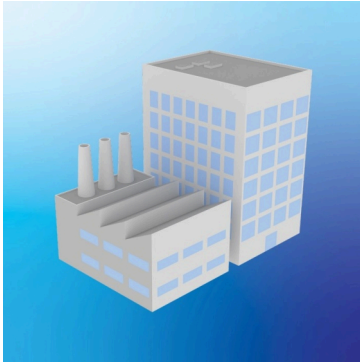# Industrial 10G SFP+ to 10G PoE++ Media Converter
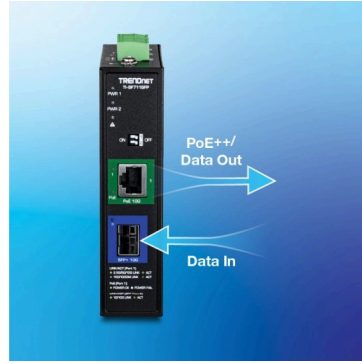
TI-BF711SFP (v1xR)

- 1 x 10G SFP+ port
- 1 x 10G PoE++ RJ-45 port
- Hardened IP50-rated metal housing
- Provides up to 95W for PoE, PoE+ and PoE++ compliant devices
- Extreme operating temperature range -40°– 75° C (-40° – 167° F)
- Overload current protection
- Includes DIN-Rail and wall mounts
- Power supply sold separately (model: TI-S15052)
- NDAA / TAA compliant (U.S. and Canada only)

TRENDnet's Industrial 10G SFP+ to 10G PoE++ Media Converter, model TI-BF711SFP, converts a long-distance fiber connection to a copper connection, while providing power to PoE, PoE+, and PoE++ compliant devices, such as IP cameras, VoIP phones, and wireless access points. With an operating temperature range of -40°– 75° C (-40° – 167° F), the industrial PoE++ media converter features a hardened IP50 rated metal housing suitable for tough, industrial environments. The industrial PoE++ media converter's rugged design also provides protection from shock, freefall, and vibration.
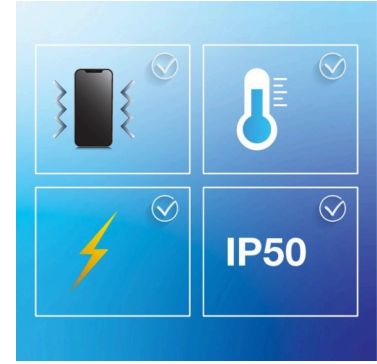
Industrial Applications
Networks devices for manufacturing, general industrial, logistics, surveillance, transportation, and corporate applications.

PoE++ Output
Converts long-distance fiber to copper while providing power to PoE, PoE+, and PoE++ compliant devices, such as IP cameras and wireless APs.

Industrial Environments
Hardened IP50 converter for industrial networking environments within a -40°– 75° C (-40° – 167° F) operating temperature range.

FEATURES

10G PoE++ Port
One 10G PoE++ Ethernet port for high-power and high-speed devices

10G SFP+ Port
One 10G SFP+ port for long distance applications

Dip Switches
1: LFPT (Link Fault Pass Through) on/off (default ON) 2: EEE (Energy Efficient Ethernet, IEEE 802.3az) on/off (default OFF)

Link Fault Pass Through
Easily enable the LFPT (Link Fault Pass Through) feature on the industrial multi-mode media converter using the front panel DIP switch to identify a link fault to the remote LFPT enabled media converter

Dust Protected
This industrial switch is IP50 rated for ingress dust protection

Fault Tolerance
Features an output alarm relay to indicate an input power failure

Surge Protection
Provides up to 6kV RJ45 Ethernet surge protection

Extreme Temperature Range
An extreme operating temperature range of -40° – 75° C (-40° – 167° F) allows for installations in industrial environments with intense hot or cold conditions

Shock and Vibration Resistant
Rated for shock (EN 60068-2-27), freefall (EN 60068-2-31), and vibration (EN 60068-2-6)

Electro Magnetic Compliance
Complies with industrial EMS certifications ESD (IEC 61000-4-2): Contact: 6kV, Air: 8kV; EFT (IEC 61000-4-4): Power: 2kV, Signal: 1kV; Surge (IEC 61000-4-5): Power: 2kV, Signal: 2kV
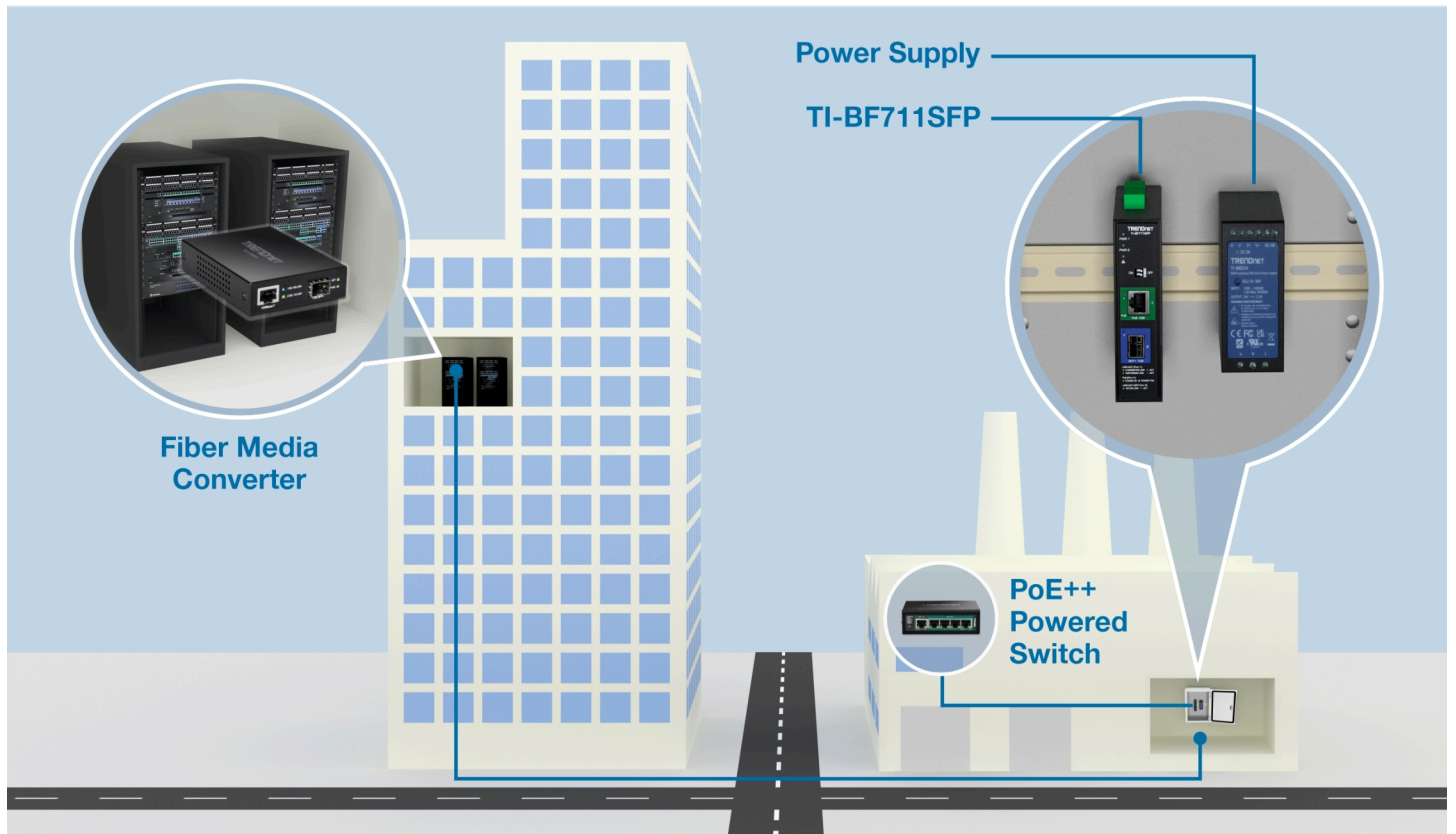
DIN-Rail / Wall Mounts
The rugged PoE+ switch includes DIN-Rail mount and wall mount hardware

Grounding Point
The industrial unmanaged PoE+ switch features a grounding point to protect equipment from external electrical surges

NETWORKING SOLUTION

Grounding point

LED indicators

DIP switch

1 x 10G RJ-45 PoE++ port
(100Mbps/1Gbps/
2.5Gbps/10Gbps)

1 x 10G SFP+ port
(1G/10G)

Power port

3-pin power
terminal block

3-pin alarm relay
terminal block

DIN-Rail mount

Power Supply

TI-BF711SFP

Fiber Media
Converter

PoE++
Powered
Switch

SPECIFICATIONS

Standards

- IEEE 802.3
- IEEE 802.3u
- IEEE 802.3ab
- IEEE 802.3an
- IEEE 802.3ae
- IEEE 802.3bz
- IEEE 802.3x
- IEEE 802.3af
- IEEE 802.3at
- IEEE 802.3bt

Device Interface

- 1 x 10G RJ-45 PoE++ port (100Mbps/1Gbps/2.5Gbps/10Gbps)
- 1 x 10G SFP+ port (1Gbps/10Gbps)
- 3-pin power terminal block
- 3-pin alarm relay terminal block
- LED indicators

Data Transfer Rate

- Fast Ethernet: 100Mbps (half duplex), 200Mbps (full duplex)
- Gigabit Ethernet: 2Gbps (full duplex)
- 2.5G Ethernet: 5Gbps (full duplex)
- 10G Ethernet: 20Gbps (full duplex)
- Gigabit SFP: 2Gbps (full duplex)
- 10G SFP+: 20Gbps (full duplex)

Performance

- Data RAM Buffer: 1MB
- Switching Fabric: 20Gbps
- MAC Address Table: 4K entries
- Jumbo Frame: 12KB
- Forwarding rate: 29.8Mpps (64-byte packet size)

DIP Switch

- 1: LFPT (Link Fault Pass Through) on/off (default ON)
- 2: EEE (Energy Efficient Ethernet, IEEE 802.3az) on/off (default OFF)

DC Power

- Input: 48 – 57V DC
- Required power supply: TI-S15052 (sold separately)
- Max. consumption: 8W (without PoE) @ 56V DC

AC

- Input: 100 – 240V AC, 50/60Hz, 2A
- Compatible power adapter: 48VDC3000 (sold separately)
- Output: 48V DC, 3.34A 160W max.
- Max. consumption: 6.8W (without PoE)

PoE

- PoE budget: 95W
- Pins 3, 4, 5, 6 +; 1, 2, 7, 8 -

Terminal Block

- 3-pin terminal blocks
- Wire range: 2.5mm^2
- Solid wire (AWG): 12-19
- Stranded wire (AWG): 12-19
- Torque: 3.5 lb. – In / 0.5Nm
- Wire strip length: 7-8mm

Alarm Relay Contact

- Relay outputs with current carrying capacity of 1A, 24V DC
- Short circuit mode when two power sources are connected
- Open circuit mode when only one power source is connected

MTBF

- 1,873,755 hours @ 25° C

Housing

- IP50 metal case
- DIN-Rail mount
- Wall mount
- Grounding point
- 6kV ESD protection
- 2kV surge protection

Operating Temperature

- - 40° - 75° C (-40°- 167° F)

Operating Humidity

- Max. 95% non-condensing

Dimensions

- 120 x 98 x 30mm (4.7 x 3.9 x 1.2 in.)

Weight

- 476g (16.8 oz.)

Certifications

- CE
- FCC
- LVD
- Shock (IEC 60068-2-27)
- Freefall (IEC 60068-2-31)
- Vibration (IEC 60068-2-6)
- IEC 61000-4-2
- IEC 61000-4-4
- IEC 61000-4-5

Warranty

- 3 year

Package Contents

- TI-BF711SFP
- Removable terminal blocks
- DIN-Rail and wall mount kit

All references to speed are for comparison purposes only. Product specifications, size, and shape are subject to change without notice, and actual product appearance may differ from that depicted herein.