

# FlexPoint

## FlexPoint™ OC12FF

### Single-mode to Multimode Fiber Converters for OC-12

The FlexPoint OC12FF 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 OC12FF. Connect the fiber cables to the appropriate interface and the installation is complete.

The fiber port operates at 1310nm or 1550nm and features SC connectors. Multimode fiber models support distances of up to 550m, and single-mode fiber models support distances of up to 80km.

The FlexPoint OC12FF 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.

Simple, dependable and flexible. For over a decade, FlexPoint media converters have been providing reliable fiber connectivity in Enterprise and mission-critical networks around the world.



- The FlexPoint OC12FF single-mode to multimode protocol-independent fiber converter
- Supports all OC-12 standards over ATM and SONET
- Requires no manual configuration
- Supports auto-negotiation of duplex mode
- Extends network distances up to 80km
- 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

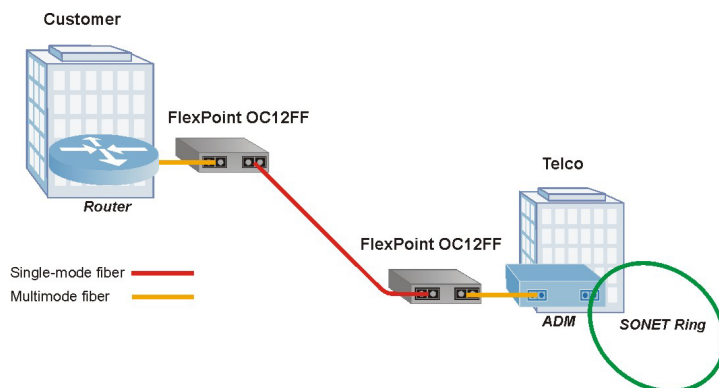
# SPECIFICATIONS

Model Type	OC12FF	
Protocols	OC-12	
Fiber Cables	Multimode: 50/125, 62.5/125, 100/140µm Single-mode: 9/125µm	
Fiber Connectors	SC	
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	<b>Barrel Connector</b> <b>Nominal Voltage:</b> 9VDC <b>Voltage Range:</b> 6.0 to 15.0VDC <b>Power Nominal:</b> 0.2A @ 9VDC <b>Maximum Power:</b> 1A @ 9VDC	<b>Molex Connector</b> <b>Nominal Voltage:</b> 5VDC <b>Voltage Range:</b> 4.75 to 5.25VDC <b>Power Nominal:</b> 0.5A @ 5VDC <b>Maximum Power:</b> 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 OC12FF fiber converter can extend the network across single-mode fiber with distances up to 80km. In this application, the customer's router is connected to an Add Drop Multiplexer (ADM) providing access to the SONET ring using a pair of FlexPoint OC12FF fiber converters. The converters provide the multimode to single-mode conversion.



# ORDERING INFORMATION

Port	Fiber Type	Distance	Connector SC	Wavelength [nm]	Min. Tx Power (dBm)	Max. Tx Power (dBm)	Min. Rx Sensitivity (dBm)	Max. Rx Sensitivity (dBm)	Link Budget (dBm)
Port 1	MM	550m	4461-X	1310	-20	-14	-26	-14	6
Port 2	SM	12km		1310	-9.5	-3	-19.5	-3	10
Port 1	MM	550m	4463-x	1310	-20	-14	-26	-14	6
Port 2	SM	34km		1310	-5	0	-23	-3*	18
Port 1	MM	550m	4469-x	1310	-20	-14	-26	-14	6
Port 2	SM	80km		1550	-5	0	-26	-3*	18

**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)  
For other power and fiber configurations, contact Omnitron.

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

Trademarks are owned by their respective companies. FlexPoint is a trademark of Omnitron Systems Technology, Inc.  
Specifications subject to change without notice. ©1998-2007 Omnitron Systems Technology, Inc.

091-04460-004C 12/07

