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-X fiber conversion.

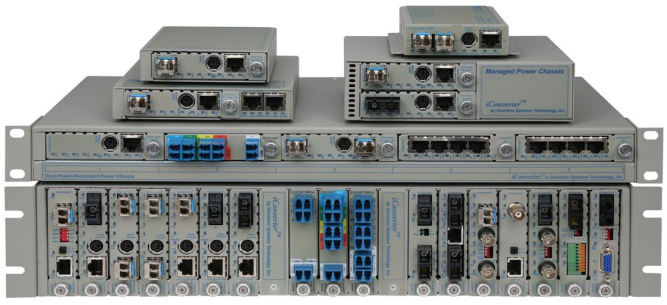
The iConverter 100Fx/Tx models support multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors. The RJ-45 port supports 100BASE-TX Half or Full-Duplex mode. A UTP crossover switch facilitates connectivity to network equipment such as hubs, switches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

The iConverter 100Fx/Tx can be used in managed or unmanaged applications. Management is accomplished by installing an iConverter Management Module (NMM2) or Network Interface Device (NID) in the same chassis. The management module provides access to all the advanced features available on the module.

The management software can override the physical DIP-switch settings such as Link Propagate, Link Segment, and Remote Fault Detection. The module supports SNMP trap notification for the monitoring and notification of different network events.

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 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/DWDM multiplexers and managed media converters that combine to deliver Carrier Ethernet and TDM services over fiber or CWDM/DWDM wavelengths.

KEY FEATURES

- 100BASE-TX copper to 100BASE-X 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
- Automatic Link Recovery
- 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 50ºC), wide (-40º to 60ºC) and extended (-40º to 75º C) temperature ranges
- TAA, BAA and NDAA compliant, and Made in the USA
- Lifetime Warranty and free 24/7 Technical Support

SPECIFICATIONS

Description	***iConverter* 100Fx/Tx** 100BASE-TX Copper to 100BASE-X Fiber Media Converter	
Standard Compliances	IEEE 802.3	
Regulatory Compliances	Safety: EMI: ACT:	UL, CE, NEBS Level 3, UKCA FCC Class A TAA, BAA,NDAA
Environmental	RoHS, WEEE, REACH	
Port Types	Copper: Fiber:	100BASE-TX (RJ-45) 100BASE-FX (ST, SC, LC) 100BASE-LX (ST, SC, LC) 100BASE-ZX (SC, LC) 100BASE-BX (SC Single-Fiber)
Cable Types	Copper: Fiber:	EIA/TIA 568A/B, Cat 5 UTP and higher Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm

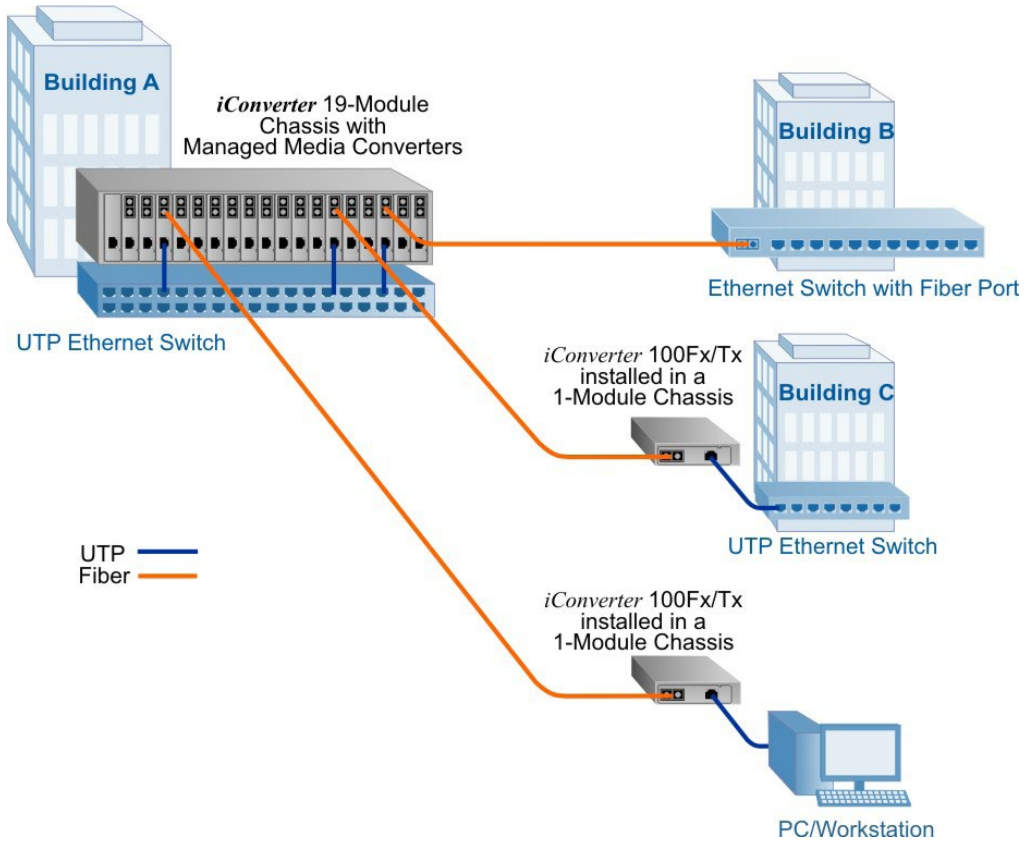
Frame Size	Unlimited	
DC Power Requirements	DC Input: (Backplane)	3.3VDC, 0.7A @ 3.3VDC
Dimensions W x D x H	0.85" x 4.5" x 2.8" (21.6 mm x 114.3 mm x 71.1 mm)	
Weight	8 oz. (226.8 grams)	
Temperature	Commercial: Wide: Extended: Storage:	0 to 50°C -40 to 60°C -40 to 75°C -40 to 80°C
Humidity	5 to 95% (non-condensing)	
Altitude	-100m to 4,000m	
MTBF (hrs)	730,000	
Warranty	Lifetime warranty and 24/7/365 free Technical Support	

APPLICATION

In this enterprise campus application example, iConverter 100Fx/Tx media converters are installed in a 19-Module chassis for high-density fiber distribution from UTP Ethernet switch at Building A.

At Building B, an Ethernet switch with a fiber port is connected directly via fiber to the iConverter module at Building A. A UTP Ethernet switch at Building C is connected via fiber with an iConverter 100Fx/Tx media converter installed in a 1-Module Chassis. Another iConverter 100Fx/Tx converts the fiber to copper in a fiber-to-desktop application.

In all cases, multimode or single-mode fiber can be used, and fiber links can be extended up to 120km using single-mode fiber.



ORDERING INFORMATION

Step 1: Choose a Base Part Number (xxxx-xt)

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							
MM/DF	5km	8360-0t	8362-0t	8366-0t	1310 / 1310	-24	-14	-31	-14	-	7
SM/DF	30km	8361-1t	8363-1t	8367-1t	1310 / 1310	-15	-8	-31	-8	-	16
SM/DF	60km	8361-2t	8363-2t	8367-2t	1310 / 1310	-5	0	-31	-3	3	26
SM/DF	120km	-	8363-3t	8367-3t	1550 / 1550	-5	0	-31	-3	3	26
MM/SF[1]	5km	-	8370-0t	-	1310 / 1550	-8	0	-28	0	-	20
MM/SF[1]	5km	-	8371-0t	-	1550 / 1310	-8	0	-28	0	-	20
SM/SF[1]	20km	-	8370-1t	-	1310 / 1550	-15	-5	-30	-3	-	15
SM/SF[1]	20km	-	8371-1t	-	1550 / 1310	-15	-5	-30	-3	-	15
SM/SF[1]	40km	-	8370-2t	-	1310 / 1550	-8	0	-30	-3	3	22
SM/SF[1]	40km	-	8371-2t	-	1550 / 1310	-8	0	-30	-3	3	22
SM/SF[1]	60km	-	8370-3t	-	1310 / 1550	-5	0	-31	-3	3	26
SM/SF[1]	60km	-	8371-3t	-	1550 / 1310	-5	0	-31	-3	3	26

[1] When using single-fiber (SF) 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

Contact Omnitron for other configurations and RoHS (5/6) compliant models.

For chassis options, see iConverter Chassis and Mounting Options web page.

Step 2: Choose an Operating Temperature Range (xxxx-xt)

<leave blank> = Commercial temperature (0 to 50°C)
W = Wide temperature (-40 to 60°C)
Z = Wide temperature (-40 to 75°C)