

iConverter® 2Fx

100BASE-FX to 100BASE-FX Managed Fast Ethernet Media Converter & Switch

The iConverter 2Fx is a Fast Ethernet fiber-to-fiber media converter that provides multimode to single-mode and dual fiber to single fiber conversion with advanced switching features. The 2Fx is a member of the modular iConverter product family, and is a cost-effective solution to extend fiber network distances over single-mode fiber cabling. The iConverter 2Fx regenerates and re-times the fiber optic signal, and multiple 2Fxs can be used to extend total network distances.

iConverter 2Fx models support multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors.

The iConverter 2Fx features two 10/100 Ethernet backplane ports to provide connectivity to adjacent modules for network expansion and provides additional fiber ports for iConverter modular Network Interface Devices (NIDs).

The iConverter 2Fx supports the IEEE 802.1Q and 802.1p standards. It supports the 802.1Q VLAN packet tagging and untagging for segregating data in Enterprise networks, and enables secure separation of Service Provider network management and customer data.

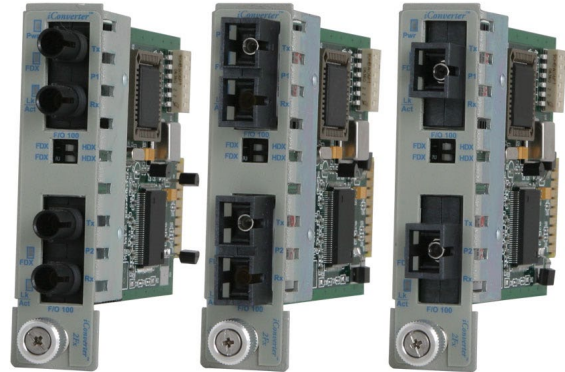
The 802.1p prioritization enables delivery of Quality of Service (QoS) to high-priority, real-time applications such as voice and video over Ethernet.

The iConverter 2Fx supports Bandwidth and Port Access Controls. Bandwidth Control enables the network administrator to selectively deliver eight different levels of traffic bandwidth to different ports, thereby limiting the bandwidth allocated to individual users. The Port Access Control enables the network administrator to easily control and deny individual port access while maintaining port configuration for easy port re-enabling.

The 2Fx features user-selectable fault detection modes to facilitate quick fault detection, isolation and reporting.

The iConverter 2Fx 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 hot-swappable plug-in module can be mounted in a high-density 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.



KEY FEATURES

- 100BASE-FX to 100BASE-FX Fast Ethernet fiber converter and switch
- Supports multimode, single-mode dual fiber with ST, SC and LC connectors, and single-mode single-fiber with SC connectors
- 100Mbps Ethernet backplane ports for connectivity to adjacent modules
- Supports IEEE 802.1Q Tag VLAN, Q in Q and Port VLAN
- Supports IEEE 802.1p Prioritization QoS
- Individual Port Bandwidth and Port Access Controls
- Per port MIB statistics
- User-selectable link fault detection modes facilitate quick fault detection, isolation and reporting
- Automatic Link Recovery
- 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 status, parameter configuration and trap notification
- Commercial (0 to 50°C) and wide (-40° to 60°C) temperature ranges
- TAA, BAA and NDAA compliant, and Made in the USA
- Lifetime Warranty and free 24/7 Technical Support

SPECIFICATIONS

Description	iConverter 2Fx 100BASE-FX to 100BASE-FX Fiber Media Converters	
Standard Compliances	IEEE 802.3, 802.1Q, 802.1p RFC 2819 (RMON)	
Regulatory Compliances	Safety: EMI: ACT:	UL, cUL, CE, UKCA FCC Class A TAA, BAA, NDAA
Environmental	RoHS, WEEE, REACH	
Frame Size	Up to 1,536 bytes	
Port Types	Fiber:	100BASE-FX (ST, SC, LC) 100BASE-LX (ST, SC, LC) 100BASE-ZX (SC, LC) 100BASE-BX (SC Single-Fiber)
Cable Types	Fiber:	Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm

DC Power Requirements	DC Input: (Backplane)	3.3VDC, 0.9A @ 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: 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)	880,000	
Warranty	Lifetime warranty and 24/7/365 free Technical Support	

ORDERING INFORMATION

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

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	8440-0t	8442-0t	8446-0t	1310	1310	-24	-14	-31	-14	-	7
SM/DF	30km	8441-1t	8443-1t	8447-1t	1310	1310	-15	-8	-31	-8	-	16
SM/DF	60km	8441-2t	8443-2t	8447-2t	1310	1310	-5	0	-31	-3	3	26
SM/DF	120km	-	8443-2t	8447-3t	1550	1550	-5	0	-31	-3	3	26
SM/SF ¹	20km	-	8450-1t	-	1310	1550	-15	-5	-30	-3	-	15
SM/SF ¹	20km	-	8451-1t	-	1550	1310	-15	-5	-30	-3	-	15
SM/SF ¹	40km	-	8450-2t	-	1310	1550	-8	0	-30	-3	3	22
SM/SF ¹	40km	-	8451-2t	-	1550	1310	-8	0	-30	-3	3	22

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, extended temperature (-40 to 75°C) 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)

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