
PoE Splitter Specification

Description? The PoE Splitter is working with PSE (Power Sourcing Equipment, i.e. PoE Injector/Midspan and PoE Switch/Endspan). It split data and power from PSE via CAT-5 and convert

Ordering Information?

POE - SP - 12 05 1 D N

N : Special Version. "N" means No.

D : Special Specification.

"D" means IEEE 802.3af enable.

"H" means Hi-Operating temperature.

"T" means with TVS function.

"A" means D+H+T.

"B" means H+T.

"1" means D+H. "2" means D+T.

1 : DC Jack size.

"1" means 2.1 / 5.5mm.

"5" means 2.5 / 5.5mm.

"S" means special size.

05 : Output Voltage (V)

"12" means 12Vdc.

"05" means 5Vdc.

12 : Output Power (W)

SP : PoE Splitter

POE : Power over Ethernet Series

1. Input?

-36Vdc to -60Vdc, Nominal? -48Vdc.

2. Output?

POE-SP-1205xxx	
OUTPUT	+5V
Max. load	2.4A
Power	12W
Min. Load	0.1A
Load reg. %	1%
Line reg. %	1%
Ripple %	1%

POE-SP-1212xxx	
OUTPUT	+12V
Max. load	1A
Power	12W
Min. Load	0.1A
Load reg. %	1%
Line reg. %	1%
Ripple %	1%

POE-SP-0805xxx	
OUTPUT	+5V
Max. load	1.6A
Power	8W
Min. Load	0.1A
Load reg. %	1%
Line reg. %	1%
Ripple %	1%

POE-SP-0812xxx	
OUTPUT	+12V
Max. load	660mA
Power	8W
Min. Load	0.1A
Load reg. %	1%
Line reg. %	1%
Ripple %	1%

Note?

1. Total power 12W / 8W is for 48Vin.
2. Ripple & Noise bandwidth is from DC to 20MHz. Terminated with a 47uF capacitor and 0.1uF MPE capacitor of proper polarity.

3. Efficiency?

70% min.

4. Protection?

Any output short ground (GND) The terminal will lead Auto-Reset

5. General Description?

5.1. Operation Temperature

0°C to 60°C (Commercial grade).

-40°C to 85°C (Industrial grade).

5.2. Storage Temperature

-10°C to 70°C

5.3. Operation Humidity

5% to 90%

6. RJ-45 Connector & Pinout ?

6.1. PSE feeds the PoE Splitter with power via Spare pairs (4/5, 7/8).

	RJ-45 Input (Data & Power)		RJ-45 Output (Data Only)	
Pin	Symbol	Description	Symbol	Description
1	Rx+	Data Receive	Rx+	Data Receive
2	Rx-	Data Receive	Rx-	Data Receive
3	Tx+	Data Transmit	Tx+	Data Transmit
4	Vin +/-	Feeding power(+/-)	NC	Not Connected
5	Vin +/-	Feeding power(+/-)	NC	Not Connected
6	Tx-	Data Transmit	Tx-	Data Transmit
7	Vin +/-	Feeding power(+/-)	NC	Not Connected
8	Vin +/-	Feeding power(+/-)	NC	Not Connected

6.2. PSE feeds the PoE Splitter with power via Data pairs (1/2, 3/6).

	RJ-45 Input (Data & Power)		RJ-45 Output (Data Only)	
Pin	Symbol	Description	Symbol	Description
1	Rx+ (Vin +/-)	Data Receive	Rx+	Data Receive
2	Rx- (Vin +/-)	Data Receive	Rx-	Data Receive
3	Tx+ (Vin +/-)	Data Transmit	Tx+	Data Transmit
4	NC	Feeding power(+)	NC	Not Connected
5	NC	Feeding power(+)	NC	Not Connected
6	Tx- (Vin +/-)	Data Transmit	Tx-	Data Transmit
7	NC	Feeding power(-)	NC	Not Connected
8	NC	Feeding power(-)	NC	Not Connected

6.3. DC Power Plug :

Diameter : 2.1 / 5.5mm or 2.5 / 5.5mm.

Length : 12 +/- 0.5mm. 180°C angle.

Polarity : Inside (+) / Outside (-).

7. Mechanical & Dimension?

7.1. Plastic Case Material? PC

7.2. Plastic Case Finish? Texture

7.3. Plastic Case Color? Gray

7.4. Plastic Case Dimension? 85 x 76 x 36 (L x W x H) mm.

7.5. Weight? 150g

7.6. CAT-5 UTP Cable? 30cm length, with RJ-45 plug, Gray color.

7.7. DC Power Cable? 30cm length, with DC Power plug, Gray color.



Picture 1 : PoE Splitter

8. Specification of Surge / Lightning Protection?

	Signal
Operating Voltage	Data 5V
Clamping Voltage	Data 11V
Peak Pulse Current	36A (10/1000uS)
Pin Protected	4 pin protected (1/2, 3/6)
Protection Mode	Common mode
Max. Shut Capacitance	<5 pF
Data Rate	100 Mbps
Response Time	<1 nS
Operating Temperature	-20°C~+60°C
Storage Temperature	-40°C~+80°C
Operating Humidify	0~95% non condensing