

FiberPlex™ Un-Managed Industrial Gigabit SFP Media Converter with High Power 90-watt PoE Injector

Model FP101E/BT90



Industrial Gigabit Media Converter with built in 90 Watt PoE injector offers the benefits inherent of fiber with the flexibility of Power over Ethernet.

Extended Operating Temperature

-40 to -167°F (-40 to 75°C) ambient temperature range.

Flexible Mounting Options

Wall mount, DIN rail or desktop.

Rugged

Meets tough EN60068 standards for Free Fall, Shock and Vibration.

Plug and Play

Auto sensing network speeds and PoE compliant power negotiation makes this product incredibly easy to use.

Link Fault Pass-Through (LFP)

If the copper signal is lost or disconnected, the fiber signal will turn off. If the fiber signal is lost or disconnected, the copper port will turn off.

Full PoE Support

Supports all current options for standards-based PoE including 60W uPoE and 95W Power over HDBaseT (PoH).

TAA Compliant

Top notch quality and reliability with local support.

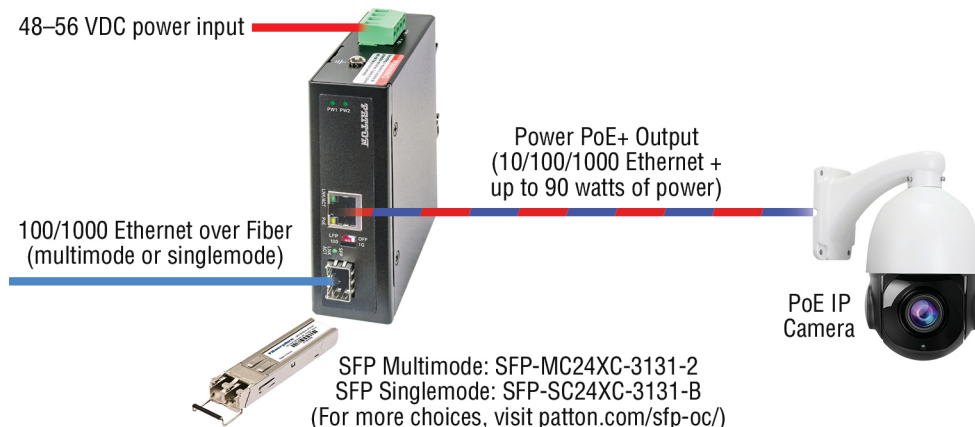
Patton's FP101E/BT90 converts singlemode or multimode fiber to a copper Ethernet signal. With the built-in high power PoE (Power over Ethernet) injector and a local power source, you can easily and reliably extend both power (90 watts/high power PoE) and 10/100/1000 Mbps Gigabit Ethernet to any PoE enabled end point including devices such as IP security cameras, IP speakers, Digital Signage, VoIP phones, Wireless Access Points, POS kiosks, BACs, PLCs and more.

Because Gigabit Ethernet over Cat5e/6 cables is limited to about 100 meters (328 feet), using fiber as a backhaul allows for a massive increase in distances. SFP options for multimode can reach up to 2 km (1.24 miles) and singlemode options can range as far as 120 km (74 miles). In addition to the reach, you get Fiber's superior immunity to noise and, harmful transients (surges).

The FP101E/BT90 is housed in an IP30 rated DIN rail, wall-mount enabled enclosure and has a wide operating temperature of -40 to -167°F (-40 to 75°C). Its rugged design and wide temperature range makes it an ideal media converter for industrial or harsh environments.

The Fiberplex 101E/BT90 is very simple to use, completely plug and play. LEDs will make it clear when power is detected on the power inputs and when PoE is being delivered. This is a PoE compliant device so the amount of power is negotiated automatically by the injector. Should the device you are connecting to not be PoE enabled, the FP101E/BT90 will detect this and not pass power to the connected device.

Visit patton.com to view our huge selection of network connectivity products, SFPs and more.



FP101E/BT90 application

FP101E/BT90 Un-Managed Industrial Gigabit SFP Media Converter with High Power 90-watt PoE Injector

Specifications*

Ethernet Interfaces

- 1x100/1000Mbps SFP Port
- 1xRJ-45 10/100/1000BaseT(X) 90W PoE Output (PSE)
- Auto MDI-X / MDI crossover
- Auto Negotiation, 10/100/1000 Mbps
- Auto-Negotiation, Full or Half Duplex

Networking

- IEEE 802.3x Flow Control and Back Pressure
- Back-plane (switching fabric): 4 Gbps
- Converter Mode: Port speeds are the same
- Switch Mode/Store and Forward: Port speeds are not the same
- Jumbo Frame: 16Kb
- MAC Address Table Size: 1K
- Packet Buffer Size: 512 Kb

IEEE Standards

- IEEE 802.3ab 1000Base-T Gigabit Ethernet
- IEEE 802.3an 10GBase-T Ethernet
- IEEE 802.3af for PoE (15W)
- IEEE 802.3at for PoE+ (30W)
- IEEE 802.3bt for 60W and 90W
- PoH 95W Power over HDBaseT

Management

- Plug and Play operation

LEDs

- Power
- Copper TX Link & Activity
- PoE
- Fiber (SFP) Link & Activity
- DIP Switch Functions
- Link Fault Pass Through On or Off
- SFP Speed 100 Mbps or 1 Gbps

PoE Pin Assignment

- Pin 1 (V-), 2 (V-), 3 (V+), 6 (V+)
- Pin 4 (V+), 5 (V+), 7 (V-), 8 (V-)

Power Input

4-pin terminal block 52–56VDC input

Power Input Connector

- Removable 4-pin terminal block
- Wire range: 0.34 to 2.5 mm²
- Solid wire (AWG): 12–24/14–22
- Stranded wire (AWG): 12–24/14–22
- Torque: 5lb-In/0.5Nm/0.56Nm
- Wire Strip length: 7–8 mm

Power Consumption

3W@52 VDC full load

Max PoE Power

90 watts with 56 VDC input

Protocol

CSMA/CD

Regulatory Approvals

- Safety: LVD (EN62368-1)
- EMC: CE, FCC, EN55032/24
- EMI: CISPR 32, FCC Part 15B Class A
- EMS
 - IEC 61000-4-2 ESD: Contact: 6KV; Air: 8KV
 - IEC 61000-4-4 EFT: Power: 2KV; Signal: 2KV
 - IEC 61000-4-5 Surge: Power: 2KV; Signal: 2KV
- Free Fall: EN60068-2-32
- Shock: EN60068-2-27
- Vibration: EN60068-2-6

Environmental

Ambient Temperature

- Operating: -40 to -167°F (-40 to 75°C)
- Storage: -40 to -185°F (-40 to 85°C)

Relative Humidity

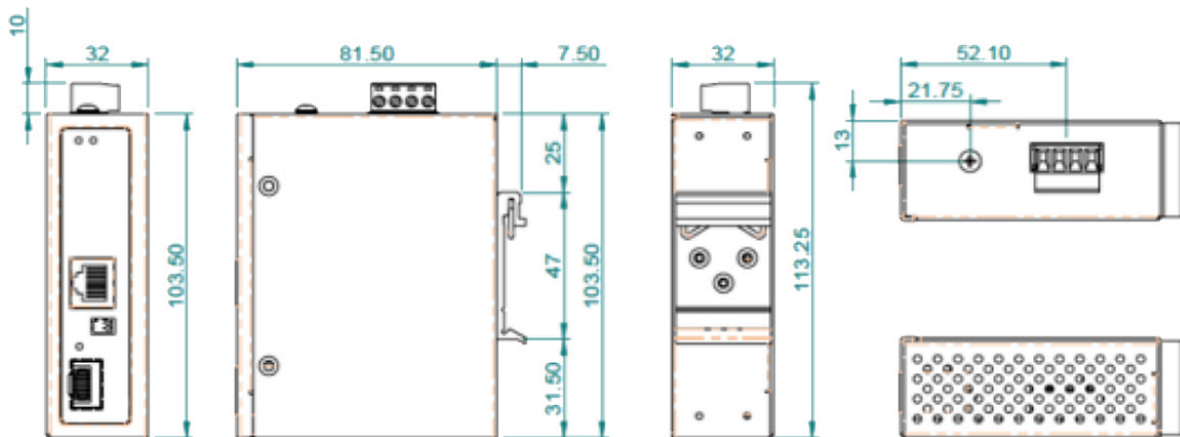
5 to 95% non-condensing

Protection Class

IP30

Physical

- 4.07L x 1.26W x 3.21D inches (103.5L x 32W x 81.5D mm)
- Unit Weight: 2.5 lbs (1.13 kg)
- Shipping Weight: 3.0 lbs (1.36 kg)



Specifications subject to change without notice

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