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SPECIFICATION

DIN-POE12-2456PNNx2

DC/DC 5Gigabit Passive PoE Injector



1. INPUT :

- 1.1 Input Voltage: DC 18V ~ 57V
- 1.2 Input Current: 11.6A at 18Vdc @F.L 90W*2
8.71A at 24Vdc @F.L 90W*2
3.66A at 57Vdc @F.L 90W*2

2. OUTPUT :

2.1 Output Voltage & Current:

OUTPUT	POE 1	POE 2
Voltage	+56V	+56V
Max. load	1.6A	1.6A
Power	90W Max	90W Max
Min. Load	0A	0A
Load reg. %	5%	5%
Line reg. %	1%	1%
Ripple %	1%	1%
Noise %	2%	2%

TOTAL POWER : 180W

3. EFFICIENCY : 90% min. at DC 24V Input @F.L

4. PROTECTION

4.1 Short Circuit Protection

Output short will not damage the model, it will auto-recover when load back to normal.

4.2 Over Current Limits: 120% ~ 130% @18V~57Vdc

4.3 Input with Fuse Protection

4.4 Input Reverse Protection-----NO Work



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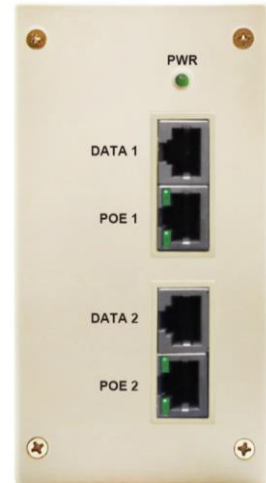
WEB: <http://www.mse.com.tw>

4.5 Indicators:

The PWR LED: light GREEN means input power OK.

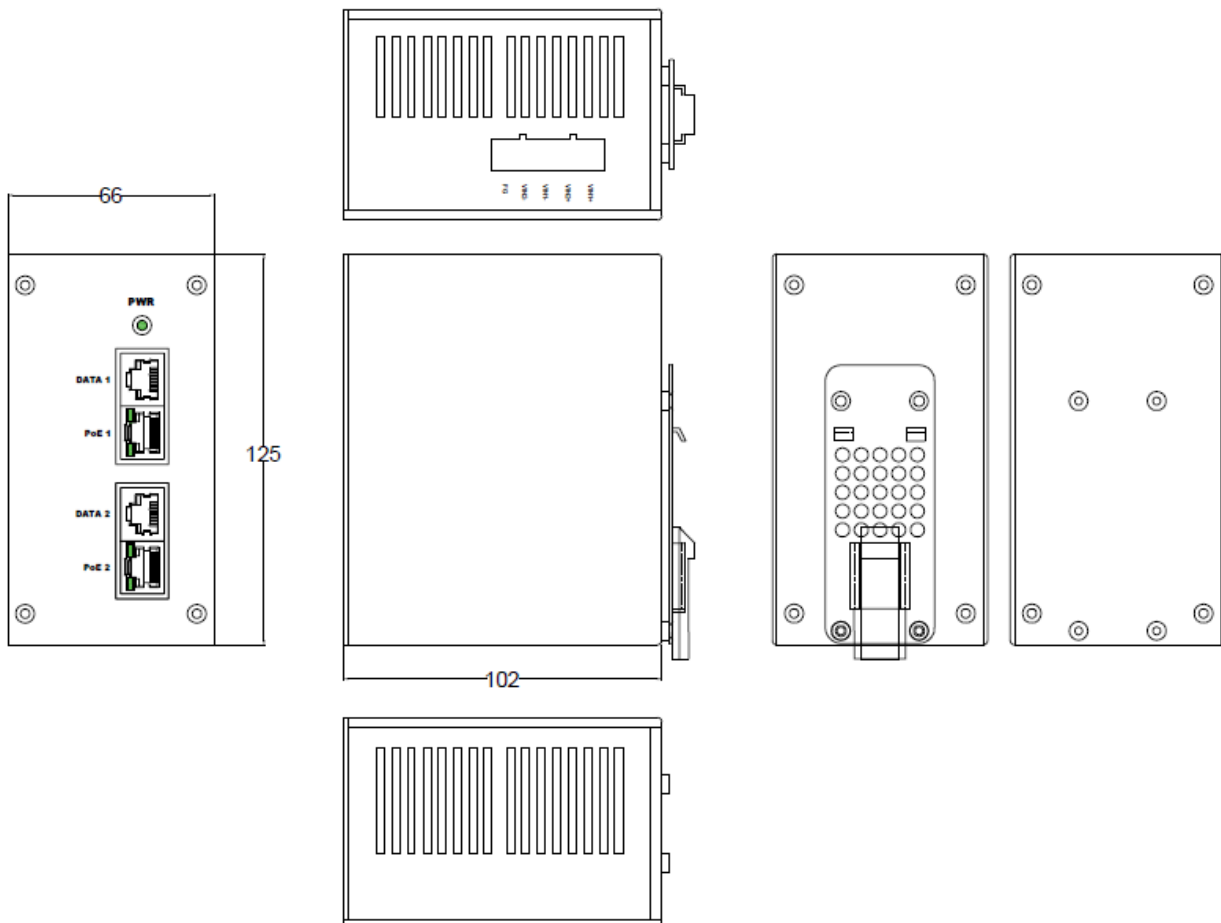
The LEDs on RJ45s: light GREEN means POE Output –OK

(Upper for spare pairs, lower for data pairs)



5. GENERAL DESCRIPTION

- 5.1 Operation Temperature: -40 - +70 Degree
- 5.2 Storage Temperature: -40 - +85 Degree
- 5.3 Operation Humidity: 5% - 90% (40 Degree)
- 5.4 Cooling: Free air cooling
- 5.5 SIZE 66 x 125 x 102 mm (L*W*H)





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6. CONNECTION : RJ45 pin assignment: @10/100/1000/5000MBASE

Pin	RJ-45 Input (Data Only)		RJ-45 Output (Data & Power)	
	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 Non-isolated design, the input(-) is **Only** can be shorted to ground (FG).
2. The model with force PoE output, make sure polarity before connect to end device.

7. CONNECTOR FIGURE : 5EHDRM-05P

Input : Allow two inputs for redundant.

VIN1+ = VIN2+ ; VIN1- = VIN2-





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LTC4291-1/LTC4292

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

BACKWARD COMPATIBILITY

The LTC4291-1/LTC4292 may be configured as an 802.3bt-compliant PSE, either Type 3 or Type 4. While 802.3bt PSEs cannot identify as an 802.3at Type 1 or Type 2 PSE, there is no loss in PSE functionality; all 802.3bt-compliant PSEs are fully backwards compatible with existing 802.3at Type 1 and Type 2 PDs as shown in Table 2. In addition to full compatibility, 802.3bt PSEs extend support for lower standby power, enhanced current limit timing, and dynamic power management to all PD Types (as supported by the PD application).

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

Special Compatibility Mode Notes

- As with prior generations, each I²C address provides status and control for four PoE ports. Each port register slice provides port control and status as well as channel A vs B control and status.
- Certain status registers, e.g. Port Status and Power Status, relate to a channel state, as opposed to port state and are split into three copies; a generalized port state, channel A state and channel B state.
- Certain command registers, e.g., Power-on pushbutton, likewise are bifurcated to allow per-channel control.

OPERATING MODES

The LTC4291-1/LTC4292 includes four independent ports, each of which can operate in one of three modes: manual, semi-auto, or auto. A fourth mode, shutdown, disables the port (see Table 3).

Table 3. Operating Modes

MODE	AUTO PIN	OPMD	DETECT/ CLASS	POWER-UP	AUTOMATIC THRESHOLD ASSIGNMENT
Auto	1	11b	Enabled at Reset	Automatically	Yes
	0	11b	Host Enabled	Automatically	Yes
Semi-auto	0	10b	Host Enabled	Upon Request	No
Manual	0	01b	Once Upon Request	Upon Request	No
Shutdown	0	00b	Disabled	Disabled	No