Datasheet : F-GET-4ET-A/B

4 Port 10/100/1000 Mbps Gigabit Ethernet Transceiver over Single Fibe

4-Port Gigabit Ethernet over Single Fiber Transceiver

Thor Fiber's 4-Port Gigabit Ethernet Transceiver transmits five 10/100/1000 Mbps Ethernet channels over a single-mode fiber using WDM technology—one strand, full-duplex.

It allows you to connect multiple Ethernet devices on each end, such as IP cameras, PCs, network switches, Wi-Fi routers, and IP encoders—supporting up to 4 devices per side, making connectivity simple and efficient.

The unit functions as a transparent, unmanaged switch with plug-and-play operation—no configuration required. It uses LC/PC connectors and supports transmission distances up to 20km.

A complete link requires a matched A/B pair (Side A transmits at 1310nm, Side B at 1550nm).

Ideal for industrial, remote monitoring, and transportation applications.

Features :

- Point-to-point bi-directional transmission over a single (simplex) fiber

- Zero-delay automatic forwarding

- Auto Speed negotiation

- Full Duplex

- Transmits 4 ports of 10/100/1000 Mbps Gigabit Ethernet (10BASE-T / 100BASE-TX / 1000BASE-T)

- 4 x RJ45 connectors (auto-negotiated, unmanaged switch)

- Supports single-mode, single-fiber via LC connectors (simplex)

- Transmission distance: 20km standard (40km, 80km, or 120km available depending on model)

- Hot-pluggable modules

- Available in chassis mount, wall-mount, or DIN-rail configurations

- 1500W surge protection and 15kV ESD protection

- External power supply

- Wide operating temperature range: -40°C to +70°C

- Input voltage: 9 ~ 48VDC

- Reverse polarity protection

- Compact form factor

Model Selection :

Simplex Fiber Gigabit Ethernet Solution

Model: F-GET-4ET-A/B (A/B Link Pair)
Distance: 20Km over Single-Mode Fiber (LC/PC Connector)

A complete point-to-point solution for transmitting Gigabit Ethernet over a single strand of fiber. Ideal for industrial, security, and long-distance IP networking applications.
Each system requires both A and B units (sold as a matched pair).
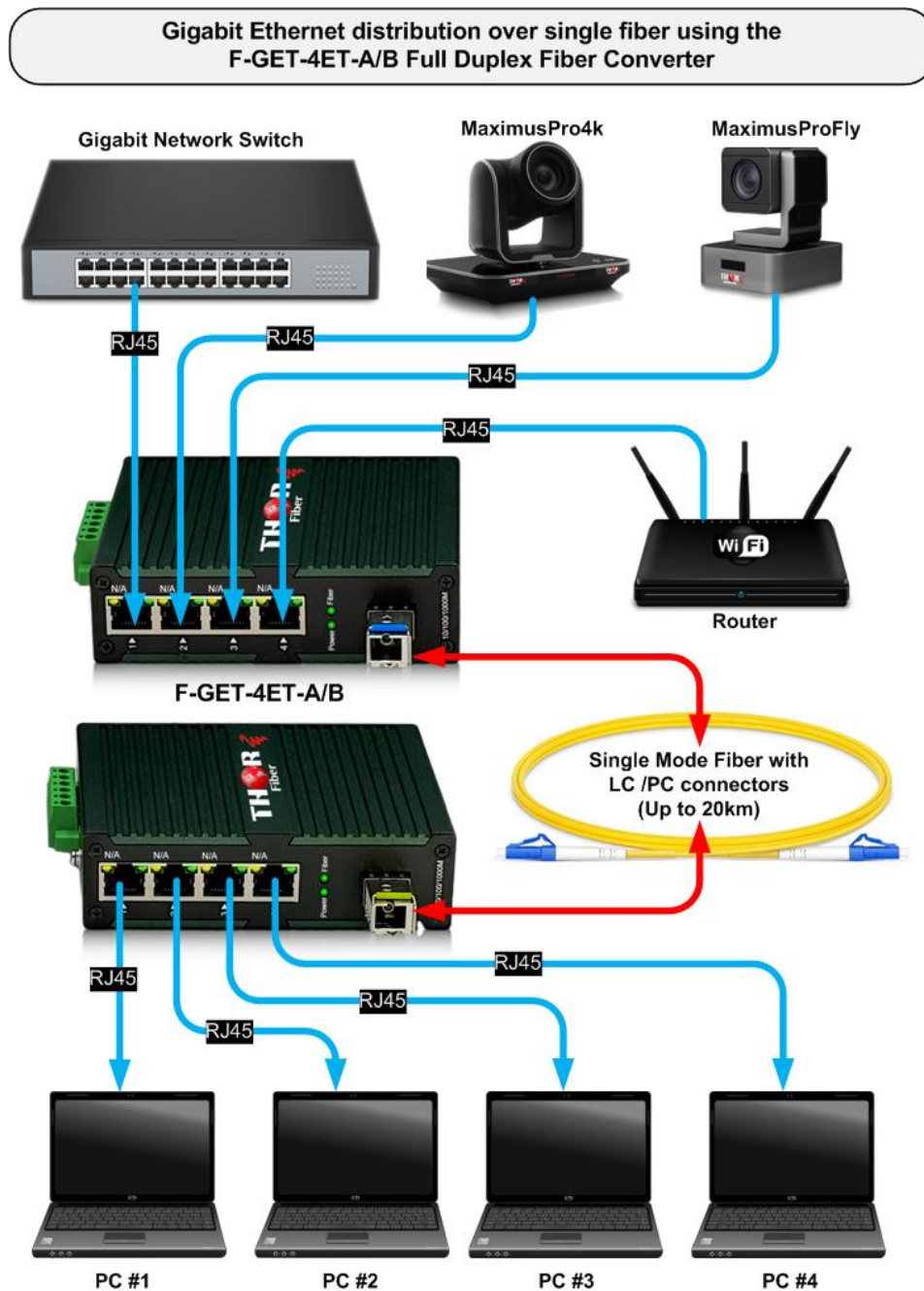
Model Breakdown:

- **F-GET-4ET-A**
  4 x 10/100/1000 Mbps Ethernet ports over 1 simplex fiber
  LC/PC connector – Single-Mode Fiber
  TX: 1310nm / RX: 1550nm
  Distance: 20Km
- **F-GET-4ET-B**
  4 x 10/100/1000 Mbps Ethernet ports over 1 simplex fiber
  LC/PC connector – Single-Mode Fiber
  TX: 1550nm / RX: 1310nm
  Distance: 20Km

EMI, RFI, and Surge Immunity

Electromagnetic interference (EMI) is common in industrial plants, warehouses, and factory floors. It can corrupt data over copper-based Ethernet links. In contrast, fiber optic transmission is completely immune to EMI, RFI, and ground loop issues ensuring clean, reliable data communication.

By using fiber, you eliminate problems caused by voltage equalization currents and electromagnetic noise, enabling more stable and reliable network performance, especially in electrically noisy environments.

Drawing:

Specifications:

Category	Specification
Ethernet Ports	4 x RJ45 ports (G1–G4) – 10/100/1000 Mbps Auto-Negotiated
Standards Supported	IEEE 802.3 – Ethernet base standard IEEE 802.3u – 100BASE-TX IEEE 802.3ab – 1000BASE-T IEEE 802.3x – Full Duplex & Flow Control IEEE 802.3az – Energy Efficient Ethernet (optional)
Auto-Negotiation	Supports auto detection of 10/100/1000 Mbps speeds and full/half duplex modes
Transport/Application Protocols	Pass-through support for: TCP, UDP, HTTP/HTTPS, FTP/TFTP/SFTP, DHCP, BOOTP, SNMP, NTP, DNS, Modbus TCP, BACnet/IP
Optical Interface	LC/PC Connector – Single Fiber (Simplex)
Transmission Distance	20Km standard (40, 80, 120Km available per model variant)
Fiber Type	Single-mode, simplex (dual-fiber SFP version available upon request)
LED Indicators	PWR, Link/Activity LEDs for each port
Interface Protection	1500W Surge Protection, 15KV ESD Protection
Operating Temperature	-30°C to +75°C
Humidity	0–95% RH (non-condensing)
RoHS Compliant	Yes
Power Supply	5V DC Input (external power supply included)
Power Consumption	≤ 2.68W
AC Power Range (optional)	85 ~ 220V AC input version available upon request
Dimensions	4" x 5" x 1.25"