MSTronic Co., Ltd.

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SPECIFICATION

MIT-28G-8048D
80W High Power 802.3bt Gigabit PoE Splitter

1. INPUT :

1.1 Input Voltage: DC-40V to DC-60V NORMAL= 56V

2. OUTPUT :

2.1 Output Voltage & Current & Waveform :

OUTPUT	48V
Max. load	1.67A
Power	80W Max
Min. Load	0A
Load reg. %	5%
Line reg. %	1%

TOTAL POWER : 80W

Note :

(1) For maximum output of 80W, the input DC power supply should be 100W min.

(2) **PoE input must use all 8 pins. If only 4 pins input are used when power draw up to 80W, the connector will be burnt.**

3. EFFICIENCY : 85% min @ 56Vin dc

4. PROTECTION

4.1 Short Circuit Protection
output Short GND Terminal will not damage the Power Supply and will Auto-Reset. Over Load Protection is flyback mode , auto-recovery.

4.2 Operation frequency Switch is 70KHZ

4.3 Isolation Voltage : 1500Vdc

4.4 Isolation Resistance :100M ohms (min)

4.5 Input Set class Resistance : 25K ohms

4.6 Input Set as 802.3bt class 8 PD.

4.7 Maximum Load : 150% over load

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APPLICATIONS INFORMATION

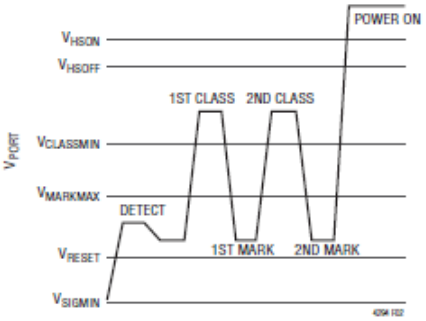

Figure 2. Type 2 PSE, 2-Event Class Sequence

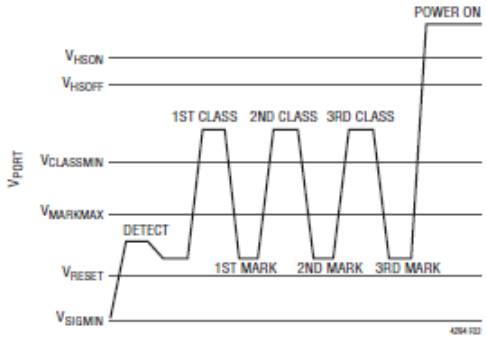

Figure 3. Type 3 or 4 PSE, 3-Event Class Sequence

IEEE 802.3bt Physical Classification and Demotion

IEEE 802.3bt defines physical classification to allow a PD to request a power allocation from the connected PSE and to allow the PSE to inform the PD of the PSE's available power. Demotion is provided if the PD requested power level is not available at the PSE. If demoted, the PD must operate in a lower power state.

The number of class/mark events issued by the PSE directly indicates the power allocated to the PD and is summarized in Table 1.

IEEE 802.3bt provides nine PD classes and four PD types, as shown in Table 2. The LT4294 class is configured by setting the R_{CLS} and R_{CLS++} resistor values.

Table 1. PSE Allocated Class Power

PD REQUESTED CLASS	NUMBER OF PSE CLASS/MARK EVENTS				
	1	2	3	4	5
0	13W				
1	3.84W				
2	6.49W				
3	13W				
4	**13W**	25.5W			
5	**13W**	**25.5W**		40W	
6	**13W**	**25.5W**		51W	
7	**13W**	**25.5W**		**51W**	62W
8	**13W**	**25.5W**		**51W**	71.3W

Note: Bold indicates the PD has been demoted.

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 : 140*150*40 (L*W*H)m/m DIN rail mountable

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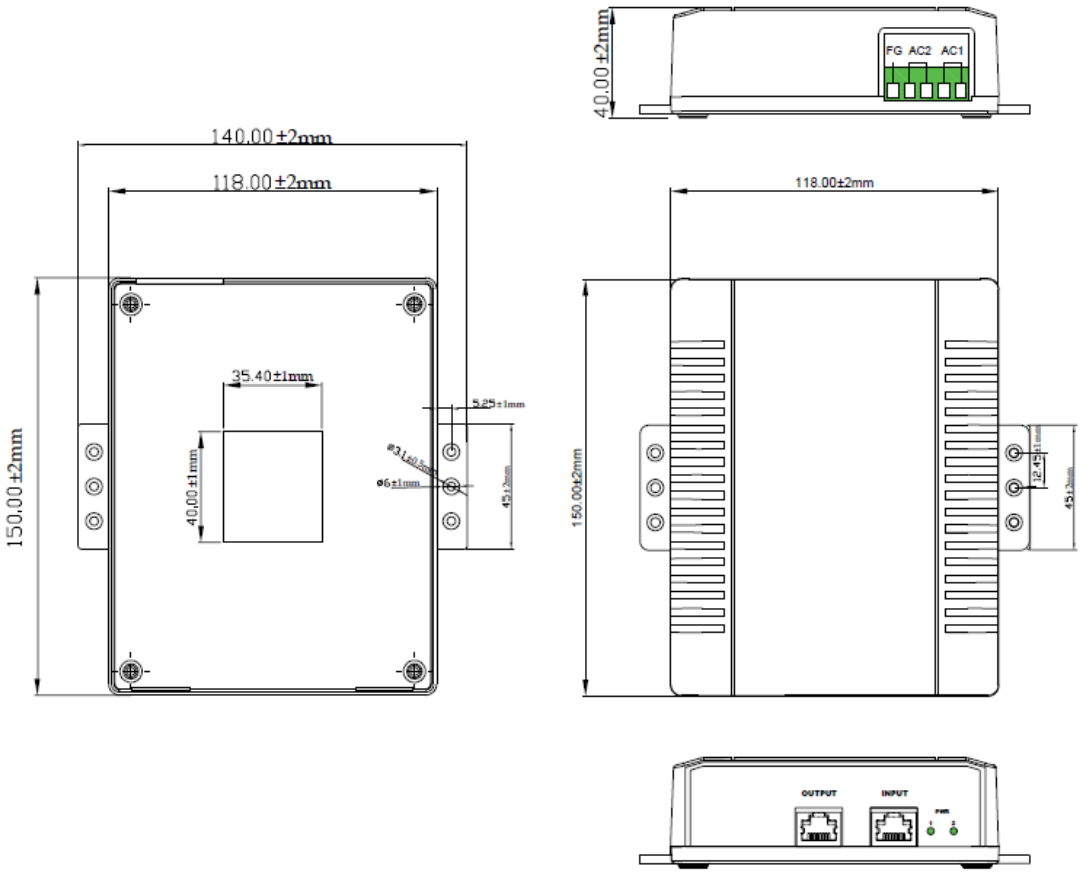

6. CHANNEL CONNECTORS & PINOUT :

6.1 10/100/1000/5000MBPS (5G@CAT6a)

RJ-45 Input (Data & Power)		
Pin	Symbol	Description
1	BI_DA+, Vin A+/-	Data Pair A+, Feeding power A+/-
2	BI_DA-, Vin A+/-	Data Pair A-, Feeding power A+/-
3	BI_DB+, Vin A+/-	Data Pair B+, Feeding power A+/-
4	BI_DC+, Vin B+/-	Data Pair C+, Feeding power B+/-
5	BI_DC-, Vin B+/-	Data Pair C-, Feeding power B+/-
6	BI_DB-, Vin A+/-	Data Pair B-, Feeding power A+/-
7	BI_DD+, Vin B+/-	Data Pair D+, Feeding power B+/-
8	BI_DD-, Vin B+/-	Data Pair D-, Feeding power B+/-
9	Shield	Connector shielding

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6.2 Output Power & Data -Connected to DTE

RJ-45 Output (only Data)		
Pin	Symbol	Description
1	BI_DA+	Data Pair A+
2	BI_DA-	Data Pair A-
3	BI_DB+	Data Pair B+
4	BI_DC+	Data Pair C+
5	BI_DC-	Data Pair C-
6	BI_DB-	Data Pair B-
7	BI_DD+	Data Pair D+
8	BI_DD-	Data Pair D-
9	Shield	Connector shielding

7. E M I Meet FCC Class A Radiation standard
Meet EN55032 Class A Radiation standard

8. indicators

LED1 for power input, LED2 for DC output

If the input is 802.3at/bt PSE

PoE input on all 4 pairs, LED1 ON, LED2 ON.

PoE input on 2 pairs (data pairs or spare pairs), LED1 flash, LED2 ON

If the input is passive PoE

PoE input on all 4 pairs, LED1 ON, LED2 ON.

PoE input on 2 pairs (data pairs or spare pairs), LED1 flash, LED2 ON

If none input or none in valid voltage input, none LED ON.

9. PACKAGE

White box (267 x 160x 45mm),

20 pcs/carton , (490x300x370mm) N.W. 7Kg, G.W.: 8Kg, 1.8Cuft.

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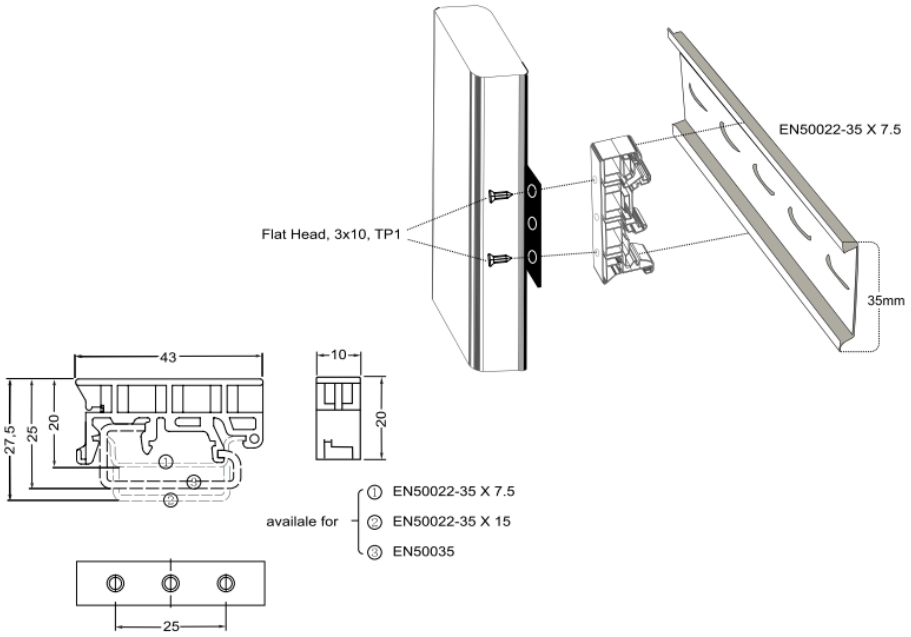
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