

TP-POE DATA SHEET

POE Power Sources

Features

- Remotely Power Equipment thru CAT5 Cable up to 100m
- Built in Ethernet and AC Surge Protection
- Autoranging Switching Power Supply
- Short Circuit, Over Current and Over Voltage Protection
- Medium Power and High Power Models Available
- Various DC Voltage Outputs Available
- High Temperature Operation
- Compact size Floor / Desktop / Wall Mount
- CE / FCC / UL / CB Approved

Applications

- Wireless Access Points and Client Devices
- IP Phone and Security Camera Systems



TP-POE Medium Power



Description

The TP-POE Passive Power Over Ethernet Power Sources offered by Tycon Power Systems are quality power sources for years of reliable operation even in the toughest conditions. They accept data-in to a shielded RJ45 Jack and provide surge protected data-out and power on the shielded RJ45 output jack. They work by supplying power to the remote device on the unused Ethernet pins 4,5(V+) and 7,8(V-). For the "R" model the voltage is reversed. 4,5(V-) and 7,8(V+). The Ethernet spec supports distances up to 100m (328 feet).

The TP-POE are autoranging so that they accept AC inputs from 90VAC to 264VAC (50/60 Hz) and they supply regulated DC Voltage at the output. They have various protections for surge, short circuit, overload and overvoltage. The medium power models (TP-POE) have power output up to 24W and the high power models (TP-POE-HP) up to 100W. They are available in 18V, 24V and 48V DC Output with load regulation within 5%. The CI model has an special current sense LED which changes color when a POE device is plugged into the CAT5 cable.

If the remote device does not support power over Ethernet, splitters (TP-POE-SPLT) are available to split the data and DC voltage at the remote device. If the remote device requires reverse voltage the POE-XOVER cable can be used.

Device Pinouts

	RJ-45 Input	(Data Only)	RJ-45 Output (Data & Power)			
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	NC	No Connection	+Vdc (-V for R Model)	DC power $(+)$ $(-$ for R $)$		
5	NC	No Connection	+Vdc (-V for R Model)	DC power $(+)$ $(-$ for R $)$		
6	TX-	Data Transmit(-)	TX-	Data Transmit(-)		
7	NC	No Connection	-Vdc (+V for R Model)	DC power(-) (+ for R)		
8	NC	No Connection	-Vdc (+V for R Model)	DC power(-) (+ for R)		

Specifications

	TP- POE-18	TP- POE-24	TP- POE-48	TP-POE- HP-18	TP-POE- HP-24	TP-POE- HP-48	TP-POE-HP-56		
DC Output Voltage (+/-2.5%)	18V	24V	48V	18V	24V	50V	56V		
Overvoltage Protection	22V	28V	52V	22V	28V	54V	60V		
AC Input (50/60 Hz)	90-264VAC								
Max Inrush Current (120VAC)	30A								
Output Current	1A	0.8A	0.5A	2A	1.5A	1A	1.8A		
Output Power	18W	19W	24W	36W	36W	50W	100W		
Efficiency (min)	70%			80%			85%		
Line / Load Regulation	1% / 5%								
Ripple / Noise	1% / 2%								
Surge Protection (+/- 4KV) (IEC 61000-4-2)	Ethernet: 4 Pin (1/2,3/6) Common Mode Protection, 7.5V Clamping Voltage 5.4A (8/20µs) Peak Pulse Current, <2pF Shunt Capacitance AC Input: Operating voltage = 385VDC, Clamping voltage = 775VDC, Maximum discharge current is 1200A(8/20us)								
EMC Standards	FCC Class B NE55022 Class B								
Safety Standards	UL1950, CSA 22.2 & TUV EN60950								
Operating Temperature	-30 to +60°C (-22 to +140°F)								
Operating Humidity (RH)	5% - 90%								
Storage Temperature	-40 to +80°C (-40 to +176°F)								
Dimensions (LxWxH)	85 x 76 x 36mm (3.4 x 3 x 1.4")			125 x 75 x 38mm (4.9 x 3 x 1.5")			116 x 150 x 41mm (4.6x5.9x1.6")		
Weight	150g (5.3oz)			300g (10.6oz)			454g (16oz)		

Notes:

- All shipments F.O.B. Draper, UT 84020
- Tycon Power Systems Power Sources carry a 1 year warranty

System Ordering:

TP-POE-1818V 18W POE Power Source with US Power Cord*
24V 19W POE Power Source with US Power Cord

TP-POE-24R-CI 24V 19W POE Reverse Voltage Power Source with current indicator and US Power Cord

TP-POE-48 48V 24W POE Power Source with US Power Cord

TP-POE-HP-1818V 36W High Power POE Power Source with US Power Cord
24V 36W High Power POE Power Source with US Power Cord
50V 50W High Power POE Power Source with US Power Cord

TP-POE-HP-56 56V 100W Very High Power POE Power Source with US Power Cord

*Add an "E" suffix for Euro power cord

POE-XOVER POE Voltage Crossover Cable - converts standard POE pin-out to reverse voltage pin-out

POE-SPLT Passive Splitter – 5.5/2.1mm DC Plug **POE-YSPLT** Passive Y* Splitter – 5.5/2.1mm DC Plug

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(*Power is supplied on both RJ45 and DC Plug)



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