

## User Manual

### MS657031X Industrial GBE PoE / PoE+ Injector up to 30W, IEEE802.3af/at



#### 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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## NOTE:

Always make sure the total length of the TX cable DOES NOT exceed 100 meter. Total length is defined as length A + length B.

Length A + Length B < 100 meter



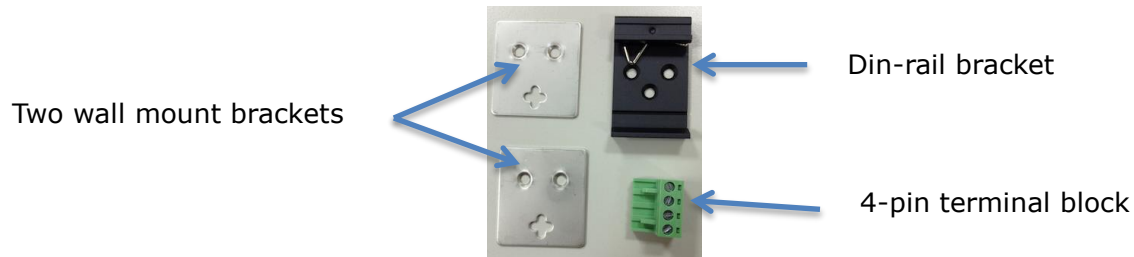
Maximum total cable length is 100 meter.

During 1000 Mbps speed transmission; recommend maximum cable length less than 90 meter is recommended.

POE signal attenuates every meter, the built-in transformer allows the attenuation to reach 100 meter long to follow IEEE802.3af / at standard. The higher quality of PD you connected to, the more reliable the network will be. When connect to a poor quality PD, it cannot generate strong signal to send to remote switch. Always make sure you have a high quality PD to perform a desired network.

## Installation package

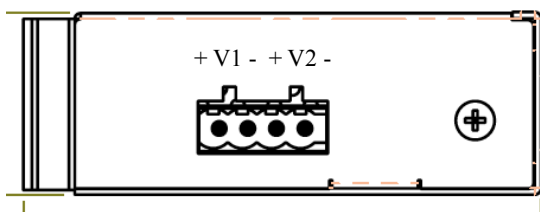
This unit can be installed by din-rail mounted or wall-mounted. Din-rail brackets and wall-mounted bracket are included at delivery.



## Power connection

This unit is equipped with POE capability to deliver 30 W POE power. The provided 4-pin terminal block can be connected with 44 VDC to 56 VDC power source. Always ensure your input voltage is within this supported voltage range.

To make power connection – Follow the printed polarity for V+, V- and ground. Connect positive wire to V+, connect negative wire to V-, and connect ground/earth to grounding screw as shown. For power redundancy, this unit can be connected to two power inputs.  
+V1 is for power input one connection  
+V2 is for power input two connection



## Connecting procedure

- STEP 1: Connect ground/earth to grounding screw.
- STEP 2: Pull out 4-pin terminal block in the included mounting kit package.
- STEP 3: Connect power wire to V1+, V1-, V2+, and V2- with correct polarity.  
Possibly connect alarm relay.
- STEP4: Plug the connector into terminal block socket shown above.

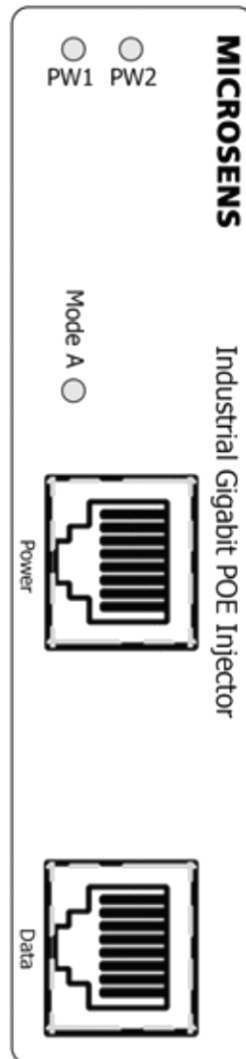
**WARNING** – Always SHUT OFF power source to connect power wire.

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

## LED indicator

PW: Power 1, Power 2

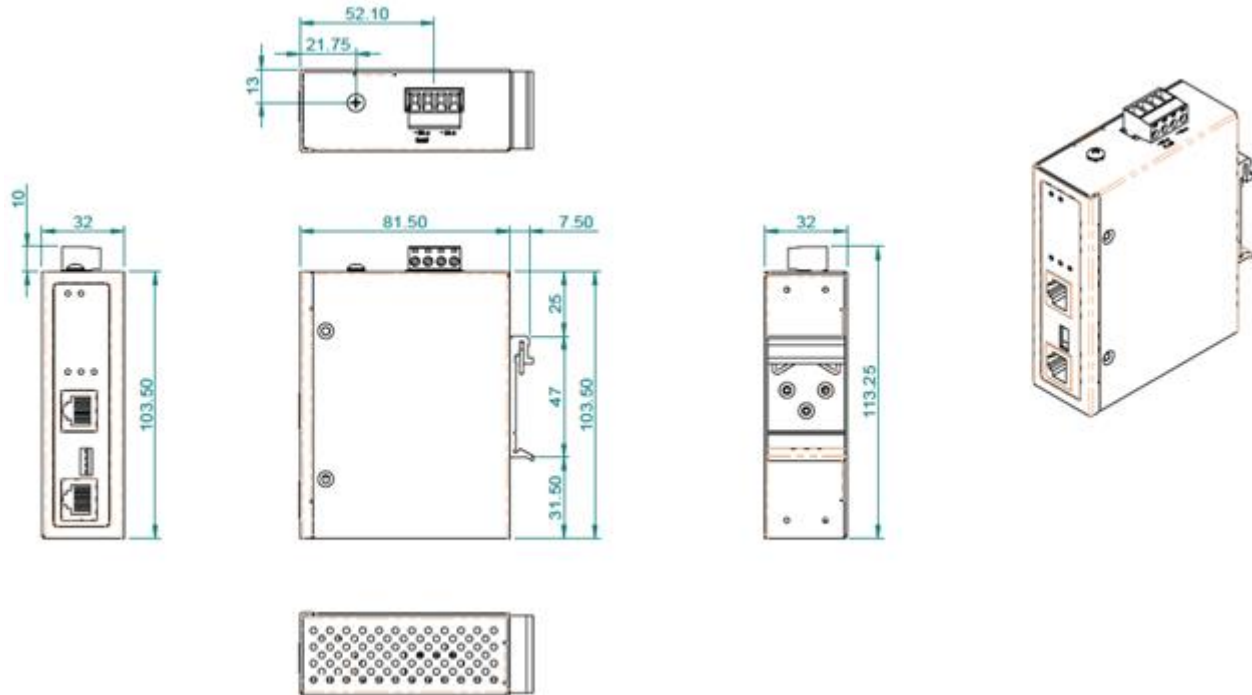
Mode A: Green LED ON --  
For End-Span POE power  
1,2,3,6



## Specifications

<b>IEEE Standard</b>	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3af for PoE IEEE 802.3at for PoE+
<b>Network Connector :</b>	1x RJ-45 10/100/1000Base-T Data 1x RJ-45 10/100/1000Base-T PSE with PoE Output power
<b>Network Cable</b>	UTP/STP above Cat.5e Cable EIA/TIA-568 10-ohm (100 m)
<b>Protocol</b>	CSMA/CD
<b>LEDs</b>	PW1(power 1) Green: ON- power good, OFF- power failed PW2(power 2) Green: ON- power good, OFF- power failed Mode A : ON- End Span PD detected
<b>POE Pin Assignment</b>	Default: Mode A (End Span) V+, V+, V-, V- for pin 1, 2, 3, 6
<b>Reverse polarity protection</b>	Present
<b>Overload current protection</b>	Present
<b>Power Supply</b>	2 Redundant power source 44..56 VDC Power Input
<b>Power Consumption</b>	1 W @ 48 VDC full load, without PoE
<b>POE power</b>	Maximum PoE power 36 W at 56 VDC input
<b>Removable Terminal Block</b>	Provide 4 pin terminal block Wire range: 0.34mm <sup>2</sup> to 2.5mm <sup>2</sup> 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
<b>Operating Temperature</b>	-40°C .. 75°C fully tested
<b>Operating Humidity</b>	5% to 95% (Non-condensing)
<b>Storage Temperature</b>	-40°C .. 85°C
<b>MTBF (Mean Time Between Failure)</b>	510,304 h (MIL-HDBK-217F) at 25°C
<b>Housing</b>	Rugged Metal, IP30 Protection
<b>Case Dimension (L X W X D)</b>	103.5 mm x 32 mm x 81.5 mm
<b>Safety</b>	IEC EN60950-1
<b>EMC/EMS</b>	EN 55022: 2010 +AC: 201 Class A EN 55024: 2010

## Housing Dimensions



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