



# FR-POE332

## Gigabit POE Media Converter (Internal PSU)

Product Data Sheet



# FR-POE332

Gigabit PoE Media Converter is a 10/100/1000Base-TX to 1000Base-X (also can be forced to 100Base-FX) media converter Complied with IEEE802.3at or IEEE802.3af standard, the Internal AC/DC powered PoE media converter is a Power Sourcing Equipment (PSE) which combines data transfer over an optical fibre, providing IEEE802.3at(15.4W) or IEEE802.3af(30W) to powered device (PD) over CAT5e/CAT6 copper cable (cable length up to 100meters / 330feet). The converter includes a PSE controller, which offers PD signature sensing and PoE negotiation features. Other features include over-current protection, LFP function, etc. The LFP (Link Fault Pass-through) allows the media converter to indicate either the fibre or LAN port in case of signal loss, the mechanism will automatically disable the TX signal to the other port, thus indicating the fault occurrence.

## Main Features

- 10/100/1000Base-TX UTP to 1000Base-X fibre media conversion
- Auto-negotiation of Half-Duplex/Full-Duplex transfer mode
- Complies with IEEE802.3af / IEEE802.3at standard
- Built-in AC/DC power supply
- Over-current protection
- Optical port supports SC, LC, ST,FC for multimode or single-mode
- DIP Switch supports LFP, PoE functionality, Ai PoE, etc.
- Plug-and-play, Supports desktop or wall-mount installation



## Application

- Perfect for powering a Wireless Access Point (WAP) in a business environment
- Power a security camera/ network webcam situated in a remote area where power connection is not possible over an Ethernet connection
- Enable remote installation of touchscreens or information kiosks
- Connecting PoE device data and power to Gigabit fiber backbone

# Product Specifications

## Physical Port

|             |   |
|-------------|---|
| Copper Port | 1x 10/100/1000T(X) RJ45                       |
| SFP Slot    | 1x 100/1000X SFP (or 1x9, SC,ST,FC connector) |

|                |  |
|----------------|--|
| LED Indicators | Power<br>SFP Link/Activity<br>RJ45 Link/Activity<br>RJ45 Speed<br>RJ45 Duplex<br>PoE |
|----------------|--|

## Cables

|             |   |
|-------------|---|
| UTP         | UTP Cables: CAT5 or above<br>UTP Cable Limitations: Max. length up to 330 ft. (100 m)   |
| Fiber Optic | 1000BASE-SX: 50/125, 62.5/125, or 100/140- $\mu$ m Multimode 550m 1000BASE-LX: 8.3/125, 8.7/125, 9/125, or 10/125- $\mu$ m Single-mode 10km |

## Ethernet Standards

|           |  |
|-----------|--|
| Standards | IEEE802.3i 10Base-T<br>IEEE802.3u 100Base-TX & 100Base-FX<br>IEEE802.3ab 1000Base-T<br>IEEE802.3z 1000Base-X<br>IEEE802.3x Flow Control<br>IEEE802.3af 15W PoE<br>IEEE802.3at 30W PoE+ |
|-----------|--|

|                    |        |
|--------------------|--------|
| Switching Capacity | 2 Gbps |
|--------------------|--------|

|              |    |
|--------------|----|
| Jumbo Frames | 9K |
|--------------|----|

## Power

|              |                                    |
|--------------|------------------------------------|
| Power Supply | AC 100~240V, 47 to 63Hz or DC9-56V |
|--------------|------------------------------------|

|                    |  |
|--------------------|--|
| PoE Power Capacity | IEEE802.3 af : 15.4W<br>IEEE802.3 at : 30W |
|--------------------|--|

|                   |                              |
|-------------------|------------------------------|
| Power Consumption | af mode: 20W<br>at mode: 35W |
|-------------------|------------------------------|

|            |               |
|------------|---------------|
| Protection | Over Currency |
|------------|---------------|

## Mechanical

|         |       |
|---------|-------|
| Housing | Metal |
|---------|-------|

|            |                             |
|------------|-----------------------------|
| Dimensions | 140mm×110mm×40mm(W x D x H) |
|------------|-----------------------------|

|        |                     |
|--------|---------------------|
| Weight | 500g(Bare Hardware) |
|--------|---------------------|

|              |                       |
|--------------|-----------------------|
| Installation | Desktop or Wall Mount |
|--------------|-----------------------|

# Product Specifications

| Environmental |  |
|---------------|--|
| Temperature   | Operating: 0 to 50°C (32 to 122°F)<br>Storage: -20 to +70°C (-4 to +158°F) |
| Humidity      | 5 to 95% noncondensing   |
| Altitude      | <3000m(<10000 ft.)   |

## DIP Switch

| DIP Switch | Name         | Status | Description          |
|------------|--------------|--------|----------------------|
| #1         | ENROM        | OFF    | FX Reset Disable     |
|            |              | ON     | FX Reset Disable     |
| #2         | FX100M       | OFF    | FX 1000M             |
|            |              | ON     | FX 100M              |
| #3         | PoE Shutdown | OFF    | PoE Shutdown Disable |
|            |              | ON     | PoE Shutdown Enable  |
| #4         | LFP          | OFF    | LFP Disable          |
|            |              | ON     | LFP Enable           |
| #5         | MODE1        | OFF    | ALS Disable          |
|            |              | ON     | ALS Enable           |
| #6         | MODE2        | OFF    | Ai PoE Disable       |
|            |              | ON     | Ai PoE Enable        |

- Notes: 1. ENROM: When enabled, when the optical link is down, the media converter will reboot  
2. LFP: Link fault pass through, When enabled, the UTP receiver is passed to the fiber transmitter to make the media converter appear transparent to the connected end devices. It uses link fault pass-through to indicate when far-end fault issues occur. If a fault occurs, the end device indicates a failure for troubleshooting.  
3, Ai PoE: When enabled, the PoE will restart if there is no data input to the UTP receiver.

## Accessories(Sold Separately)

| SFP Optical Transceiver |                                      |
|-------------------------|--------------------------------------|
| FRSX-1L311C             | 1.25Gb/s 1310nm 10km SFP             |
| FRSX-1L341C             | 1.25Gb/s 1310nm 40km SFP             |
| FRSX-1L5X1C             | 1.25Gb/s 1550nm 80/100km SFP         |
| FRSX-1L3523/5323C       | 1.25Gb/s 1310nm/1550nm 20km BiDi SFP |

  

| Armored Fiber Patch Cable / LAN Cable |   |
|---------------------------------------|---|
| FRPC-A-LC                             | Armored LSZH LC UPC to LC UPC Duplex OS2 single mode 7.0mm for Outdoor Application , 1-50m      |
| FRLC-A-CAT6                           | Armored Cat6 Snagless shielded(SFTP) Ethernet Network Patch Cable, 26AWG, 1000Base-T, 0.5m – 3m |

## Precautions

To avoid damage to the equipment and personal injury caused by improper use, please observe the following precautions:

- ❖ Keep the power off during installation, wear an anti-static wrist, and ensure that the anti-static wrist is in good contact with the skin to avoid potential safety hazards.
- ❖ The Switch/Media Converter can work normally under the correct power supply. Please confirm that the power supply voltage matches the
- ❖ voltage indicated by the Switch/Media Converter.
- ❖ Before powering on the Switch/Media Converter, please make sure that the power circuit is not overloaded, so as not to affect the normal operation of the Switch/Media Converter and even cause unnecessary damage.
- ❖ To avoid the risk of electric shock, do not open the case while the Switch/Media Converter is working, even if it is not charged, do not open it yourself.
- ❖ Before cleaning the Switch/Media Converter, pull out the power plug of the Switch/Media Converter. Do not wipe with a wet cloth. Do not use liquid to clean it.
- ❖ The equipment installed in the rack is generally from bottom to top to avoid overload installation.
- ❖ Avoid placing other heavy objects on the surface of the Switch/Media Converter to avoid accidents.

## Order Information

|            |  |
|------------|--|
| FR-POE331S | Fast Ethernet PSE Media Converter SFP to RJ45, 30W(Internal power supply AC220V) |
| FR-POE332S | Gigabit PSE Media Converter SFP to RJ45, 30W(Internal power supply AC220V)       |

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## For more information

For more information about Fiberroad Fiber Media Converter series products, Visit <https://www.fiberroad.com> or contact your local account representative.