

FlexPoint® 100Fx/Tx Fast Ethernet Copper to Fiber Media Converter

The FlexPoint 100Fx/Tx is a 100BASE-TX copper to 100BASE-FX fiber media converter that provides reliable and cost-effective network connectivity and fiber extension.

The FlexPoint 100Fx/Tx RJ-45 port auto-negotiates to the highest level of performance supported by the attached device. Manual switch settings and LED indicators with on-label descriptions enable easy configuration to legacy devices or matching specific network requirements.

The FlexPoint 100Fx/Tx fiber port operates at 1310nm or 1550nm and supports ST, SC, MT-RJ or LC connectors. Multimode models support distances of up to 5km and single-mode models support distances of up to 120km.

Diagnostic data is provided through LED indicators that assist in network installation and maintenance. The LEDs report the availability of power, port activity and link status, duplex mode and error indicators.

The FlexPoint 100Fx/Tx features a crossover switch that eliminates the need for a crossover cable and facilitates connectivity to network equipment such as switches or workstations.

FlexPoint modules can be mounted utilizing optional wall-mounting hardware or with DIN-rail mounting brackets. They can also be rack-mounted in a 5-Module shelf or in a high-density 14-Module, power-redundant Powered Chassis.

FlexPoint modules installed in the 5-Module shelf or used as standalone devices can be powered by an external AC to DC power adapter, or through the 5VDC chassis connector. Standalone modules can also be powered by attaching an external DC power supply (18-60VDC). When used in the 14-Module power-redundant Powered Chassis with any combination of AC and DC power supplies, the installed modules are powered via the 5VDC chassis connector.

The wide variety of FlexPoint mounting and power options provide flexible upgrade paths as network requirements change and grow.

FlexPoint unmanaged media converters are easy to use and provide dependable fiber connectivity in Enterprise and Government networks around the world.



KEY FEATURES

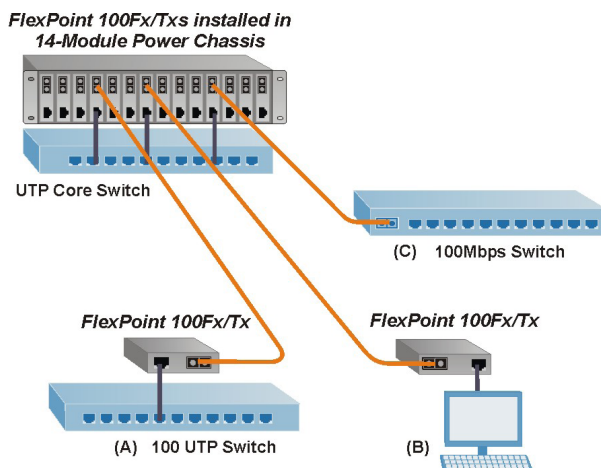
- 100BASE-TX copper to 100BASE-FX fiber media converter
- Supports auto-negotiation of duplex modes for easy installation
- Cut-through packet transfer for minimal delay
- Extends network distances up to 120km
- Supports most network interfaces with a wide variety of cable and connector types
- Labeled status LEDs and switches for quick and easy installation
- Features a crossover switch for connection to switches or workstations
- Wall-mount or rack-mount on a 5-Module shelf or in a 14-Module power-redundant FlexPoint Powered Chassis
- Commercial (0 to 50°C) and wide (-40 to 60°C) temperature ranges
- Completely software independent with no installation of drivers required
- TAA, BAA and NDAA compliant, and Made in the USA
- Peace-of-mind reliability backed by a lifetime warranty and free 24/7 technical support

APPLICATION EXAMPLE

In this enterprise campus application example, FlexPoint 100Fx/Tx media converters are installed in a 14-Module Redundant Power chassis for high-density fiber distribution from copper switch equipment at the Network Core. A copper workgroup switch (A) is connected via fiber with a standalone FlexPoint 100Fx/Tx media converter. Another FlexPoint 100Fx/Tx converts the fiber to UTP in a fiber-to-desktop application (B). An Ethernet switch (C) is connected directly via fiber to the FlexPoint module at the Network Core.

The FlexPoint 100Fx/Tx RJ-45 port can be configured for auto-negotiation or manual operation depending on the configuration of the connected device. This prevents a mismatch of operation when the connected device is forced to manual.

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



SPECIFICATIONS

Description	FlexPoint 100FX/TX 100BASE-TX Copper to 100BASE-FX Fiber Media Converter		
Standard Compliances	IEEE 802.3		
Regulatory Compliances	Safety:	UL, cUL, CE, UKCA	
	EMI:	FCC Class A	
	ACT:	TAA, BAA, NDAA	
Environmental	RoHS, WEEE, REACH		
Frame Size	Supports unlimited frame sizes		
Port Types	Copper:	100BASE-TX (RJ-45)	
	Fiber:	100BASE-FX (ST, SC, MT-RJ, LC)	
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:	100 - 240VAC/50 - 60Hz 0.03A @ 120VAC (typical)	
DC Power Requirements	Voltage Range: Nominal Voltage: Nominal Power:	Barrel Connector	Molex Connector
		6.0 to 15.0VDC 9VDC	4.75 to 5.25VDC 5VDC
		0.3A @ 9VDC	0.5A @ 5VDC
Dimensions W x D x H	3.0" x 4.0" x 1.0" (76.2 mm x 101.6 mm x 25.4 mm)		
Weight	Without AC Adapter:	6 oz. (170.1 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)	Without AC Adapter (-0):		930,000
	With AC Adapter (-1):		250,000
	With AC Adapter (-2):		100,000
Warranty	Lifetime warranty with 24/7/365 free Technical Support		



ORDERING INFORMATION

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

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	MT-RJ	LC							
MM/DF	5km	4332-pt	4330-pt	4336-pt	4353-1pt	1310 / 1310	-24	-14	-31	-14	-	7
SM/DF	30km	4333-pt	4331-pt	-	4353-2pt	1310 / 1310	-15	-8	-31	-8	-	16
SM/DF	60km	4335-pt	4334-pt	-	4353-3pt	1310 / 1310	-5	0	-31	-3	3	26
SM/DF	120km	-	4351-pt	-	4353-4pt	1550 / 1550	-5	0	-31	-3	3	26
SM/SF ¹	20km	-	4352-1pt	-	-	1310 / 1550	-15	-5	-30	-3	-	15
SM/SF ¹	20km	-	4352-2pt	-	-	1550 / 1310	-15	-5	-30	-3	-	15

¹ 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

Contact Omnitron for other fiber options, operational temperature ranges and RoHS (5/6) compliant models.

Step 2: Choose a Power Option (xxxx-pt)

-0 = Barrel Connector, No AC/DC Power Adapter
-1 = Barrel Connector and US AC/DC Power Adapter, 100-240 VAC, 50-60Hz
-2 = Barrel Connector and Universal AC/DC Power Adapter, 100-240VAC, 50-60Hz (requires AC power cord)

Step 3: Choose an Operating Temperature Range (xxxx-pt)

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



-1 = Barrel Connector and US AC/DC Power Adapter, 100-240 VAC, 50-60Hz



-2 = Barrel Connector and Universal AC/DC Power Adapter, 100-240VAC, 50-60Hz (requires AC power cord)

ACCESSORIES

Model Number	Description	Model Number	Description
4380	Wall-Mounting Hardware Kit for Modules	4381	Wall-Mounting Hardware Kit for DC to DC Power Adapter
4384	DC to DC Power Adapter	4384-W	DC to DC Power Adapter, Wide Temperature (-40 to 60°C)
4385	14-Module Chassis with two 48VDC Power Supplies	4386	14-Module Chassis with one 48VDC Power Supply
4389	Spare 48VDC Power Supply	4392	5-Module Rack-Mount Shelf
4395	14-Module Chassis with two AC Power Supplies	4396	14-Module Chassis with one AC Power Supply
4399	Spare AC Power Supply	8250	DIN-Rail Mounting Kit

See all FlexPoint accessories on [FlexPoint Chassis and Mounting Options product page](#)

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