Product Model   **1170M and 1170S**

Product Name   **Ethernet Fiber Modem**

Who is the customer for this product?

Patton's Ethernet Fiber Modems are used in pairs to increase Ethernet distances up to 18.6 miles (30km). With fiber optics immunity to electromagnetic interference (EMI) and the reduction of cross talk, Patton's Model 1170S series offer an inexpensive and superior alternative to network repeaters and other Ethernet extension devices. The Model 1170 does not retime signals or add signal propagation delays like a true repeater.

The Model 1170 Series primary customers include but are not limited to:
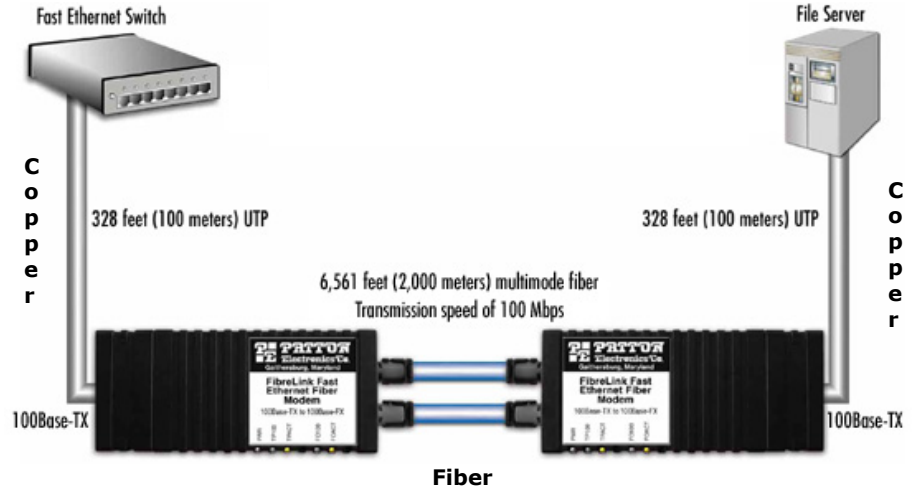
- Commercial locations such as: financial institutions, educational facilities, government institutions connecting city branches, and last mile access to Metropolitan Area Networks.

- Industrial settings such as: factories, refineries, power plants, etc. requiring noise immunity.

- Anyplace where Ethernet and fiber are located.

OpticLink Features and benefits

Extends Twisted pair Ethernet over Single or Multimode Fiber	Extending twisted pair networks over fiber gives increased bandwidth, distance, and immunity to EMI (Electro Magnetic Interference)
Plug and Play	Make two connections and go, no cryptic commands to enter, no switches to configure, no sweat.
Transparent Operation	The 1170 series converters will pass transparently any protocol running over the LAN including IP, IPX, DECnet, NetBiOS, vLAN, etc.
MDI/MDIX Ethernet Switch	Quick and easy installation, no more cross over Ethernet cables
Ultra-Miniature Size Fits in the Palm of Your Hand	Will fit into virtually any crowded facility
Compliant to Standards **Copper: 10Base-T/100Base-TX** **Fiber: 10Base-FL/100Base-FX**	Will work with any standards based Ethernet equipment

Primary application

The Ethernet Fiber Modems are used primarily to connect two LAN segments located across campus or across a metro area. Pumping 10/100Mbps Ethernet packets with complete transparency to higher layer protocols over Single mode or Multimode fiber at distances up to 30km, the Model 1170 breaks the reach limitation of twisted pair Ethernet (328ft) and enables the interconnection of distant LAN segments in point-to-point or MAN deployments.

Ordering Information

Model	Description
1171M-ST/120	10Mbps Multimode 2km Ethernet Modem, ST, 850nm, 120VAC
1171M-ST/UI	10Mbps Multimode 2km Ethernet Modem, ST, 850nm, UI
1171M-SC/120	10Mbps Multimode 2km Ethernet Modem, SC, 850nm, 120VAC
1171M-SC/UI	10Mbps Multimode 2km Ethernet Modem, SC, 850nm, UI
1170M-ST/120	100Mbps Multimode 2km Ethernet Modem, ST, 1300nm, 120VAC
1170M-ST/UI	100Mbps Multimode 2km Ethernet Modem, ST, 1300nm, UI
1170M-SC/120	100Mbps Multimode 2km Ethernet Modem, SC, 1300nm, 120VAC
1170M-SC/UI	100Mbps Multimode 2km Ethernet Modem, ST, 1300nm, UI
1170S-SC/15K/120	100Mbps Single Mode 15km Ethernet Modem, SC, 1310nm, 120VAC
1170S-SC/15KUI	100Mbps Single Mode 15K Media Converter, SC, 1310nm, UI
1170S-SC/30K/120	100Mbps Single Mode 30K Media Converter, SC, 1310nm, 120VAC
1170S-SC/30KUI	100Mbps Single Mode 30K Media Converter, SC, 1310nm, UI

Optional parts

None, units are shipped complete with:

- Ethernet Fiber Modem

- Power supply (external desktop AC or DC)

- User manual

Replacement parts

Part Number	Description
08055DCUI	Universal Input Power Supply (100–240 VAC) (*order country specific power cord separately*)
48V-PSM	-48 VDC power supply
24V-PSM	-24 VDC power supply
12V-PSM	-12 VDC power supply

Shipping/Export Information

ECCN export number: 8473.30.0000

Country of origin: United States of America, NAFTA

Total weight boxed: 1.58lbs (.72kg)

Individual unit: .72lbs (.32kg)

MTBF/Repair Information

MTBF: 251,400 Hrs. (28.7 years) Calculation based on MIL-HDBK-217F, Notice 2 - "Parts Count Reliability Prediction"

Depot Repair Turnaround Time: 5-10 days

Warranty: 1-year parts and labor.

Out of warranty repair rate:

Multimode (1170M): $100, flat rate – contact Tech Support for details

Single Mode (1170S): $235, flat rate – contact Tech Support for details

Physical Specifications

Dimensions: 4.25"L x 1.7"W x 0.8"H (10.8 L x 4.3 W x 2.0 H cm)

Color: *Case:* black *Label:* white with black letters.

Case material: Plastic, Fire retardant (V0 or better)

Environmental

Model 1171 (Multimode)

Operating Temp: 32 to 122°F (0 to 50°C)

Storage Temp: -40 to 185°F (-40 to +85°C)

Relative Humidity: Up to 90%, non-condensing

Altitude: 0–15000 feet (4,572 meters)

Ventilation requirements: None. Units do not require cooling fans.

Model 1170 (Multimode) 1170 (Single Mode)

Operating Temp: 32 to 95°F (0 to 35°C)

Storage Temp: -40 to 185°F (-40 to +85°C)

Relative Humidity: Up to 90%, non-condensing

Altitude: 0–15000 feet (4,572 meters)

Ventilation requirements: None. Units do not require cooling fans.

Approvals

Safety	Emissions	Telecommunications
CE Marked per EMC directive 89/336/EEC and low voltage directive 72/23/EEC.	FCC part 15, Class A	NOT APPLICABLE
	EN55022 Class A, conducted and radiated emissions	
ESD EN61000-4-2		
CDRH Class 1 Laser Product*		

*single mode only ex. 1170S-SC/15K

Power Supplies

Standalone

AC: Universal input, 100-240VAC, 50-60Hz, external

DC: -12VDC, -24VDC, or -48VDC, external