



# MSTronic Co., Ltd.

2F, 12, Gongshang Rd., Wugu District, New Taipei City, 248 Taiwan

TEL:886-2-2293-0159 FAX:886-2-2292-8851

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## MIT-20G-4856D2NN

### DC/DC Gigabit PoE Injector SPECIFICATION

#### 1. INPUT :

- 1.1 Input Voltage: 36Vdc to 72Vdc Normal = 48V
- 1.2 Input Current: 1.82A at 48Vdc @ Full Load

#### 2. OUTPUT :

##### 2.1 Output Voltage & Current:

OUTPUT	+56V1 (12-/36+)	+56V2 (45+/78-)
Max. load	0.625A	0.625A
Power	35W	35W
Min. Load	0.01A	0.01A
Load reg. %	5%	5%
Line reg. %	1%	1%
Ripple %	1%	1%
Noise %	1%	1%

TOTAL POWER : 70W

Note 1: Noise bandwidth is from DC to 20Mhz. Ripple & Noise is measured by Paralleling a 0.1uF metalize capacitor on the test point.

#### 3. EFFICIENCY : 80% min at Full Load , 36Vdc ~ 72Vdc Input Voltage

#### 4. PROTECTION

##### 4.1 Short Circuit Protection

Output Short GND Terminal will not damage the Power Supply and will Auto-Reset.

##### 4.2 Input with Fuse Protection.

##### 4.3 Safety Standard : meet UL1950, CSA 22.2 & TUV EN60950-1.

##### 4.4 EMC : meet FCC Class B , EN55022 Class B

##### 4.5 Over Current : 120% ~ 160% @48VDC Input F.L

##### 4.6 Input Reverse Protection-----NO Work



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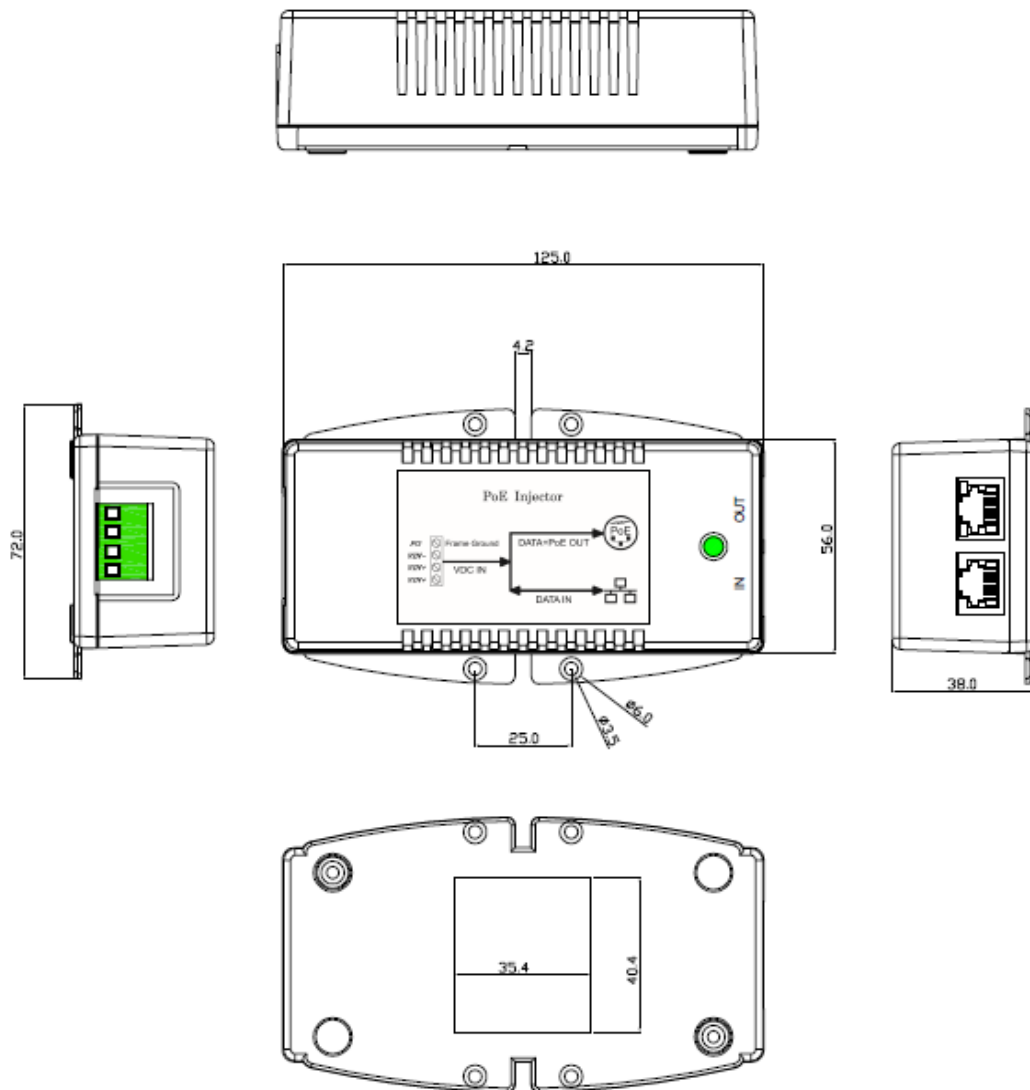
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## 5. GENERAL DESCRIPTION

- 5.1 Operation Temperature: -40 - +70 Degree
- 5.2 Storage Temperature: -40 - +85 Degree
- 5.3 Operation Humidity: 5% - 90%
- 5.4 Cooling: Free air cooling
- 5.5 SIZE : 125\*72\*38 (L)\*(W)\*(H) unit: m/m
- 5.6 DIN rail mountable : DIN rail clip kit optioned





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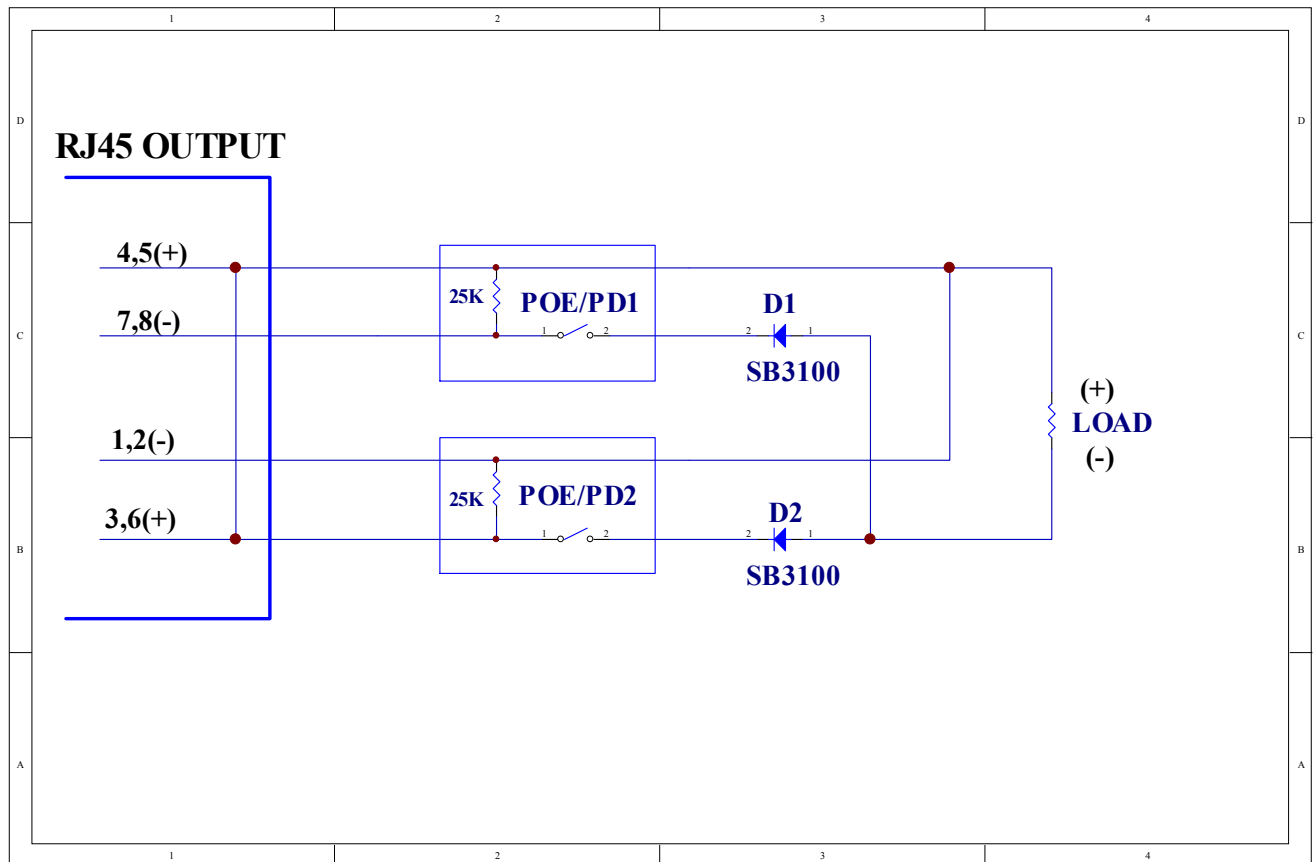
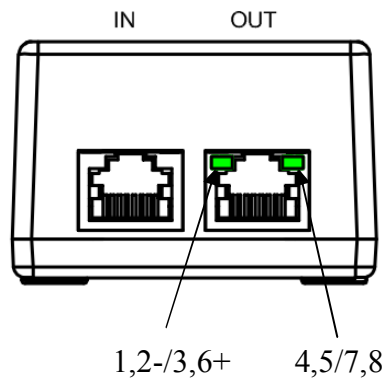
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## 6. Indicators :

6.1 the LED on top cover light GREEN when Power Ready

6.2 the LEDs on right RJ45 light GREEN when powering is OK, the left LED ON means the spare pairs powering, the right LED ON means the signal pairs powering.



Note 1: the signal pairs (pin 1236) and spare pairs (pin 4578) with individual 802.3at PSE detection, each PSE with valid output, the model will offer 70W maximum.



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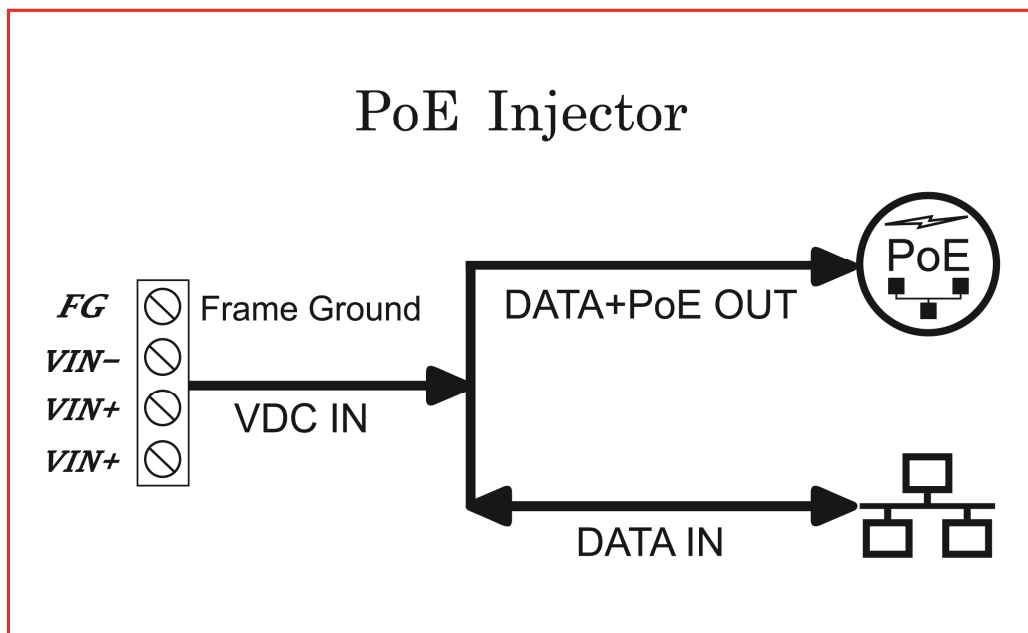
## 7. RJ45 Pin Assignment : @1000M

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

Note :

1. the model is isolated design, the output +/- or input +/- can be shorted to ground (FG).

## 8. INPUT CONNECTION:





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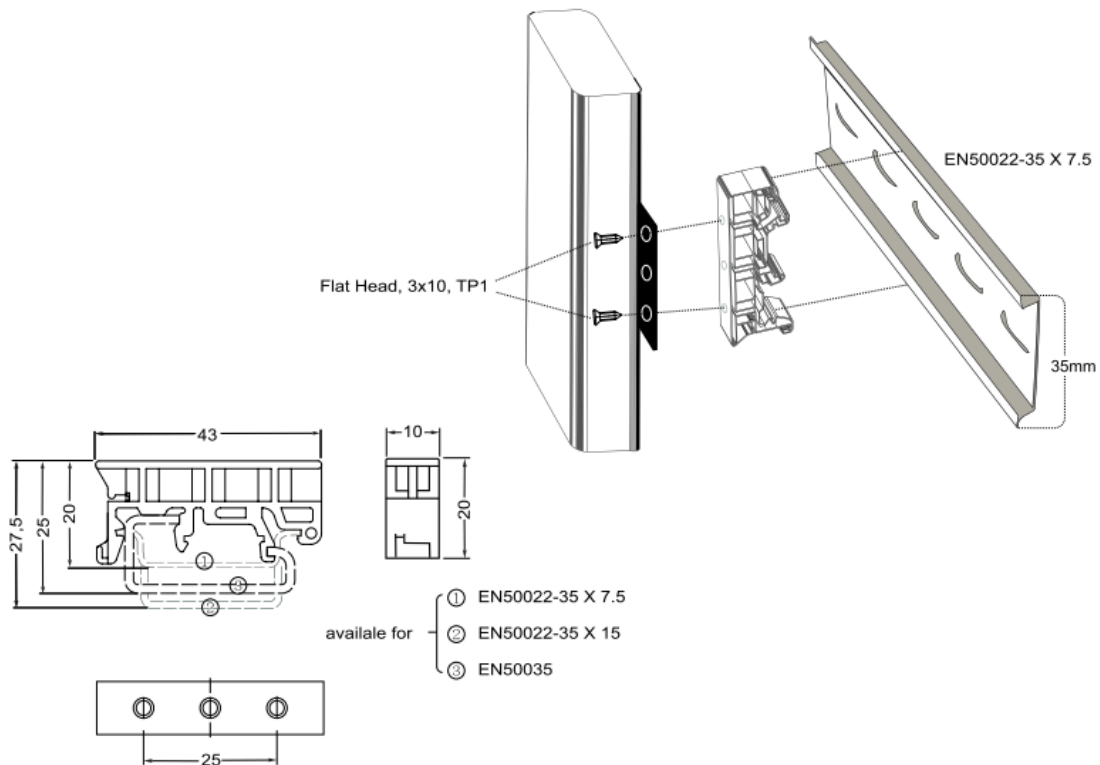
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## 9. SPEC. of SURGE/LIGHTNING PROTECTION

	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 @ data input
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)





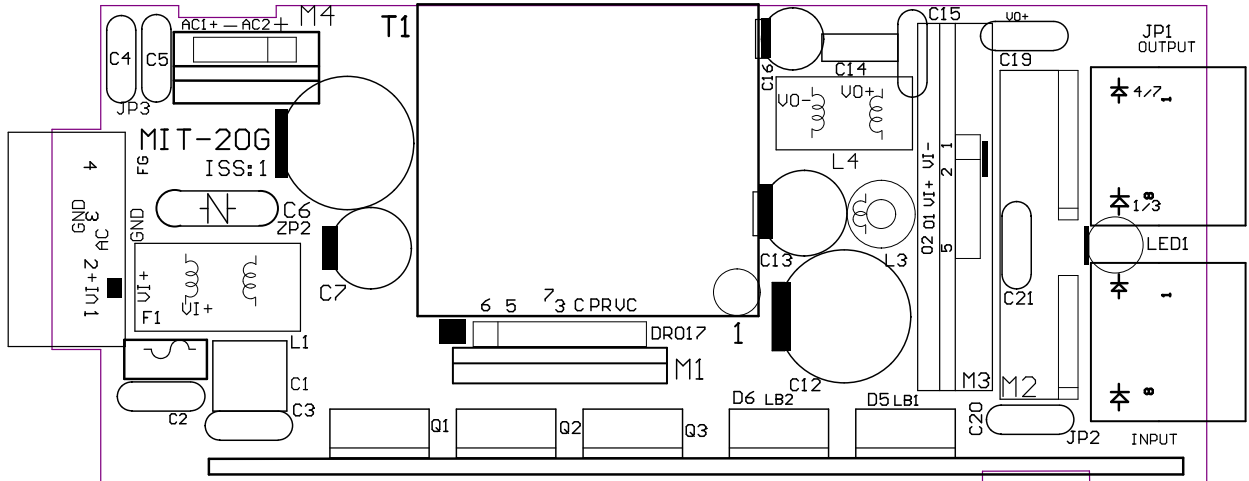
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## RATING TEMPERATURE LIMITS AND OUTPUT POWER RANGE

MODEL : MIT-20G-4856 & MIT-20G-2456 Series

