

User Manual

MS657099PX Industrial Gigabit Ethernet Bridging Converter with PoE+, 1x 10/100/1000Base-T to 100/1000Base-X SFP Port

CE MARKING

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 2004/108/EC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

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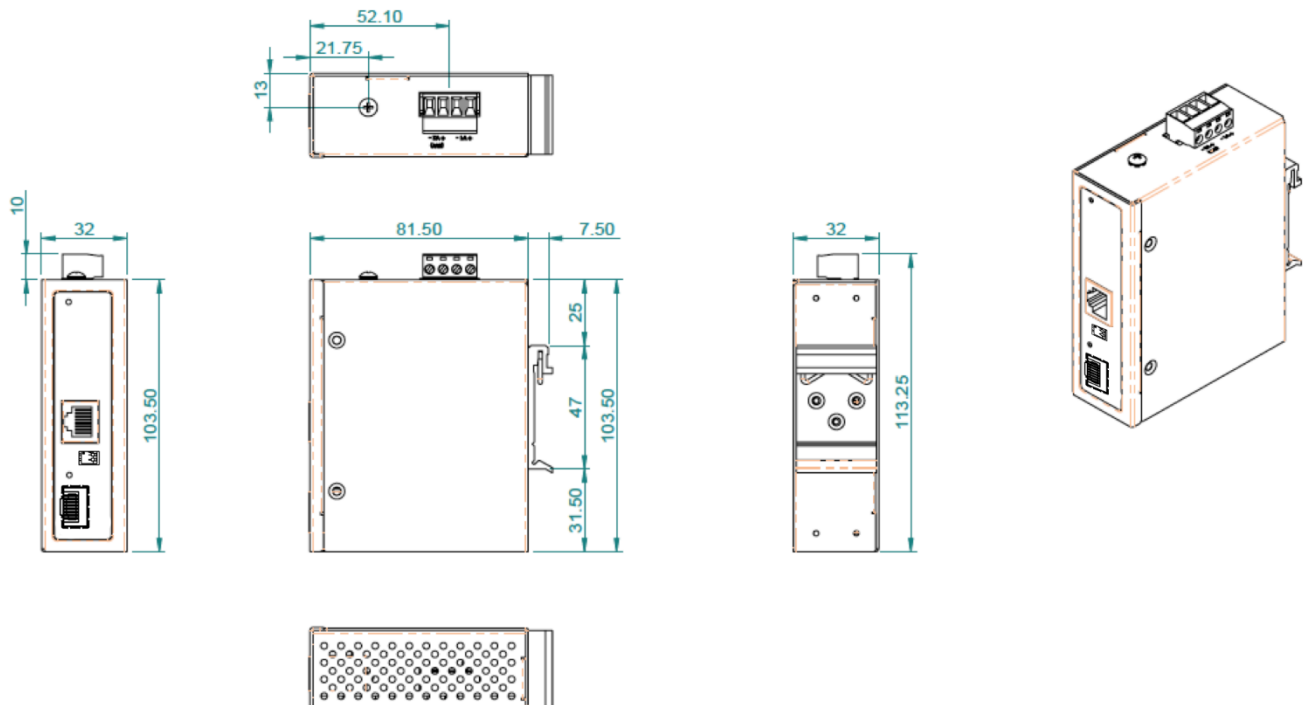
Introduction

This ruggedized Industrial POE bridging media converter is equipped with Hardened chipset to provide a reliable power source to power up your remote PoE device. It is designed for security, transportation and telco applications to expand your network distances. With its multi-purpose design, it can also be used for DIN-Rail or wall-mounted. It is an ideal unit for IP surveillance, traffic monitoring and Security applications in critical environment. It can tolerate -40°C to 75°C in harsh environment to perform a reliable network.

Key Features

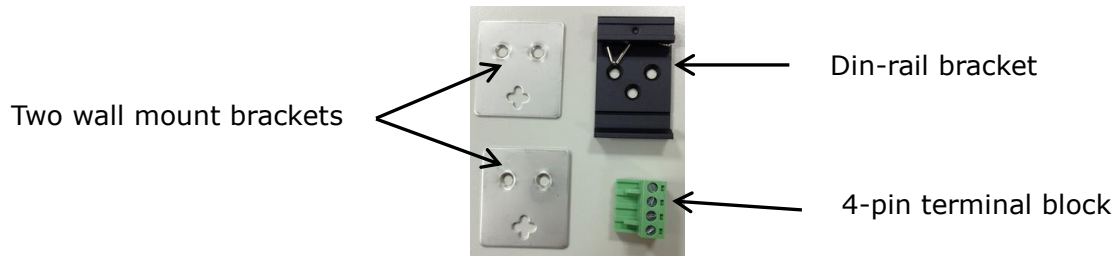
- Hardened Industrial graded chipset
- Ruggedized design aluminum enclosure 103.5x32x81.5mm (LxWxD)
- Supports 30Watts PSE on TX port
- Surge protection diodes on power input
- ESD protection diodes on RJ-45 port
- Provides increased Noise Immunity
- Extended environmental specification -40°C to 75°C

Housing Dimensions



Installation package

This unit can be installed by DIN-rail mounted or wall-mounted. DIN-rail brackets and wall-mounted bracket are included.



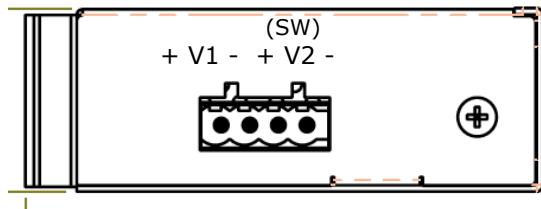
Power connection

This unit provides 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. For this 30 Watts model, you need to use 56 VDC input to generate IEEE802.3at 30 Watts power.

To make power connection – Follow the printed polarity for V+, V- and ground. Connect positive wire to V1+, connect negative wire to V1- and connect ground/earth to grounding screw.

+V1- is for power input connection, this unit has only one power input.

+V2-(SW) is for relay connection. (SW) is the relay connection.



Connecting procedure

STEP 1: Pull out 4-pin terminal block in the included mounting kit package.

STEP 2: Connect power wire to +V1- with correct polarity.
Connect +V2- (SW) for relay.

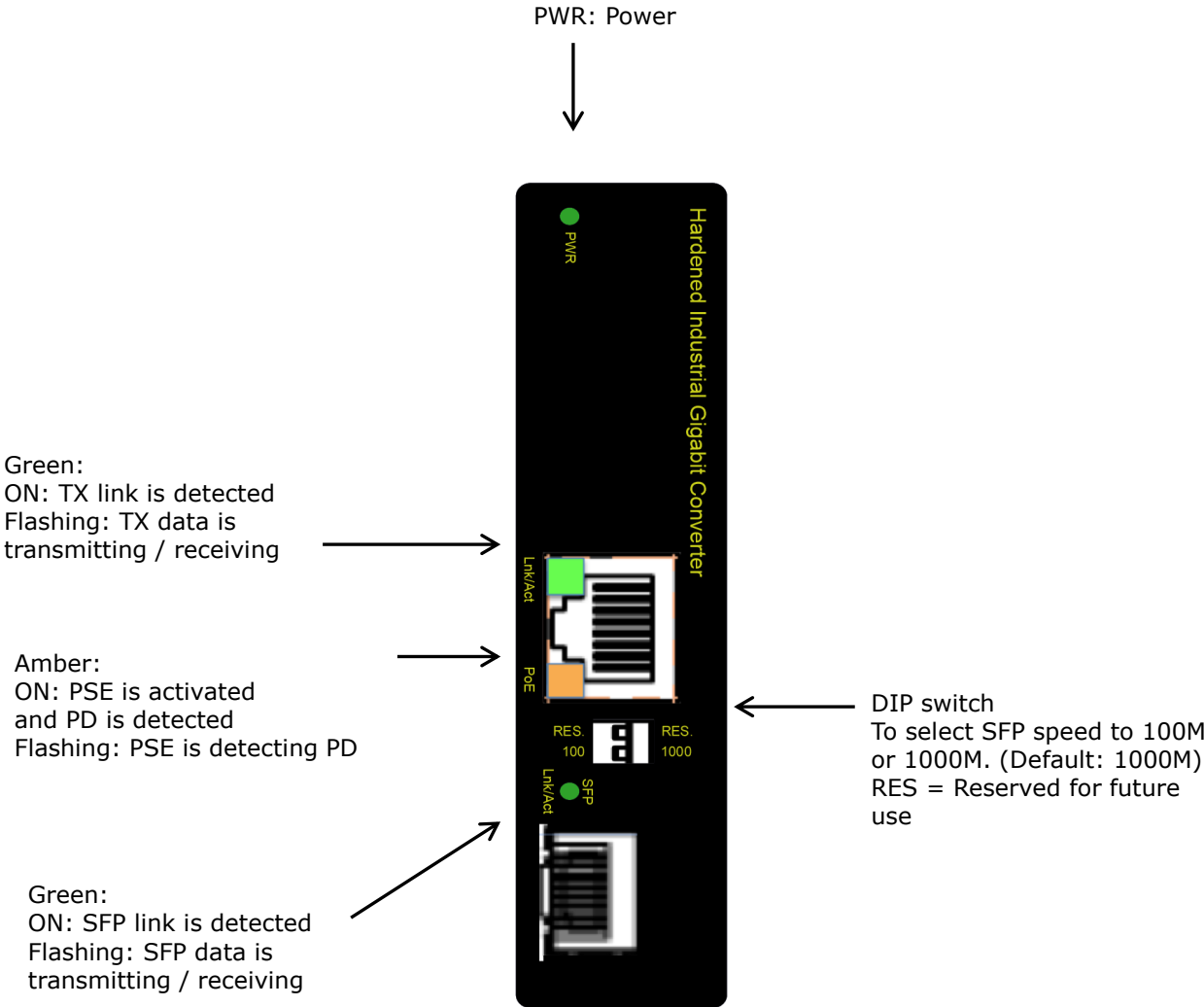
STEP 3: Connect ground/earth to grounding screw.

STEP 4: Plug into terminal block socket shown above.
Polarity needs to match the V+ and V-.

WARNING: Always SHUTS OFF power source to connect power wire.

WARNING: Any exceeded input voltage will not make this unit function and may damage this unit.

LED indicator and DIP-Switch



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Specification:

IEEE Standards	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 IEEE802.3x Flow Control and Back Pressure, IEEE802.3af for POE IEEE802.3at for POE+
Switch Architecture	Back-plane (Switching Fabric): 4Gbps
Data Processing	Store and Forward
Flow Control:	IEEE 802.3x Flow Control and Back Pressure
Jumbo Frame	9KB
MAC address Table Size	2K
Packet Buffer Size	1M
Network Connector :	1xRJ-45 10/100/1000BaseT(X) PSE with POE Output power up to 36Watts 1 x 100/1000M SFP
Network Cable	UTP/STP min. Cat.5e cable EIA/TIA-568 10-ohm (100m)
Protocol	CSMA/CD
LED	PW1(power 1) Green: ON- power good, OFF- power failed UTP LEDs: Amber ON- PD detected Green ON – Link/active – SFP LED: Green ON – SFP detected
POE Pin Assignment	30 watts 2 pairs V+, V+, V-, V- for pin 1, 2, 3, 6
DIP Switch	To select SFP speed 100M or 1000M.
Reverse polarity protection	Present
Overload current protection	Present
Power Supply	4 pin terminal block with 48V-56V VDC Power Input, SW (Relay): 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	2 W@48 VDC Without POE
POE power	Maximum PoE power 36watts at 56VDC input

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Removable Terminal Block	Provide 4 pin terminal block Wire range: 0.34mm ² to 2.5mm ² Solid wire (AWG):12-24/14-22 Stranded wire(AWG): 12-24/14-22 Torque:5lb-In/0.5Nm/0.56Nm Wire Strip length: 7-8mm
Operating Temperature	-40°C~75°C fully tested.
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40°C~85°C
MTBF (mean time between failure)	510,304 hrs (MIL-HDBK-217F) at 25°C
Housing	Rugged Metal ,IP30 Protection
Case Dimension (L X W X D)mm	103.5mmx32mmx81.5mm (LxWxD)
Installation mounting	DIN-rail mounting and wall mounting
Certifications:	
EN55022/24	ITE equipment
EN55011	Industrial, Scientific and Medical (ISM) equipment
Safety	IEC EN60950-1
EMC/EMS	CE
EMI	CE EN 55022 Class A