FlexPoint® 100FF

Fast Ethernet Fiber-to-Fiber Converter/Transponder

The FlexPoint 100FF is a Fast Ethernet fiber-to-fiber converter/transponder that provides reliable and cost-effective extension of network distances by connecting multimode fiber networks or devices over single-mode fiber cabling.

The FlexPoint 100FF is designed to operate with a constant rate signal between 1Mbps to 100Mbps allowing the converter to be used in Ethernet networks as well as other fiber-to-fiber protocol applications.

No manual configuration is required with the plug-and-play FlexPoint 100FF. Connect the fiber cables to the appropriate interface and the installation is complete.

Depending on the model, the fiber port operates at 850nm, 1310nm or 1550nm and features SC or ST connectors. Multimode fiber models support distances of up to 5km, and single-mode fiber models support distances of up to 120km.

The FlexPoint 100FF features descriptions of the LED indicators on the label for easy in-the-field installation and maintenance. The LEDs report the availability of power and the detection of devices attached to the fiber ports.

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

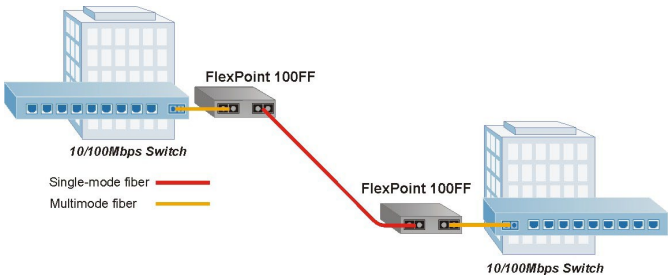
- Fiber-to-Fiber Converter/Transponder supporting:
  - Multimode dual fiber to multimode dual fiber
  - Multimode dual fiber to single-mode dual fiber
  - Single-mode dual fiber to single-mode dual fiber
  - Wavelength conversion
- Conforms to IEEE 802.3 and 100BASE-FX specifications
- Operates with a constant rate signal from 1Mbps to 100Mbps
- Supports multimode and single-mode dual fiber with ST or SC connectors
- Plug-and-play installation requires no manual configuration or software drivers
- Supports auto-negotiation of duplex mode
- Extends network distances up to 120km
- Labeled status LEDs for quick and easy installation
- Wall-mount or rack-mount on a 5-Module shelf or in a 14-Module power-redundant FlexPoint Powered Chassis
- TAA, BAA, NDAA compliant, and Made in the USA
- Peace-of-mind reliability backed by a lifetime warranty and free 24/7 technical support

SPECIFICATIONS

Description	**FlexPoint 100FF** Fast Ethernet Fiber-to-Fiber Converter/Transponder		
Standard Compliances	IEEE 802.3, Protocol Transparent		
Regulatory Compliances	Safety: EMI: ACT:	UL, cUL, CE, UKCA FCC Class A TAA, BAA, NDAA	
Environmental	RoHS, WEEE, REACH		
Frame Size	Supports unlimited frame sizes		
Port Type	Fiber:	100BASE-X (ST, SC)	
Cable Type	Fiber:	Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm	
AC Power Requirements	AC Adapter:	100 - 240VAC/50 - 60Hz 0.04A @ 120VAC (typical)	
DC Power Requirements		Barrel Connector	Molex Connector
	Voltage Range: Nominal Voltage: Nominal Power:	6.0 to 15.0VDC 9VDC 0.2A @ 9VDC	4.75 to 5.25VDC 5VDC 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: Storage:	0 to 50°C -40 to 80°C	
Humidity	5 to 95% (non-condensing)		
Altitude	-100m to 4,000m		
MTBF (hrs)	Without AC Adapter (-0): With AC Adapter (-1): With AC Adapter (-2):	2,600,000 250,000 100,000	
Warranty	Lifetime warranty with 24/7/365 free Technical Support		

APPLICATION EXAMPLE

The FlexPoint 100FF fiber converter can extend the network across single-mode fiber with distances up to 120km. In this application, two 10/100Mbps Ethernet switches are connected utilizing a pair of FlexPoint 100FF fiber converters, which are connected to the switches via a multimode fiber uplink.



ORDERING INFORMATION

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

Port	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							
Port 1	MM/DF	5km	4420-p	4421-p	1310 / 1310	-24	-14	-31	-14	-	7
Port 2	MM/DF	5km			1310 / 1310	-24	-14	-31	-14	-	7
Port 1	MM/DF	2km	4414-6p	4415-6p	850 / 850	-10	-4	-24	-3	-	14
Port 2	SM/DF	30km			1310 / 1310	-15	-8	-31	-8	-	16
Port 1	MM/DF	5km	4410-p	4411-p	1310 / 1310	-24	-14	-31	-14	-	7
Port 2	SM/DF	30km			1310 / 1310	-15	-8	-31	-8	-	16
Port 1	MM/DF	5km	4412-p	4413-p	1310 / 1310	-24	-14	-31	-14	-	7
Port 2	SM/DF	60km			1310 / 1310	-5	0	-31	-3	3	26
Port 1	MM/DF	5km	-	4425-p	1310 / 1310	-24	-14	-31	-14	-	7
Port 2	SM/DF	120km			1550 / 1550	-5	0	-31	-3	3	26
Port 1	SM/DF	60km	-	4423-p	1310 / 1310	-5	0	-31	-3	3	26
Port 2	SM/DF	120km			1550 / 1550	-5	0	-31	-3	3	26

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

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

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

-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)

Operating Temperature

Commercial temperature (0 to 50°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