



# MSTronic Co., Ltd.

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## SPECIFICATION

### DIN-DC75-56DBN

#### DC/DC 802.3bt Gigabit PoE Injector

##### 1. INPUT :

- 1.1 Input Voltage: DC : 10V ~ 60V
- 1.2 Input Current :
  - 8.38A @10Vin at full load
  - 7.0A @12Vin at full load
  - 3.48A @24Vin at full load
  - 1.75A @48Vin at full load
  - 1.40A @60Vin at full load

##### 2. OUTPUT :

- 2.1 Output Voltage & Current:

OUTPUT	56V
Max. load	1.28A
Power	71.3W Max.
Min. load	0A
Load reg. %	5%
Line reg. %	1%
Ripple %	1%
Noise %	1%

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 : 86% min at Full Load , 10Vdc ~ 60Vdc 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.





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- 4.3 Over Current : 110% ~ 120% @all DCV Input F.L
- 4.4 Input polarity Reverse Protection----- will not damage the Power Supply, NO work.
- 4.5 Input Over low Voltage Protection : 8V ~ 9V Turn-off Input
- 4.6 Surge protection on data input ports:

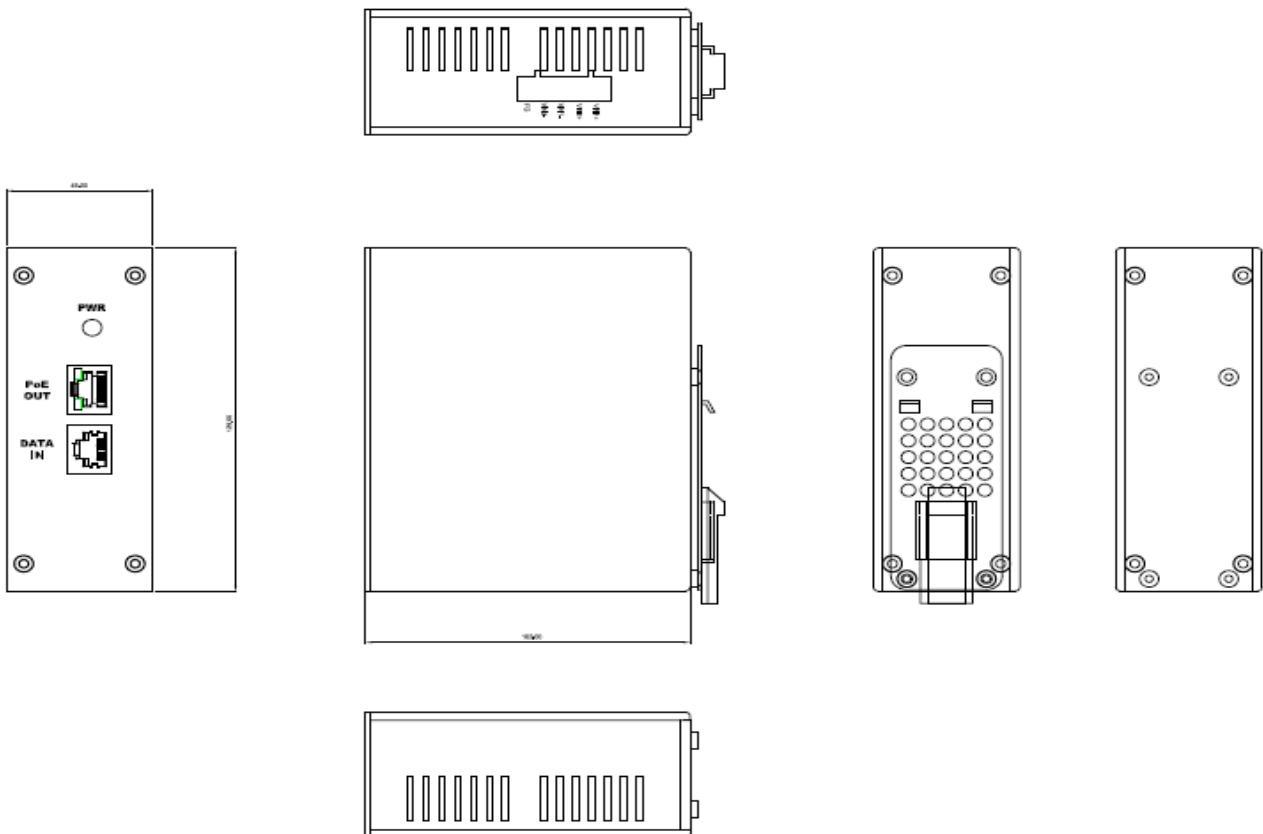
## 5.0 Indicators (on front panel, output RJ45 )

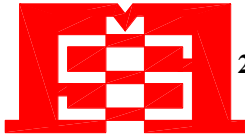
**JP3 (upper) GREEN indicates 802.3bt Output –OK**

**LED1 PWR PSE ready**

## 6. GENERAL DESCRIPTION

- 6.1 Operation Temperature: -40 - +70 C
- 6.2 Storage Temperature: -40 - +85 C
- 6.3 Operation Humidity: 5% - 90%
- 6.4 Cooling: Free air cooling
- 6.5 SIZE : 46 x 125 x 102 mm (W\*H\*D)





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## 7. RJ45 pin out assignment: (10M/100M/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 : the model is isolated design, the output +/- or input +/- can be shorted to ground (FG).

## 8. CONNECTOR FIGURE :

Input : HD-515R8C 5P (P1)  
Allow two inputs for redundant.



## APPLICATIONS INFORMATION

Table 1. IEEE-Specified Power Allocations, Single-Signature PD

PD CLASS	PSE OUTPUT POWER	ALLOCATED CABLING LOSS	PD INPUT POWER
1	4W	0.16W	3.84W
2	6.7W	0.21W	6.49W
3	14W	1W	13W
4	30W	4.5W	25.5W
5	45W	5W	40W
6	60W	9W	51W
7	75W	13W	62W
8	90W	18.7W	71.3W

Table 2. PSE Maximum Delivered Power, Per-Port

DEVICE	PSE					
	STANDARD	TYPE	802.3at		802.3bt	
			1	2	3	4
PD	802.3at	1	13W	13W	13W	13W
		2	13W*	25.5W	25.5W	25.5W
	802.3bt	3	13W*	25.5W*	51W	51W
		4	13W*	25.5W*	51W*	71.3W

\*Indicates PD allocated less power than requested.