MICROSENS

User Manual

MS657032X
Industrial GBE High Power PoE Injector up to 60W, 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.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

Trademarks:
All trade names and trademarks are the properties of their respective companies.

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.

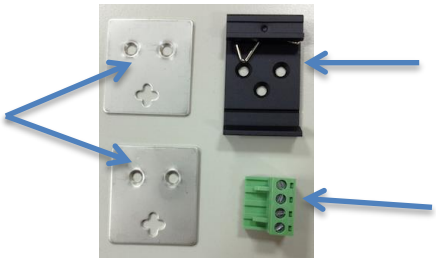
During 1000 Mbps speed transmission; recommend maximum cable length less than 90 meter is recommended.

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.

Two wall mount brackets



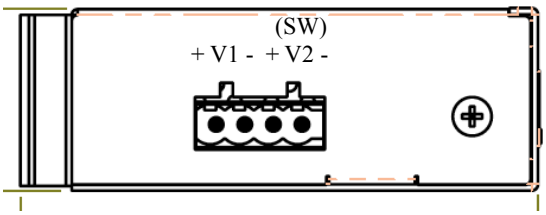
Din-rail bracket

4-pin terminal block

Power connection

This unit is equipped with POE capability to deliver 30 W and 60 W POE power. The provided 4- pin terminal block can be connected with 48 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 (SW) is for power input two connection



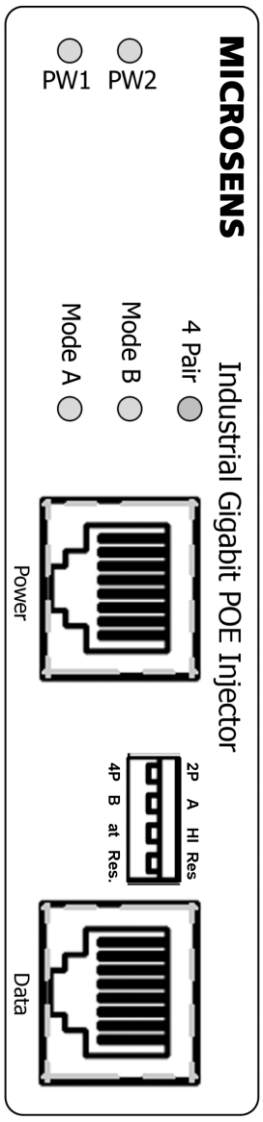
Connecting procedure

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



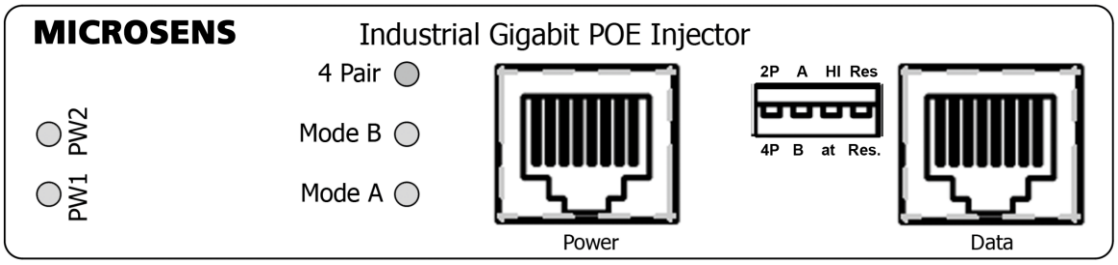
Mode A: Green LED ON --
For End-Span POE power
1,2,3,6

Mode B: Green LED ON --
For Mid-Span POE power
4,5,7,8

4 pair amber LED ON –
Both 4 pair are delivering POE power. For 60 W application

Dip Switch setting

This unit is equipped with 4-pin DIP switches that allow users to set the desired POE power setting to meet your desired POE network. Refer to the setting shown below:



2P	2 pair 30 W is selected
4P	4 pair 60 W is selected (DEFAULT)
A	Mode A End-Span is selected (DEFAULT)
B	Mode B Mid-Span is selected
HI	High power 36 W is selected (DEFAULT)
at	IEEE802.3at 30 W is selected
Res	Reserved (DEFAULT)
Res	Reserved

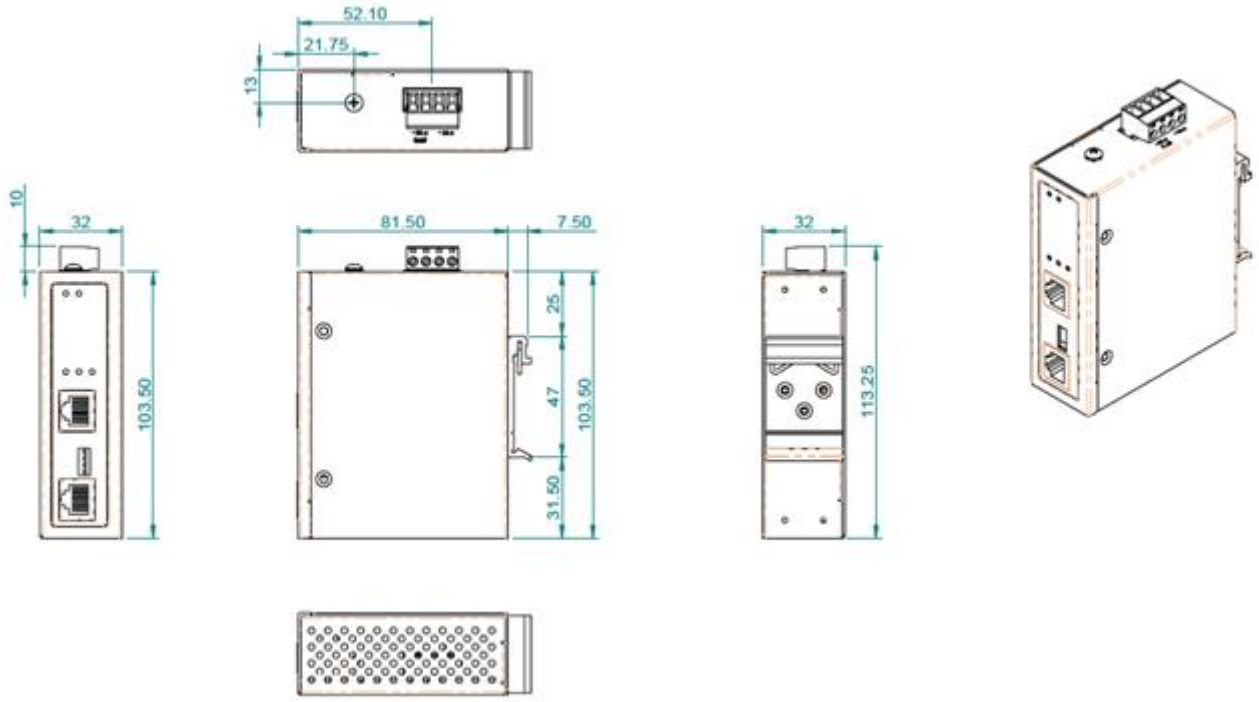
Specifications

IEEE Standard	IEEE 802.3 10Base-T Ethernet IEEE 802.3u 100Base-TX Fast Ethernet IEEE 802.3ab 1000Base-T Gigabit Ethernet IEEE 802.3af for POE IEEE 802.3at for POE+
Network Connector :	1x RJ-45 10/100/1000Base-T Data 1x RJ-45 10/100/1000Base-T PSE with POE Output power
Network Cable	UTP/STP above Cat.5e Cable
	EIA/TIA-568 10-ohm (100 m)
Protocol	CSMA/CD
LEDs	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 Mode B: ON – Mid Span PD detected 4 Pair: ON – 60 W PSE in active mode OFF – 30 W PSE in active mode
POE Pin Assignment	Default: Mode A (End Span) V+, V+, V-, V- for pin 1, 2, 3, 6 DIP switch setting can be changed to Mode B, V+, V+, V-, V- for pin 4, 5, 7, 8
DIP Switch	To select 2 pair (30/36 W) or 4 pair (60/72 W) To select Mode A, or Mode B To select standard IEEE802.3at 30 W or high power POE 36 W
Reverse polarity protection	Present
Overload current protection	Present
Power Supply	2 Redundant power source 48..56 VDC Power Input
Power Consumption	1 W @24/48 VDC full load, without POE
POE power	Maximum POE power 72 W at 56 VDC input

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℃ … 75℃ fully tested
Operating Humidity	5% to 95% (Non-condensing)
Storage Temperature	-40℃ ... 85℃
MTBF (mean time between failure)	510,304 h (MIL-HDBK-217F) at 25°C
Housing	Rugged Metal, IP30 Protection
Case Dimension (L X W X D)	103.5 mm x 32 mm x 81.5 mm
Installation mounting	DIN rail mounting and wall mounting
Certifications:	
EN55022/24	ITE equipment
Safety	IEC EN60950-1
EMC/EMS	CE
EMI	EN 55022: 2010 +AC: 201 Class A EN 55024: 2010

MICROSENS

Housing Dimensions



MICROSENS reserves the right to make any changes without further notice to any product to improve reliability, function or design. MICROSENS does not assume any liability arising out of the application or use of any product. 2616SH