Products (/products/) > Datacom Industrial Connectivity (/products/industrial-connectivity/) > Industrial POE Products (/products/industrial-connectivity/#35) > POE Media Converters (/products/industrial-connectivity/#35) > FiberPlex FP101EBT

View Printable (/products/product_detail.asp?id=688&v=print)

POE Media Converters

FiberPlex FP101EBT Industrial Gigabit Media Converter with 90W (802.3bt) PoE Injector





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 Fthernet.

Overview

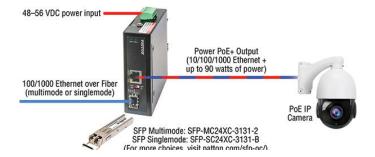
Patton's FP101E/BT90 converts singlemode or multimode fiber to a copper Ethernet signal. With the built-in high power PoE (Power over Ethernet) injector and a local power source, you can easily and reliably extend both power (90 watts/high power PoE) and 10/100/1000 Mbps Gigabit Ethernet to any PoE enabled 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 75C. 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.

Applications



Features

- Extended Operating Temperature -40 to 75°C (-40 to -167°F) 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.

Specifications

- 1x100/1000Mbps SFP Port
- 1xRJ-45 10/100/1000BaseT(X) 90W PoE Output (PSE)

Ethernet Interfaces

- Auto MDI-X / MDI crossover
- Negotiation, 10/100/1000 Mbps
- Auto-Negotiation, Full or Half Duplex

• IEE 802.3x Flow Control and Back Pressure

- Back-plane (switching fabric): 4 Gbps
- Converter Mode: Port speeds are the same

Networking

- 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 802.3ab 1000Base-T Gigabit Ethernet

- IEEE 802.3an 10GBase-T Ethernet
- IEEE 802.3af for PoE (15W)

IFFF Standards

- IEEE 802.3at for PoE+ (30W) • IEEE 802.3bt for 60W and 90W
- PoH 95W Power over HDBaseT

• Plug and Play operation

Management

• 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-)

4-pin terminal block 52-56VDC input

• Removable 4-pin terminal block

• Wire range: 0.34 to 2.5 mm^2

Power Input Connector

Power Input

• 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

Regulatory Approvals

3W@52 VDC full load

Max PoE Power

90 watts with 56 VDC input

Protocol

CSMA/CD

- Safety: LVD (EN62368-1)
- EMC: CE, FCC, EN55032/24
- EMI: CISPR 32, FCC Part 15B Class A
- FMS

- o IEC 61000-4-2 ESD: Contact: 6KV; Air: 8KV
- o IEC 61000-4-4 EFT: Power: 2KV; Signal: 2KV
- $\circ~$ IEC 61000-4-5 Surge: Power: 2KV; Signal: 2KV
- Free Fall: EN60068-2-32 • Shock: EN60068-2-27
- Vibration: EN60068-2-6

Ambient Temperature

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

Environmental

Relative Humidity

5 to 95% non-condensing

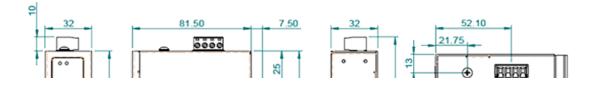
Protection Class

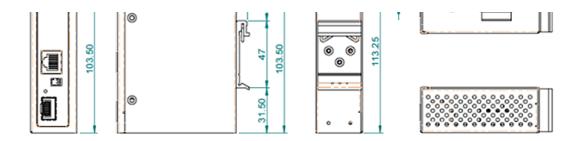
IP30

• 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)

Physical

• Shipping Weight: 3.0 lbs (1.36 kg)





Ordering

Model # Description Availability
1 FP101E/SFP/BT90/52 Industrial Gigabit SFP Media Converter with IEEE802.3bt Power Injector (90W); 10/100/10000Base-TX (RJ45); 1G (SFP); -40 ot 75C; 52-56VDC Input Available

Item Number	Item Description	Price
SVC-SmartCare- BH (/support /support.asp) SVC-	Premium Support for Business Hours	Contact us (/howtobuy/) for availability and pricing.
Swc- SmartCare-24/7 (/support /support.asp) SVC-SmartAssist-	Premium Support, 24 x 7 Coverage	Contact us (/howtobuy/) for availability and pricing.
BH (/support /support- professional.asp) SVC-SmartAssist-	Business Hour Support Services	Contact us (/howtobuy/) for availability and pricing.
AH (/support /support- professional.asp) SVC-ENHWAR1	After Hours Support Services	Contact us (/howtobuy/) for availability and pricing.
(/support /support- warranty.asp) SVC-ENHWAR2	1 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
(/support /support- warranty.asp) SVC-ENHWAR3	2 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
(/support /support- warranty.asp)	3 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR4 (/support /support- warranty.asp)	4 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-ENHWAR5 (/support /support- warranty.asp)	5 Year Enhanced Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR2 (/support /support- warranty.asp)	2 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-EXTWAR3 (/support /support- warranty.asp) SVC-EXTWAR4	3 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
(/support /support- warranty.asp) SVC-EXTWAR5	4 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
(/support /support- warranty.asp)	5 Year Extended Warranty	Contact us (/howtobuy/) for availability and pricing.
SVC-NETENG- HOUR (/support /support- professional.asp)	Network technician hour rate for pre-config services, after hours support, etc.	Contact us (/howtobuy/) for availability and pricing.

Company (/company/)

- > Contact Us (/company/contact-us.asp)
- > About Patton (/company/about.asp)
- > Jobs (/company/careers/)
- > Capabilities (/products/special/services.asp)
- > Quality & Responsibility (/company/environment/)
- > Legal (/legal/)

News & Events

- > Press Room/Releases (/press/)
- > Training & Events (/training/)
- > Library/Downloads (/resources/)

Partners & Resources (/partners/)

- > Partner Programs (/partners/)
- > Resources (/resources/)
- > Blog (https://blog.patton.com)

Products

(/products/)

Unified

Communications

> VoIP Adapters (/voipadapter/#products) > Fax Adapters (/fax-

adapter/#products) gateway/#products)

> VoIP Routers (/voiprouter/#products)

> VoIP IADs - Integrated Access Devices (/voipiad/#products)

> Enterprise Session **Border Controllers** (/session-bordercontroller/#products)

> Media Gateways (/media-gateway /#products)

> SS7 Gateways (/ss7gateway/#products) Software and Cloud

> Virtual SBC |

sbc/#products)

> Virtual Access Router (/virtual-access-router

/#products)

> VPN Server (/vpnserver/#products) > IPv6 IPv4 Converter

(/IPv6-IPv4-Converter

/#products) > Intelligent Edge

Orchestration

(/intelligent-edgeorchestration

/#products) > NFV & SDN (/nfv/#products)

Networking & Access

> Ethernet Extenders (/ethernet-extender /#products)

> Industrial Ethernet (/industrial-ethernet

/#products)

> Industrial Switches (/industrial-switch /#products)

> Unmanaged Industrial **Ethernet Switches** (/unmanaged-industrial-

ethernet-switch

/#products) > Managed Industrial **Datacom Industrial Connectivity**

> Industrial POE Products (/products /datacom-industrial-connectivity/#35)

> Ethernet Over Fiber (/products /datacom-industrial-connectivity/#23) > Pro AV Live and Media Broadcast

Systems (/products/datacom-> VoIP Gateways (/voip- industrial-connectivity/#29)

> Line Drivers / Short Range Modems (/products/datacom-industrialconnectivity/#11)

> Fiber Serial DataCom (RS-232/422 /530/188C) (/products/datacomindustrial-connectivity/#27)

> Fiber Telecom (T1/E1/PRI, Analog and ISDN) (/products/datacomindustrial-connectivity/#28) > Multiplexers & Sharing Devices

(/products/datacom-industrial-

connectivity/#12)

> SFP (Small Form Pluggable) Modules and Kits (/products/datacomindustrial-connectivity/#30) > Fiber Alarming, Notification, Relay and Control (/products/datacom-

Virtualized SBC (/virtual-industrial-connectivity/#24)

> Other Network Extenders (/products /datacom-industrial-connectivity/#13)

> Defense/Security Fiber

Communications (/products/datacomindustrial-connectivity/#22)

> Baluns (/products/datacomindustrial-connectivity/#3)

> Surge Protectors & Opto-Isolators (/products/datacom-industrial-

connectivity/#15)

> DataTaps, Testers, Adapters, Rack Kits

(/products/datacom-industrial-

connectivity/#7)

> Interface Converters (/products /datacom-industrial-connectivity/#10) > Fiber Rack and Enclosure Systems (/products/datacom-industrial-

connectivity/#25)

> Fiber Repeaters and Wavelength Division Multiplexers (WDM) (/products /datacom-industrial-connectivity/#26) > Waveguide RF Filters (/products /datacom-industrial-connectivity/#31)

Support & Services (/support/)

- > Support Home (/support/)
- > Support Portal (/support/#portal)
- > Premium Support (/support/support.asp)
- > Software Upgrades (/support/upgrades/)
- > Warranty Services (/support/support-warranty.asp)
- > Returns & RMAs (/returns/)
- > Manuals (/manuals/)

Special Projects Group (SPG) (/products/special)

- > SPG Home (/products/special/)
- > Services & Capabilities (/products/special/services.asp)
- > Projects (/products/special/projects.asp)
- > Facilities (/products/special/facilities.asp)

Ethernet Switches (/managed-industrialethernet-switch /#products) > Industrial PoE Switches (/poeindustrial-switch /#products) > POE Extenders (/poeextender/#products) > Industrial Network Solutions (/industrialnetwork-solutions /#products) > xDSL Products | DSL Modems, DSL VoIP, DSL Router Modem (/xdsl /#products) > Routers (/router /#products) > Dial-Up Access (/dialup/#products)

<u>Sunset Products</u> (/products/sunsetproducts.asp)







Also of Interest

Unmanaged Industrial Ethernet Switch (https://www.patton.com/ethernet-switch/fp1008e/)
Industrial Copper/fiber/sfp Ethernet Switches... (https://www.patton.com/ethernet-switch/fp1008eat/)
Un-Managed Industrial Switches... (https://www.patton.com/ethernet-switch/fp1005e/)

Patton Electronics Co. Copyright © 2001–2020 All Rights Reserved.

| Sitemap (/company/sitemap.asp) | Legal (/legal/) | Privacy Policy (/legal /privacy.asp) | Disclaimer (/legal/terms-conditions.asp) | (https://twitter.com/pattonconnect) (https://www.facebook.com/PattonElectronics) (https://www.youtube.com/user/pattonelectronicsco) (https://www.linkedin.com/companies/patton-electronics) (news.rss)