

DIN-POE1-G
4 Ports Gigabit
DC/DC
Industrial PoE Injector



USER'S MANUAL

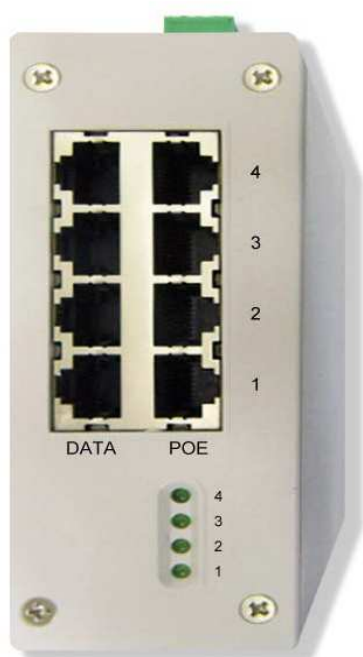


MSTRONIC CO., LTD.

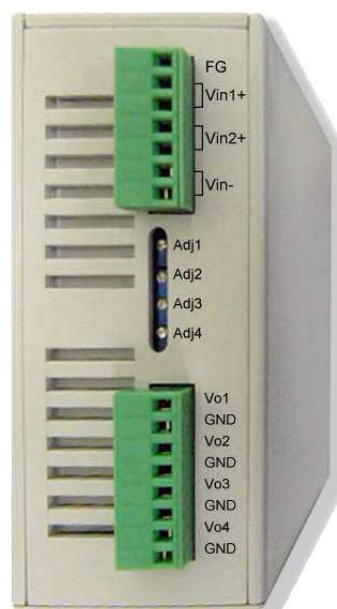
1. General Information

The DIN-POE1-G is a DC/DC PoE (Power over Ethernet) injector, which allows one DC input and four different adjustable voltage PoE outputs. Output power maximum is 1A/port, the data rate can be up to 10M/100M/1000M. This manual will help you with installation and setting up the PoE injector.

2. Hardware Description



Front panel.



Top panel

*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	Output ready
	Off	No output, or input source failed.

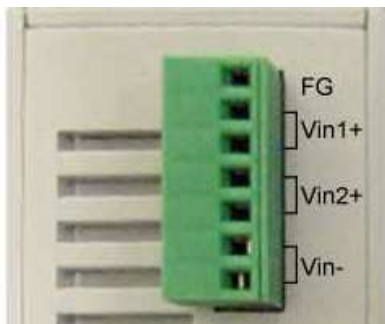
*Data Input

The left RJ45 ports 1-4 on the front panel are used for Ethernet data input. The model is a midspan, without Ethernet switch functionality. Each data port is independent.

All four ports with surge protection.

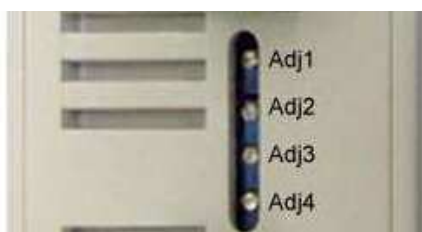
*Power Input

The 7 pin green terminal on the top panel is used for power input wiring, it can be connected to the two DC sources as back up, and the higher voltage source will become the main source. The input voltage range of the model is 5VDC to 30VDC.



*PoE Output

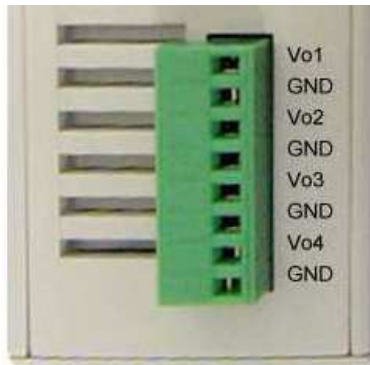
The right RJ45 ports 1-4 on the front panel are used for PoE output. Each port can deliver a different voltage. The Adj1~Adj4 on the top panel are used to adjust the output voltage of port 1~4 (the same as Vo1~Vo4). Each port can be regulated between 5VDC to 24VDC with individual setting.



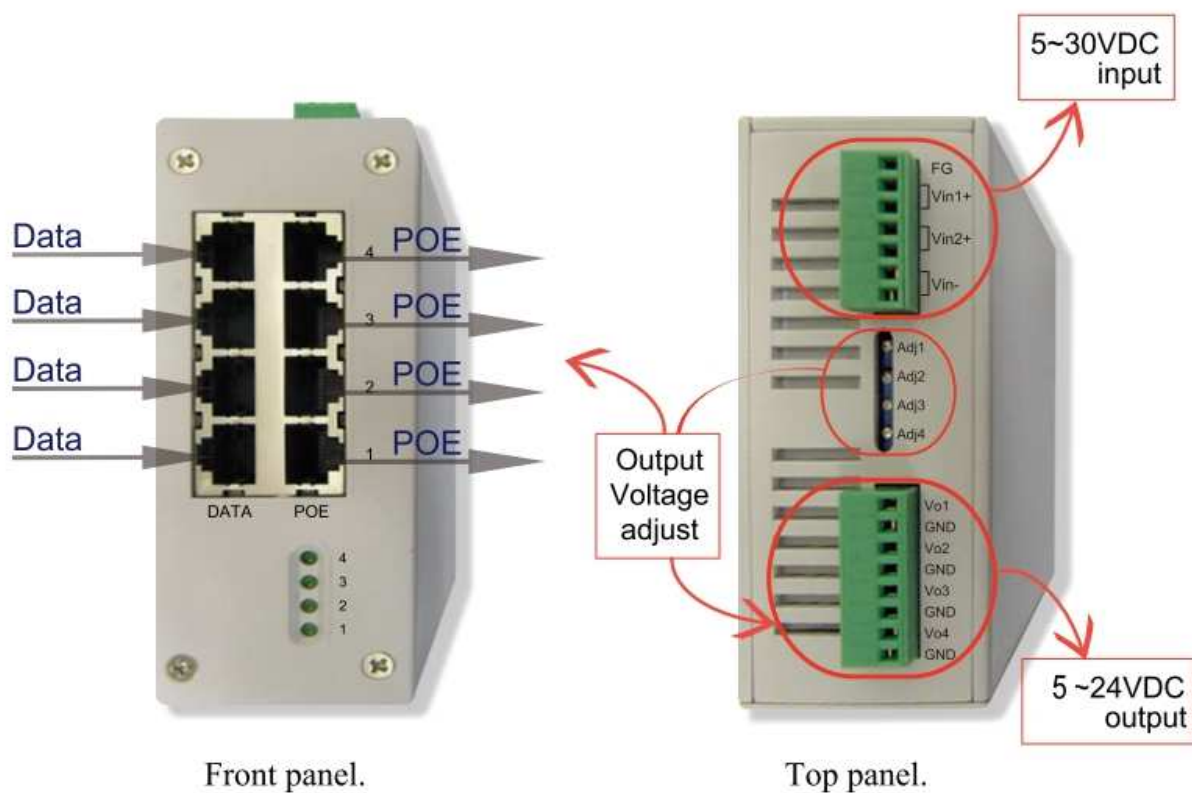
- * Data pair A on line 1 and 2
- * Data pair B on line 3 and 6
- * Data pair C plus V+ on line 4 and 5
- * Data pair D plus V- on line 7 and 8

*DC Output

The 8 pin connector on the top panel is used for DC output. Vo1~Vo4 with the same voltage as PoE port 1~4 as regulated between 5VDC to 24VDC. All the GNDs can be connected together.

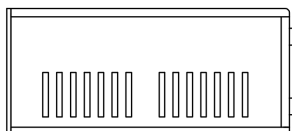
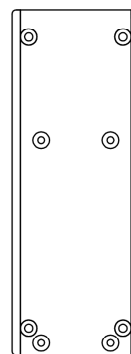
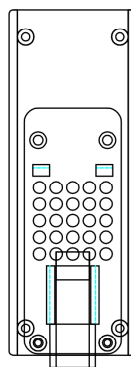
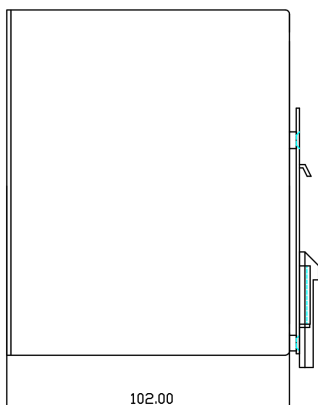
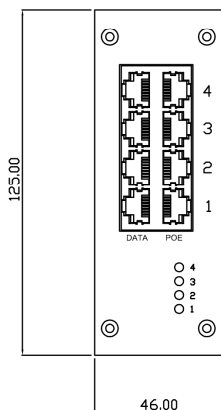
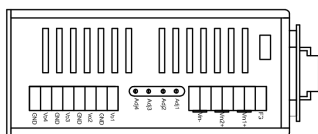


*Quick Guide



4. Technical Information

Data Rate	10M/100M/1000M
Input voltage:	5VDC to 30VDC
Maximum PoE output	Current limited – 1A/port (as the output voltage/current chart below)
Maximum DC output	3A maximum (as the output voltage/current chart below)
Compliance	non 802.3af/at
PoE protection	over-current protection
LEDs:	Green-Power ready, Off-No power apply
Operating temperature	-40°C ~ +65°C
Operation humidity	90% relative humidity, non-condensing
Storage temperature	-40°C ~ +85°C
Dimension	125mm(H) x46mm(W) x102mm(D) DIN RAIL Mountable



RJ45 pin assignment: (DIN-POE1-G)

RJ-45 Input (Data Only)			RJ-45 Output (Data & Power)	
Pin	Symbol	Description	Symbol	Description
1	BI_DA+	Data Pair A+	BI_DA+	Data Pair A+
2	BI_DA -	Data Pair A-	BI_DA -	Data Pair A-
3	BI_DB +	Data Pair B+	BI_DB +	Data Pair B+
4	BI_DC +	Data Pair C+	+VdcV + BI_DC +	power(+)+Data Pair C+
5	BI_DC -	Data Pair C-	+VdcV + BI_DC -	power(+)+Data Pair C-
6	BI_DB -	Data Pair B-	BI_DB -	Data Pair B-
7	BI_DD +	Data Pair D+	-VdcV + BI_DD +	power(-)+Data Pair D+
8	BI_DD -	Data Pair D-	-VdcV + BI_DD -	power(-)+Data Pair D-

Output voltage and current limits:

OUTPUT 24V :

INPUT Voltage/ V	CURRENT Limits	Output Ripple mVp-p	EFFICIENCY %
5	0.33A *note 1	150	88
10	1.2A	150	90
15	2.1A	170	92
20	2.1A	180	95
25	2.2A	150	96
30	3.2A	50	96

OUTPUT 20V :

INPUT Voltage/ V	CURRENT Limits	Output Ripple mVp-p	EFFICIENCY %
5	0.45A	90	88
10	1.4A	150	90
15	2.1A	170	93
20	2.4A	130	94
25	2.6A	150	94
30	2.9A	50	96

OUTPUT 15V :

INPUT Voltage/ V	CURRENT Limits	Output Ripple mVp-p	EFFICIENCY %
5	0.6A	80	89
10	2.1A	140	90
15	2.4A	110	92
20	2.9A	80	94
25	3.0A	100	94
30	3.1A	50	93

OUTPUT 10V :

INPUT Voltage/ V	CURRENT Limits	Output Ripple mVp-p	EFFICIENCY %
5	1.3A	120	90
10	2.2A	180	91
15	3.0A	80	92
20	3.1A	70	92
25	3.1A	60	92
30	3.1A	50	90

OUTPUT 5V :

INPUT Voltage/ V	CURRENT Limits	Output Ripple mVp-p	EFFICIENCY %
5	2.4A	80	90
10	2.8A	70	88
15	2.9A	50	87
20	2.8A	40	87
25	2.85A	30	85
30	3.0A	50	86