crossover switch eliminates the need for a crossover cable
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- LED displays for immediate visual status of each port
- 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), wide (-40° to 60°C) and extended (-40° to 75° C) temperature ranges
- Lifetime Warranty and free 24/7 Technical Support

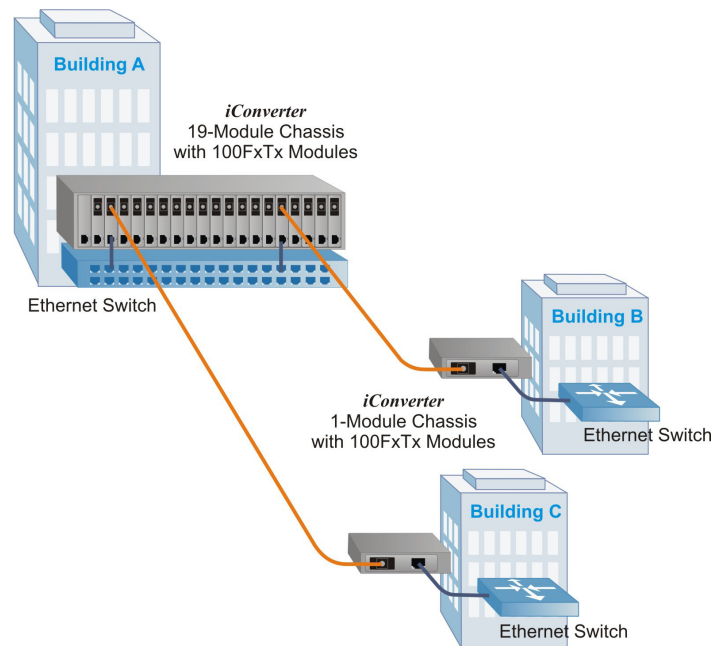
APPLICATION

In this application example, 100FxDx media converters are deployed in a star topology network with fiber links distributed from a central location.

At Building A, iConverter 100FxDx media converters are installed in an iConverter 19-Module providing a high density copper-to-fiber deployment. RJ-45 ports from the Ethernet switch are converted to fiber, extending the network to different locations throughout the campus.

At Buildings B and C, iConverter 100FxDx media converters are installed in iConverter 1-Module Chassis. The iConverter 100FxDx modules provide copper-to-fiber connectivity to Ethernet switches in each building.

The iConverter 100FxDx 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 100FxDx can be used in managed or unmanaged applications. Management provides remote configuration, monitoring and trap notification. Management of the 100FxDx 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 100FxDx 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 Link Propagate, Link Segment, and Remote Fault Detection. Other parameters include module type and model, hardware and software revisions, serial numbers and a user-defined identifier.

The iConverter 100FxDx 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.

SPECIFICATIONS

Description	iConverter 100Fx/Tx 100BASE-TX Copper to 100BASE-FX Fiber Media Converter	
Standard Compliances	IEEE 802.3	
Regulatory Compliances	UL, CE, FCC Class A, NEBS Level 3, RoHS2, WEEE, REACH	
Frame Size	Unlimited	
Port Types	Copper:	100BASE-TX (RJ-45)
	Fiber:	100BASE-FX (ST, SC, LC) 100BASE-LX (ST, SC, LC) 100BASE-ZX (SC, LC) 100BASE-BX (SC Single-Fiber)
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, 0.7A @ 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
	Extended:	-40 to 75°C
	Storage:	-40 to 80°C
Humidity	5 to 95% (non-condensing)	
Altitude	-100m to 4,000m	
MTBF (hrs)	730,000	
Warranty	Lifetime warranty and 24/7/365 free Technical Support	

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	5km	8360-0	8362-0	8366-0	1310	1310	-24	-14	-31	-14	-	7
SM/DF	30km	8361-1	8363-1	8367-1	1310	1310	-15	-8	-31	-8	-	16
SM/DF	60km	8361-2	8363-2	8367-2	1310	1310	-5	0	-31	-3	3	26
SM/DF	120km	-	8363-3	8367-3	1550	1550	-5	0	-31	-3	3	26
SM/SF ¹	20km	-	8370-1	-	1310	1550	-15	-5	-30	-3	-	15
SM/SF ¹	20km	-	8371-1	-	1550	1310	-15	-5	-30	-3	-	15
SM/SF ¹	40km	-	8370-2	-	1310	1550	-8	0	-30	-3	3	22
SM/SF ¹	40km	-	8371-2	-	1550	1310	-8	0	-30	-3	3	22
SM/SF ¹	60km	-	8370-3	-	1310	1550	-5	0	-31	-3	3	26
SM/SF ¹	60km	-	8371-3	-	1550	1310	-5	0	-31	-3	3	26

¹ 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. For extended temperature (-40 to 75°C), add a "Z" to the end of the model number.

Contact Omnitron for other configurations.

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