MIT-44GD

4 Ports Gigabit PoE Injector

USER'S MANUAL

MSTRONIC CO., LTD.

1. General Information

The MIT-44GD is a DC/DC PoE (Power over Ethernet) Injector, provide up to 4 different voltage DC input and four different voltage PoE output, output power maximum 35W/port, data rate can be operating at 10M/100M/1000M.

2. Hardware Description

4	3	2	1	Data in
4	3	2	1	Data + Power out

Front panel detail
the port number is as the diagram shows.

Rear panel detail

*LED Indicator

There are 4 LEDs on the front panel to indicate the input and output power status of each port.

LED	STATUS	Description
1~4	Green	A valid power device is detected on this port.
	Red	No power device is detected on this port.
	Off	No input power valid.

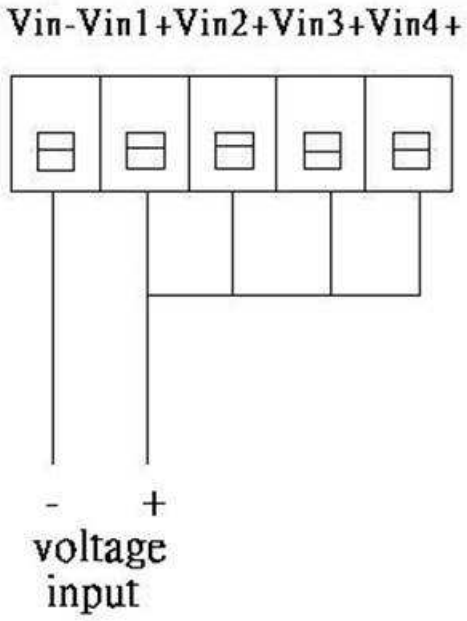
*Data Input

The upper ports 1-4 on the front panel are used for Gigabit Ethernet data input.
All four ports with surge protection.

*Power Input

The input voltage range is 44~57VDC, common negative design, the green terminal (CON1) on rear panel is used for power input wiring, it can be connected to maximum 4 different sources with 4 different voltages, the jumper A, B, C, of JP1 on rear panel controls the input/output connection, its setting as below. (1=jumper on, 0=off)

Jumper / Input	A (1-2)	B (1-3)	C (1-4)	PoE Output
VIN1+	**1**	**1**	**1**	**PoE 1/2/3/4=VIN1 (Factory setting)**
VIN1+ VIN4+	**1**	**1**	**0**	PoE 1/2/3=VIN1 PoE 4=VIN4
VIN1+ VIN3+	**1**	**0**	**1**	PoE 1/2/4=VIN1 PoE 3=VIN3
VIN1+ VIN3+ VIN4+	**1**	**0**	**0**	PoE1/2=VIN1 PoE3=VIN3 PoE4=VIN4
VIN1+ VIN2+	**0**	**1**	**1**	PoE1/3/4=VIN1 PoE2=VIN2
VIN1+ VIN2+ VIN4+	**0**	**1**	**0**	PoE1/3=VIN1 PoE2=VIN2 PoE4=VIN4
VIN1+ VIN2+ VIN3+	**0**	**0**	**1**	PoE1/4=VIN1 PoE2=VIN2 PoE3=VIN3
VIN1+ VIN2+ VIN3+ VIN4+	**0**	**0**	**0**	PoE 1=VIN1 PoE 2=VIN2 PoE 3=VIN3 PoE 4=VIN4



Recommend input connection

*PoE Output

The bottom ports 1-4 on the front panel are used for carry PoE output, the output voltage is the same as input, no regulated as detailed below:

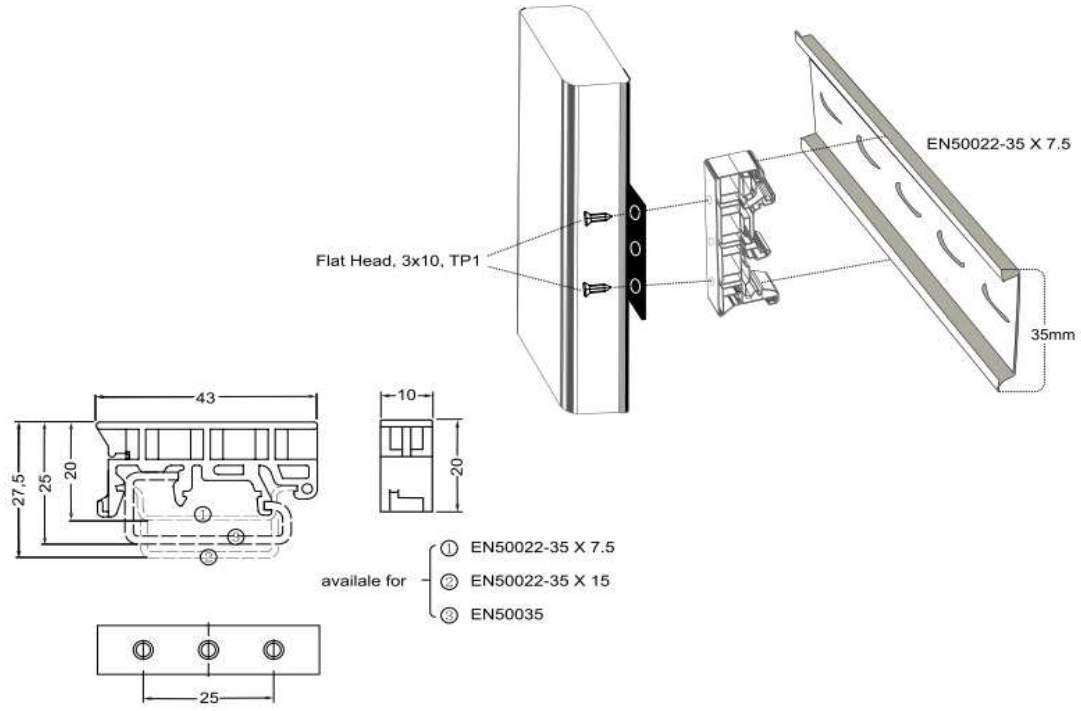
* Data pair A on line 1 and 2
* Data pair B on line 3 and 6
* Data pair C plus V+ on line 4 and 5
* Data pair D plus V- on line 7 and 8

4. Technical Information

Data Rate	10M/100M/1000M
Input:	44 VDC to 57VDC 4.2A
Output:	44-57VDC, 2.5A, each port with 0.625A
Compliance	802.3af/at
PoE protection	over-current, over/under voltage
LEDs:	Green-PD detect, Red-Power ready, Off-No power apply
Operating temperature	-40℃~ +70℃
Operation humidity	90% relative humidity, non-condensing
Storage temperature	-40℃~+85℃
Dimension	40mm(H) x118mm(W) x90mm(D) DIN RAIL Mountable

NOTICE:

The product is not comply to LPS requirement, it need to evaluate at final system.



Surge protection on data input ports:

	Signal
Operating Voltage	Data 5V
Clamping Voltage	Data 16.5V (@I PP =5A, t p =8/20μs, I/O pin to GND)
Peak Pulse Current	20A (tp=8/20μs)
Pin Protected	All 8 pin protected
Max. Shut Capacitance	<3pF (VR = 0V, f = 1MHz, I/O pin to GND) < 1.5 pF (VR = 0V, f = 1MHz, Between I/O pins)
IEC COMPATIBILITY (EN61000-4)	IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact) IEC61000-4-4 (EFT) 40A (5/50ns) IEC61000-4-5 (Lightning) 20A (8/20μs)