User Manual

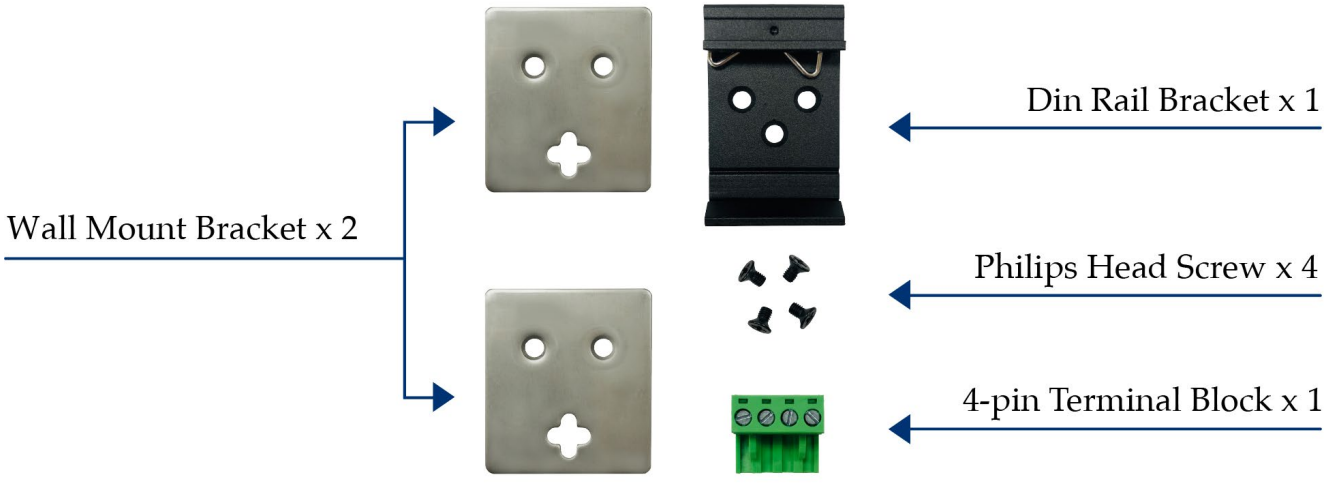
Industrial Gigabit PoE Media Converter,
with 1 x 10/100/1000M TX 60W PSE + 1 x 100/1000M SFP, 48-56 VDC input

Introduction

This rugged Industrial PoE media converter is equipped with a Hardened Main IC to provide a reliable power source to power up your remote PoE device. The 60W PoE port can be used for power outdoor speed domes, outdoor lamps, and other high-power PD devices. It can easily expand your network distances for the installation plan of Security, Transportation or Telco applications. With its multi-purpose design, it can not only be Din-Rail but wall mounted. It is an ideal unit for IP surveillance, traffic monitoring and Security application in critical environment. It can tolerate -40°C to 75°C in harsh environment to perform a reliable network.

Installation package

This unit can be din-rail or wall mounted. Din-rail brackets and wall mount brackets are included.



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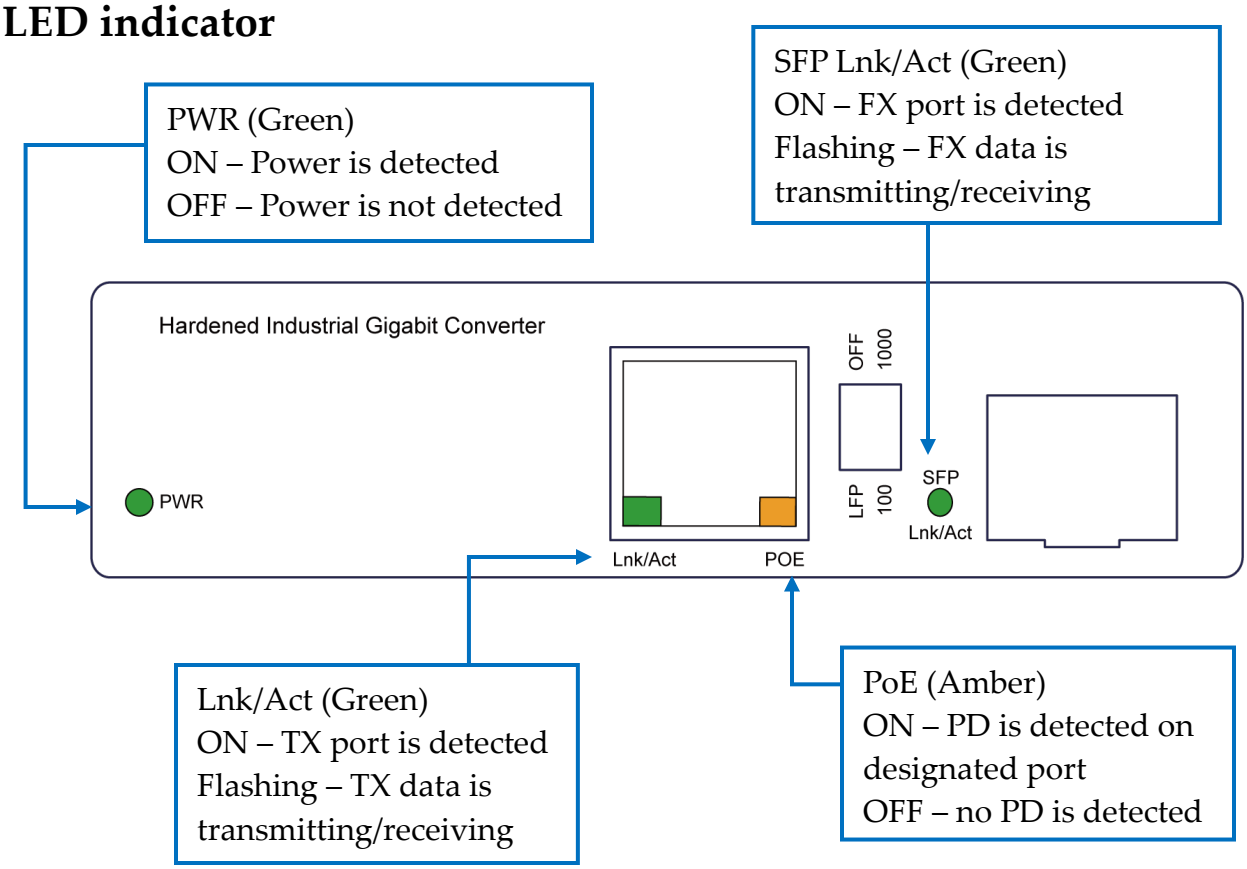
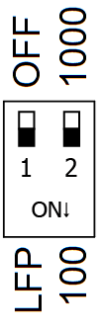
LED indicator



Dip switch function

This unit is equipped with dip switches, located on the front panel. Adjusting the dip switches will change the default function of this unit. This unit has set to manufacturer default as: SFP speed 1000M and LFP function OFF.

The table shown as below, you may change the dip switch setting to match your environment.

	Dip 1	UP	LFP disabled (Default)
		DOWN	LFP enabled
	Dip 2	UP	SFP Speed 1000M (Default)
		DOWN	SFP Speed 100M

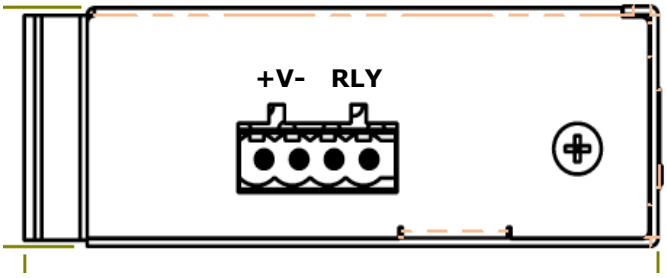
Power connection

This unit provides a 4 pin terminal block. It can be operated using 48-56VDC power source. Always make sure your input voltage is within this supported voltage range.

To connect power: Follow the printed polarity for V+, V- and Ground. Connect positive wire to V+, connect negative wire to V- and connect neutral wire to ground.

+V- is for power input connection, this unit has only one power input.
RLY is for relay connection.

Power connecting procedure:



STEP 1 – Take out 4 pin terminal block located in the included mounting kit package.
STEP 2 – Connect power wire to +V- with correct polarity and connect RLY for relay. **Connect the grounding wire to the ground screw.**
STEP 3 – Plug into terminal block socket shown above. Polarity needs to match V+ and V-.

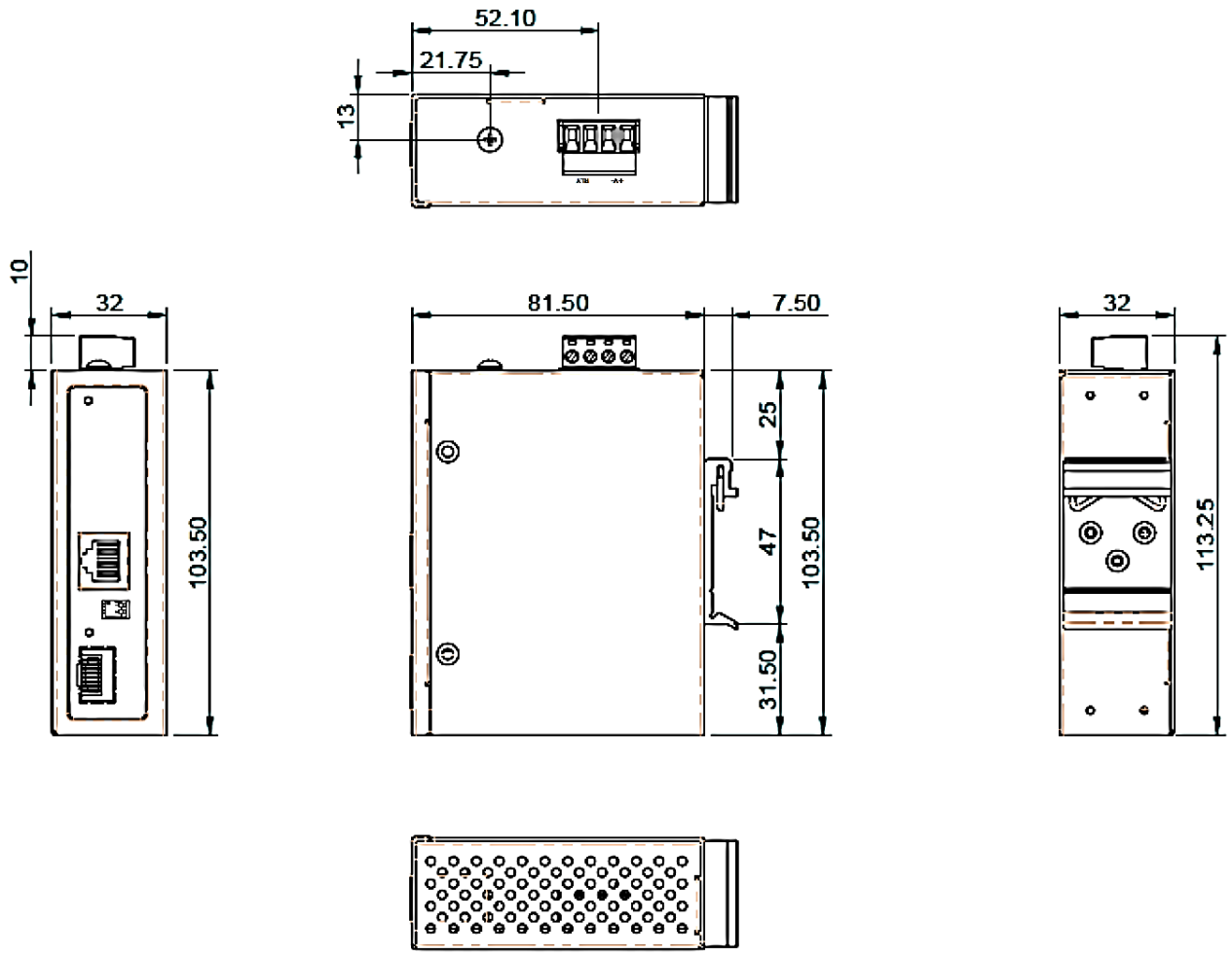
WARNING -- Always SHUT OFF power source to connect power wire.
WARNING -- Any exceeded input voltage will not make this unit function and may damage this unit.

Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3z 1000Base-X Gigabit Ethernet IEEE 802.3x Flow Control and Back Pressure IEEE 802.3af PoE IEEE 802.3at PoE+
Switch Architecture	Back-plane (Switching Fabric): 4Gbps
Data Processing	Ports speed are the same: Converter mode Ports speed are not the same: Switch mode (store and forward)
Flow Control	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	16KB
MAC Address Table Size	1K
Packet Buffer Size	512Kbits
Network Connector	1xRJ-45 10/100/1000BaseT(X) PSE Auto MDI/MDI-X function, Full/Half duplex Support PoE output up to 60Watts 1 x 100/1000M SFP
Network Cable	UTP/STP Cat.5e or above Cable
	EIA/TIA-568 (100m)
Protocol	CSMA/CD
LED	PWR (Green): ON－Power is detected OFF－Power is not detected
	SFP: Lnk/Act (Green): ON－FX port is detected Flashing－FX data is transmitting/receiving
	RJ-45 port: Lnk/Act (Green): ON－TX port is detected Flashing－TX data is transmitting PoE (Amber): ON – PD is detected on designated port. OFF – no PD is detected.
PoE Pin Assignment	60 watts 4 pairs Pin 1 (V+), 2 (V+), 3 (V-), 6 (V-) Pin 4 (V+), 5 (V+), 7 (V-), 8 (V-)
DIP Switch	DIP1: OFF－LFP disabled (Default) ON－LFP enabled DIP 2:

	OFF—SFP speed 1000M (Default) ON—SFP speed 100M Link Fault Pass Through (LFP) is when copper side signal lost or disconnect, fiber side link signal will actively off, when fiber side signal lost or disconnect, copper side link signal will also actively off.
Reverse polarity protection	Present
Overload current protection	Present
Power Supply	4 pin terminal block with 48V-56V DC Power Input RLY: Relay switch for alarm
Alarm Relay Contact	Relay outputs with current carrying capacity of 1 A @24VDC, Relay in short circuit mode when power fails. in open circuit mode when power supply is connected
Power Consumption	3W@48 VDC full load, Without PoE
PoE Power	Maximum PoE power 60 Watts at 56VDC input
Removable Terminal Block	Provide 4 pin terminal block Wire range: 0.34mm^2 to 2.5mm^2 Solid wire (AWG):12-24 Stranded wire (AWG): 12-24 Torque:5lb-In/0.5Nm/0.56Nm Wire Strip length: 7-8mm
Operating Temperature	-40°C to 75°C
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C to 85°C
MTBF (mean time between failure)	551,468 hrs (Telcordia (Bellcore), GB) at 50°C
Housing	Rugged Metal, IP30 Protection
Case Dimension (L X W X D) mm	103.5mmx32mmx81.5mm (LxWxD)
Installation mounting	DIN Rail and Wall Mount options included
Certifications:	
Safety	UL (EN60950-1)
Safety	LVD (EN62368-1)
EMC	CE (EN 55032/35), FCC
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
Vibration	EN 60068-2-6
Shock	EN 60068-2-27
Free Fall	EN 60068-2-32

Housing Dimension (mm)



NOTE:
Housing dimension is for purpose of showing product Length, Width, Height, din-rail, and terminal block's position and dimension. Please reference the LED Indicator Page for correct port order.