

**Product Related Questions****What is the primary application for the Fiber Ethernet Extender?**

Patton's Fiber Ethernet Extenders utilize fiber technology to increase Ethernet's distance beyond its 328 ft limitations. Common applications include service delivery in MxU environments, connecting remote sites/offices/equipment, or service delivery, Patton Fiber Ethernet modems offer unparalleled performance while future proofing a network.

**What is the 1170 Series?**

The Fiber Ethernet modems provide a cost-effective plug and play solution for extending your twisted pair Ethernet networks over multimode or single mode fiber at distances up to 30km.

**Which Ethernet Fiber Modem is the product for me?**

| Model        | Twisted-Pair Standard | Fiber Standard | Fiber Cable Type | Fiber Interface | Wavelength | Distance |
|--------------|-----------------------|----------------|------------------|-----------------|------------|----------|
| 1170M-ST     | 100Base-TX            | 100Base-FX     | Multimode        | ST              | 1300nm     | 2km      |
| 1170M-SC     | 100Base-TX            | 100Base-FX     | Multimode        | SC              | 1300nm     | 2km      |
| 1170S-SC/15K | 100Base-TX            | 100Base-FX     | Single Mode      | SC              | 1310nm     | 15km     |
| 1170S-SC/30K | 100Base-TX            | 100Base-FX     | Single Mode      | SC              | 1310nm     | 30km     |
| 1171M-ST     | 10Base-T              | 10Base-FL      | Multimode        | ST              | 850nm      | 2km      |
| 1171M-SC     | 10Base-T              | 10Base-FL      | Multimode        | SC              | 850nm      | 2km      |

**What devices typically connect to a Model 1170?**

Devices that typically connect to the Model 1170 are any Ethernet enabled devices such as bridges, PC NIC cards, switches, routers, etc.

**How do the Fiber Ethernet Modems establish a link?**

- 1) Units are connected to Ethernet and receive Ethernet negotiation.
- 2) Units attempt to establish communication with each other.
- 3) Ethernet negotiation information is passed, and a common standard is found.
- 4) Units establish a full link as indicated by LEDs.
- 5) Units transfer LAN traffic and operate with complete transparency.

**Do the Fiber Ethernet Modems operate in pairs?**

Yes, they can only be operated in pairs.

**What protocols does the Model 1170 support?**

The Model 1170 is transparent to all upper layer protocols, including VLAN tagged frames.

**What items are configurable by the user?**

An MDI/MDI-X switch is provided on the Ethernet side to facilitate connection to either a hub or PC NIC. This allows the use of either a straight through or cross-over CAT5 twisted pair cable from the 1170 to the Ethernet enabled device.

**Can I connect an Model 1170 between two devices at different speeds?**

As long as the devices auto negotiate, any combination of speeds is permissible for 10/100 versions. However, both ends of the link must support the same speed. Ex: One side has a PC NIC capable of 10/100 auto sensing. The remote side has a 10BaseT hub. The units will link at 10BaseT, if they support operation at 10BaseT. However, if one side is a 10BaseT hub and the other side is a 100BaseT only network card, the units will not link.

**Does the Model 1170 support full duplex?**

Yes, if both sides of the link support it as well.

**Fiber related questions****What type of fiber is required?**

Multimode: Standard multimode, 62.5/125 micron fiber pair capable of the transmission of 850nm signals.

Single Mode: Standard grade, non-polarized fiber pair capable of handling 1310 and/or 1550 nm wavelength.

**Power Supply****What are the power supply options for the Fiber Ethernet Modems?**

The Fiber Ethernet Modems come standard with an external UI (100-240VAC) power supply. DC power supplies of -48, -24, and -12V dc are optional. *The country specific power cord is ordered separately.*