

### 802.3af POE Converter

#### Features

- Converts 48V 802.3af POE Input to 12V or 24V POE Output
- Run non-compliant equipment on 802.3af POE switches
- POE output switchable between 12VDC and 24VDC
- Remotely Power Equipment thru CAT5 Cable up to 100m
- Short Circuit, Over Current and Over Voltage Protection
- High Temperature Operation
- Compact size – Floor / Desktop / Wall Mount



TP-POE-1224  
802.3af POE Converter

#### Applications

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

#### Description

The TP-POE-1224 is a unique Power Over Ethernet adapter which converts an 802.3af 48VDC POE input into a 12V or 24VDC regulated non-compliant POE output. The POE output is external jumper selectable. The POE input is IEEE 802.3af compatible so the TP-POE-1224 will work with standard 802.3af compliant POE switches or routers. The TP-POE-1224 enables the powering of non compliant POE devices from standard 802.3af POE switches, which eliminates the extra expenses usually required to power non compliant equipment.

They accept data-in and 802.3af POE to a shielded RJ45 Jack and provide data-out and 12V or 24V POE 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-). The Ethernet spec supports distances up to 100m (328 feet). They have various protections for surge, short circuit, overload and overvoltage.

If the remote device does not support power over Ethernet, splitters (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-1224	
<b>DC POE Output Voltage (+/-2.5%)</b>	12V or 24V (switchable)
<b>Overvoltage Protection</b>	16V or 28V
<b>POE Input (IEEE 802.3af)</b>	36 - 60VDC
<b>Output Current</b>	1A @ 12V 0.5A @ 24V
<b>Output Power</b>	12W
<b>Load Regulation</b>	5%
<b>Ripple / Noise</b>	2%
<b>EMC Standards</b>	FCC Class B NE55022 Class B
<b>Safety Standards</b>	UL1950, CSA 22.2 & TUV EN60950
<b>Operating Temperature</b>	-30 to +60°C (-22 to +140°F)
<b>Operating Humidity (RH)</b>	5% - 90%
<b>Storage Temperature</b>	-40 to +80°C (-40 to +176°F)
<b>Dimensions (LxWxH)</b>	85 x 76 x 36mm (3.4 x 3 x 1.4")
<b>Weight</b>	150g (5.3oz)

**Notes:**

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

## System Ordering:

**TP-POE-1224** 802.3af POE Converter with 12V or 24V 12W POE output

**Related Items:**

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



## For further information contact:

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