

FlexPoint Gx Gigabit Ethernet Copper to Fiber Media Converter

The FlexPoint Gx is a 1000BASE-T UTP to 1000BASE-SX/LX fiber media converter that provides reliable and cost-effective network connectivity and fiber extension.

The FlexPoint Gx auto-negotiates with most network devices for quick installations. Manual switch settings and LED indicators with on-the-label descriptions enable easy configuration with different network requirements.

The FlexPoint Gx features an auto-sensing UTP port that adjusts to the duplex and pause mode of the attached device. A switch provides manual control over the Half/Full-Duplex operation of UTP port. The port features a crossover switch that facilitates connection to a workstation or switch.

Network flow control is supported via an auto-selected or user-selected Pause function that assists in relief of network congestion.

The fiber port operates at 850nm, 1310nm or 1550nm and supports SC, MT-RJ or LC connectors. Multimode models support distances of up to 550m and the single-mode models support distances of up to 140km.

User-selectable link modes are available to facilitate the detection of link faults. Faults can be propagated to managed devices or isolated to a per segment basis.

Diagnostic data is provided through LED indicators that assist in network installation and maintenance. The LEDs report the availability of power, port activity and link status and duplex mode.

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 Gx is a Gigabit Ethernet 1000BASE-T to 1000BASE-SX/LX fiber media converter
- Fiber port supports auto or manual negotiation
- UTP port supports Full and Half-Duplex operation
- Extends network distances up to 140km
- User-selectable or Auto-sensing Pause flow control
- Supports most network interfaces with a wide variety of cable and connector types
- User-selectable Link Modes for quick fault detection
- Labeled status LEDs and switches for quick and easy installation
- Features a crossover switch for connection to switches or workstations
- 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

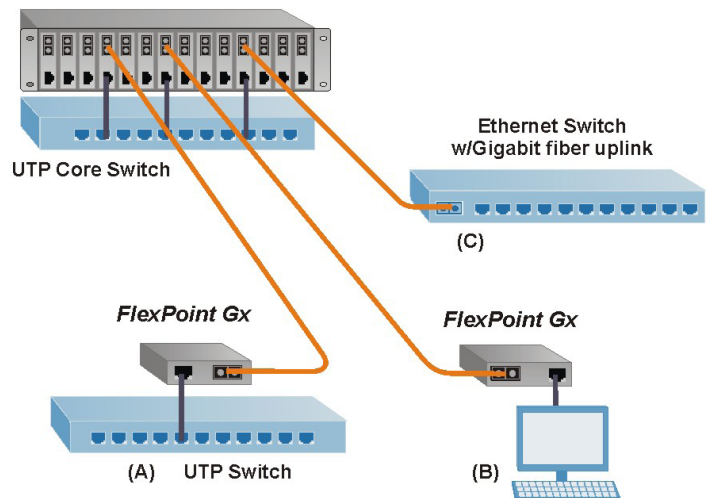
Model Type	Gx		
Protocols	IEEE 802.3ab, 1000BASE-T, 1000BASE-X		
UTP Cable	RJ45, Category 5 and higher		
Fiber Cables	Multimode: 50/125, 62.5/125, 100/140µm Single-mode: 9/125µm		
UTP Connectors	RJ-45		
Fiber Connectors	SC, MT-RJ, LC		
DIP-Switches	Auto-Neg, FDX/HDX, Pause En/Dis, Link Prop.		
LED Displays	Power, Fiber Link/Activity, UTP Link/Activity, Full/Half-Duplex		
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 0.4A @ 9VDC 1A @ 9VDC	Molex Connector 5VDC 4.75 to 5.25VDC 0.6A @ 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: 990,000 Module with Power Adapter -1: 250,000 Module with Power Adapter -2: 100,000		



APPLICATION EXAMPLE

In this enterprise campus application example, FlexPoint Gx 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 Gx media converter. Another FlexPoint Gx converts the fiber to UTP 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 80km using single-mode fiber.

FlexPoint Gx modules installed in 14-Module Power Chassis



ORDERING INFORMATION

Fiber Type	Distance	Connector Type				Tx / Rx Wavelength [nm]	Min. Tx Power [dBm]	Max. Tx Power [dBm]	Min. Rx Sense [dBm]	Max. Rx Power [dBm]	Min. Attenuation (dB)	Optical Power Budget
		ST	SC	MT-RJ	LC							
MM	220 / 550m ¹	4376-x	4370-x	4670-x	4672-x	850	-10	-4	-17	-3	-	7
SM	12km	4377-x	4371-x	4671-x	4673-x	1310	-9.5	-3	-19.5	-3	-	10
SM	34km	-	4372-x	-	4674-x	1310	-5	0	-23	-3	3	18
SM	80km	-	4373-x	-	4675-x	1550	-5	0	-23	-3	3	18
SM	110km	-	4374-x	-	4676-x	1550	0	5	-24	-3	8	24
SM	140km	-	4375-x	-	4677-x	1550	2	5	-28	-8	13	30

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.
¹ 62.5/125µm, 100/140µm multimode fiber up to 220m. 50/125µm multimode fiber up to 550m. Refer to the fiber cable manufacturer for multimode distance specifications.

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