

FlexPoint 100FF Single-mode to Multimode Fiber Converters for Fast Ethernet

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

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.

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.

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

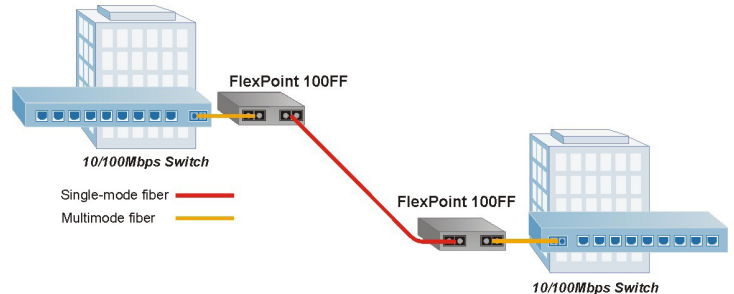
- The FlexPoint 100FF is a single-mode to multimode protocol-independent fiber converter
- Plug-and-play installation requires no manual configuration
- Operates with a constant rate signal from 1M to 100Mbps
- Supports auto-negotiation of duplex mode
- Extends network distances up to 120km
- Supports most network interfaces with a wide variety of cable and connector types
- 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
- Completely software independent with no installation of drivers required
- Peace-of-mind reliability backed by a lifetime warranty and free 24/7 technical support

SPECIFICATIONS

Model Type	100 FF		
Protocols	10BASE-FL, 100BASE-FX		
Fiber Cables	Multimode: 50/125, 62.5/125, 100/140µm Single-mode: 9/125µm		
Fiber Connectors	SC, ST		
LED Displays	Power, Fiber Link/Activity		
Dimensions	W: 3.0" x D: 4.0" x H: 1.0"		
Weight	6 oz. (without power adapter)		
Compliance	UL, CE, FCC Class A		
Power Requirements	Nominal Voltage: Voltage Range: Power Nominal: Maximum Power:	Barrel Connector 9VDC 6.0 to 15.0VDC 0.2A @ 9VDC 1A @ 9VDC	Molex Connector 5VDC 4.75 to 5.25VDC 0.5A @ 5VDC 0.75A @ 5VDC
Temperature	0 to 50° C		
Humidity	5 to 95% (non-condensing)		
Altitude	-100m to 4000m		
MTBF (Hours)	Module without Power Adapter: 2,600,000 Module with Power Adapter -1: 250,000 Module with Power Adapter -2: 100,000		

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

Port	Fiber Type	Distance	Connector Type		Wavelength [nm]	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Sensitivity (dBm)	Max. Rx Sensitivity (dBm)	Link Budget (dBm)
			ST	SC						
Port 1	MM	5km	4410-x	4411-X	1310	-24	-14	-31	-14	7
Port 2	SM	30km			1310	-15	-8	-31	-8	16
Port 1	MM	5km	4412-x	4413-x	1310	-24	-14	-31	-14	7
Port 2	SM	60km			1310	-5	0	-31	-3*	26
Port 1	MM	5km	4420-x	4421-x	1310	-24	-14	-31	-14	7
Port 2	MM	5km			1310	-24	-14	-31	-14	7
Port 1	SM	60km	-	4423-x	1310	-5	0	-31	-3*	26
Port 2	SM	120km			1550	-5	0	-31	-3*	26
Port 1	MM	5km	-	4425-x	1310	-24	-14	-31	-14	7
Port 2	SM	120km			1550	-5	0	-31	-3*	26

Power Adapter Kits (-x): -0 = No power adapter included, -1 = 110-120 VAC/60 Hz (US plug), -2 = 100-240 VAC/50-60 Hz (IEC plug, no power cord)
Contact Omnitron for other fiber options and operational temperature ranges.

*When using these models in pairs, a minimum attenuation of 3dB is required.