

### FlexPoint™ 10/100

#### 10/100 Copper to Fast Ethernet Fiber Media Converter

The FlexPoint 10/100 is a modular 10BASE-T or 100BASE-TX copper to 100BASE-FX fiber media converter that provides reliable and cost-effective network connectivity and fiber extension.

The FlexPoint 10/100 features a 10/100 auto-sensing RJ-45 port that adjusts to the highest level of performance supported by the attached device. An override switch provides manual control over the 10/100 operation of the RJ-45 port and the Half/Full-Duplex operation of both the fiber and RJ-45 ports.

When configured for auto-negotiation, the RJ-45 port automatically detects and sets MDI/MDI-X crossover. When configured for manual operation, the FlexPoint 10/100 features a manual switch to provide the MDI/MDI-X crossover.

The fiber port supports fixed-fiber connectors (SC, ST or LC) and Small Form Pluggable (SFP) transceivers, enabling easy adaptability to different fiber types, distances and wavelengths. The FlexPoint 10/100 supports multimode, single-mode, single-mode single-fiber, in standard, CWDM and DWDM wavelengths.

Manual switch settings and LED indicators with on-the-label descriptions enable easy configuration to legacy devices or specific network requirements. The LEDs report the availability of power, port activity and link status, speed and duplex modes.

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, 2-pin DC terminal connector 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.



SFPs not included

### KEY FEATURES

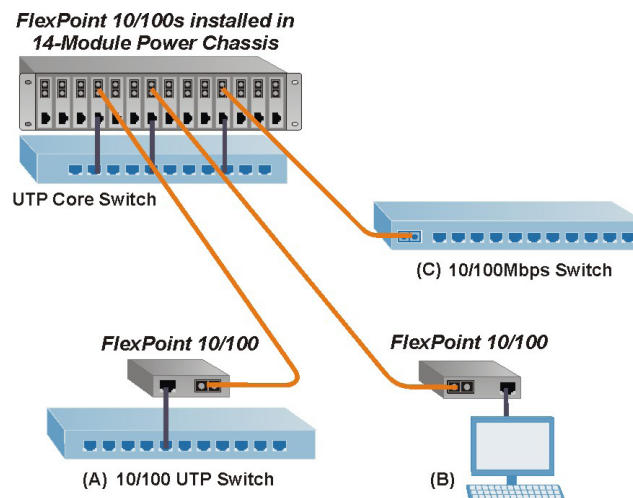
- 10/100BASE-T to 100BASE-FX Ethernet media converter
- Supports 10BASE-T, 100BASE-TX, 100BASE-FX
- RJ-45 port supports 10/100 and Half/Full-Duplex auto/manual negotiation via DIP-switches and MDI/MDIX auto-crossover
- Supports 100Mbps SFP transceivers for standard, CWDM and DWDM wavelengths
- Fixed fiber port supports multimode and single-mode dual fiber with ST, SC and LC connectors; and single-mode single-fiber with SC connectors
- Extends network distances up to 120km
- Labeled status LEDs and switches for quick and easy installation
- Available in AC and DC models
- 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
- Commercial (0 to +50°C), wide (-40° to +60°C) and extended (-40°C to +75°C) temperature ranges
- 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

## SPECIFICATIONS

Description	FlexPoint 10/100 10/100BASE-T Copper to 100BASE-FX Fiber Media Converter		
Standard Compliances	IEEE 802.3		
Regulatory Compliances	Safety: EMI: ACT:	UL, cUL, CE, UKCA FCC Class A TAA, BAA, NDAA	
Environmental	RoHS, WEEE, REACH		
Frame Size	Up to 1536 bytes		
Port Types	Copper: Fiber:	10/100BASE-T (RJ-45) 100BASE-FX (ST, SC, LC, SFP) 100BASE-BX (SC, SFP) Single-fiber	
Cable Types	Copper: Fiber:	EIA/TIA 568A/B, Cat 5 UTP and higher Multimode: 50/125µm, 62.5/125µm Single-mode: 9/125µm	
AC Power Requirements	AC Adapter:	100 - 240VAC/50 - 60Hz 0.06A @ 120VAC (typical)	
DC Power Requirements	Voltage Range: Nominal Voltage: Nominal Power:	Terminal or Barrel Connector 5.0 to 32VDC 9VDC 0.5A @ 9VDC	Molex Connector 4.75 to 5.25VDC 5VDC 0.8A @ 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: Wide: Extended: Storage:	0 to 50°C -40 to 60°C -40 to 75°C -40 to 80°C	
Humidity	5 to 95% (non-condensing)		
Altitude	-100m to 4,000m		
MTBF (hrs)	Without AC Adapter (-0, -9): With AC Adapter (-1): With AC Adapter (-2):	1,100,000 250,000 100,000	
Warranty	Lifetime warranty with 24/7/365 free Technical Support		

## APPLICATION EXAMPLE

In this enterprise campus application example, FlexPoint 10/100 media converters are installed in a 14-Module Redundant Power chassis for high-density fiber distribution from UTP switch equipment at the Network Core. A UTP workgroup switch (A) is connected via fiber with a standalone FlexPoint 10/100 media converter. Another FlexPoint 10/100 converts the fiber to copper in a fiber-to-desktop application (B). An Ethernet switch (C) is connected directly via fiber to the FlexPoint module at the Network Core. In all cases, multimode or single-mode fiber can be used, and fiber links can be extended up to 120km using single-mode fiber.



# 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	LC	SFP							
-	-	-	-	-	4359-pt	-	-	-	-	-	-	-
MM/DF	5km	4342-pt	4340-pt	4355-1pt	-	1310 / 1310	-24	-14	-31	-14	-	7
SM/DF	30km	4343-pt	4341-pt	4355-2pt	-	1310 / 1310	-15	-8	-31	-8	-	16
SM/DF	60km	4345-pt	4344-pt	4355-3pt	-	1310 / 1310	-5	0	-31	-3	3	26
SM/DF	120km	-	4349-pt	4355-4pt	-	1550 / 1550	-5	0	-31	-3	3	26
SM/SF <sup>1</sup>	20km	-	4357-1pt	-	-	1310 / 1550	-15	-5	-30	-3	-	15
SM/SF <sup>1</sup>	20km	-	4357-2pt	-	-	1550 / 1310	-15	-5	-30	-3	-	15

<sup>1</sup> 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.

Order the appropriate SFPs separately. [Visit the Omnitron Optical Transceivers web page.](#)

## 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)
-9 = 2 Pin DC Terminal Connector (non-isolated), 5-32VDC, No AC/DC Power Adapter

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

<leave blank> = Commercial temperature (0 to 50°C)
W = Wide temperature (-40 to 60°C)
Z = Extended temperature (-40 to 75°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](#)

© 2024 Omnitron Systems Technology, Inc. All rights reserved. FlexPoint is a Trademark of Omnitron Systems Technology, Inc. Trademarks are owned by their respective companies. Specifications are subject to change without notice.

