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 and CWDM 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.
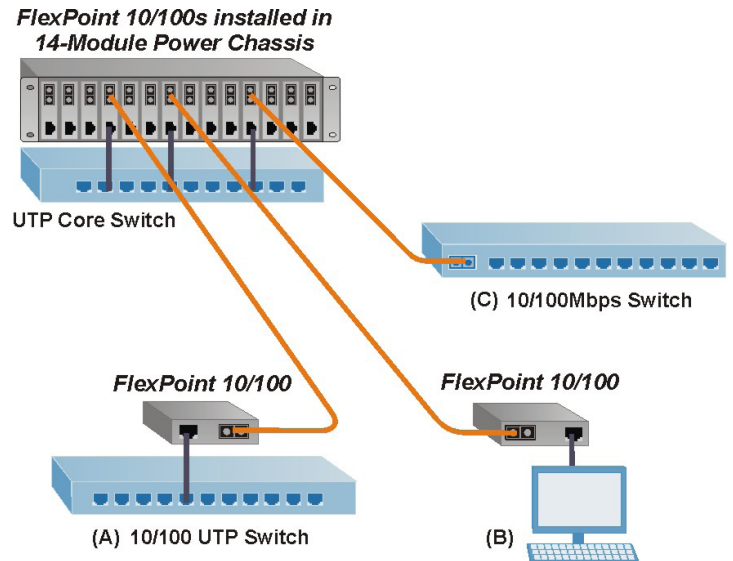

SFPs not included

KEY FEATURES

■ The FlexPoint 10/100 is a 10BASE-T or 100BASE-TX copper to 100BASE-FX fiber media converter

■ The RJ-45 port supports auto or manual negotiation

■ Extends network distances up to 120km

■ Supports 100BASE-FX fixed-fiber (SC, ST or LC) and 100BASE-FX SFP transceivers

■ Labeled status LEDs and switches for quick and easy installation

■ Auto MDI/MDI-X crossover

■ 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

■ 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	UL, CE, FCC Class A, RoHS2 (6/6), WEEE, REACH
Frame Size	Up to 1536 bytes

Port Types	Copper:	10/100BASE-T (RJ-45)
	Fiber:	100BASE-FX (ST, SC, LC, SFP)
		100BASE-BX (SC, SFP) Single-fiber

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 (-1):	100 - 120VAC/60Hz 0.06A @ 120VAC (typical)
	AC Adapter (-2):	100 - 240VAC/50 - 60Hz 0.06A @ 120VAC (typical)

DC Power Requirements		Terminal or Barrel Connector	Molex Connector
	Voltage Range:	5.0 to 32VDC	4.75 to 5.25VDC
	Nominal Voltage:	9VDC	5VDC
	Nominal Power:	0.5A @ 9VDC	0.8A @ 5VDC
	Maximum Power:	1A @ 9VDC	1A @ 5VDC

Dimensions	W: 3.0" x D: 4.0" x H: 1.0" L: 76.2 mm x B: 101.6 mm x H: 25.4 mm
Weight	Without AC Adapter: 6 oz. (170.1 grams)

Temperature	Commercial:	0 to 50°C
	Wide:	-40 to 60°C
	Extended:	-40 to 75°C
	Storage:	-40 to 80°C

Humidity	5 to 95% (non-condensing)
Altitude	-100m to 4,000m

MTBF (hrs)	Without AC Adapter (-0, -9):	1,100,000
	With AC Adapter (-1):	250,000
	With AC Adapter (-2):	100,000

Warranty	Lifetime warranty with 24/7/365 free Technical Support

FC (UL) CE

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.

FlexPoint 10/100s installed in 14-Module Power Chassis

UTP Core Switch

(C) 10/100Mbps Switch

FlexPoint 10/100

FlexPoint 10/100

(A) 10/100 UTP Switch

(B)

Omnitron Systems

Fiber Type	Distance	Connector Type				Tx Lambda (nm)	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								
-	-	-	-	-	4359-0	-	-	-	-	-	-	-	-
MM/DF	5km	4342-x	4340-x	4355-1x	-	1310	1310	-24	-14	-31	-14	-	7
SM/DF	30km	4343-x	4341-x	4355-2x	-	1310	1310	-15	-8	-31	-8	-	16
SM/DF	60km	4345-x	4344-x	4355-3x	-	1310	1310	-5	0	-31	-3	3	26
SM/DF	120km	-	4349-x	4355-4x	-	1550	1550	-5	0	-31	-3	3	26
SM/SF[1]	20km	-	4357-1x	-	-	1310	1550	-15	-5	-30	-3	-	15
SM/SF[1]	20km	-	4357-2x	-	-	1550	1310	-15	-5	-30	-3	-	15

AC Adapter Kits (-x): -0 = No AC adapter included, **-1** = 110-120 VAC/60 Hz (US plug), **-2** = 100-240 VAC/50-60 Hz (IEC plug, no power cord), **-9** = 2 pin terminal (non-isolated) connector.

For wide temperature (-40 to 60°C), add a "W" to the end of the model number.

Contact Omnitron for other fiber options, extended temperature (-40 to 75° C) models and RoHS (5/6) compliant models.

[1] When using single-fiber (SF) media converter models, the Tx wavelength on one end has to match the Rx wavelength on the other.

Order the appropriate SFPs separately. *Visit the Omnitron Optical Transceivers web page*.

Accessories	
Model Number	Description
8250-0	DIN-Rail Mounting Bracket
4380	Wall-Mount Bracket

Omnitron Systems

800-675-8410 • 949-250-6510 • www.omnitron-systems.com • info@omnitron-systems.com • 38 Tesla, Irvine, CA 92618