

### Gigabit PoE Inserter

#### 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
- High Power, 50W, Passive PoE
- 10/100/1000Mb Compatible
- High Temperature Industrial Operation
- Compact size – Floor / Desktop / Wall Mount / DIN Rail Mount



#### Applications

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

#### Description

The TP-POE-HP-48G-RC is a special Power over Ethernet inserter offered by Tycon Power® which has a regulated 48VDC PoE output. Normally, higher power inserters have an output voltage of 56V. This inserter is regulated to 48VDC PoE output to be compatible with devices that are sensitive to the higher voltages.

These are quality midspan 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 Ethernet pins 4,5(V+) and 7,8(V-). The Ethernet spec supports distances up to 100m (328 feet).

The units are autoranging so that they accept AC inputs from 90VAC to 264VAC (50/60 Hz) and they supply regulated 48VDC 50W with load regulation within 5%. They have various protections for surge, short circuit, overload and overvoltage.

#### Device Pinouts

RJ-45 Input (Data Only)			RJ-45 Output (Data & Power)	
Pin	Symbol	Description	Symbol	Description
1	BI_DA+	Data RX+	BI_DA+	Data RX(+)
2	BI_DA-	Data RX-	BI_DA-	Data RX(-)
3	BI_DB+	Data TX+	BI_DB+	Data TX(+)
4	BI_DC+	Data RX+	BI_DC+, Vo+	Data RX(+), DC power(+)
5	BI_DC-	Data RX-	BI_DC-, Vo+	Data RX(-), DC power(+)
6	BI_DB-	Data TX-	BI_DB-	Data TX(-)
7	BI_DD+	Data RX+	BI_DD+, Vo-	Data RX(+), DC power(-)
8	BI_DD-	Data RX-	BI_DD-, Vo-	Data RX(-), DC power(-)

**General Specifications**

<b>TP-POE-HP-48G-RC</b>	
<b>AC Input</b>	90-264VAC 47-63Hz, IEC-320-C13 Socket
<b>PoE Output</b>	48VDC Passive PoE , (4,5 V+) (7,8 V-), 1.04A 50W, Shielded RJ45
<b>Max Inrush Current (120VAC)</b>	30A
<b>Efficiency (min)</b>	85%
<b>Line / Load Regulation</b>	1% / 5%
<b>Ripple / Noise</b>	1% / 2%
<b>Protections</b>	Over-Voltage, Short Circuit, Over-Current
<b>Surge Protection (+/- 4KV) (IEC 61000-4-2)</b>	Ethernet: 4 Pin (1/2,3/6) Common Mode Protection, 7.5V Clamping Voltage 5.4A (8/20 $\mu$ s) Peak Pulse Current, <2pF Shunt Capacitance AC Input: Operating voltage = 385VDC, Clamping voltage = 775VDC, Maximum discharge current is 1200A(8/20 $\mu$ s)
<b>EMC Standards</b>	FCC Class B , EN55032, EN55024, EN55035, AS/NZS CISPR 32, IEC 61000-3/-4
<b>Safety Standards</b>	UL62368-1, CE EN62368-1, CB IEC EN62368-1, AS/NZS 62368-1
<b>Environmental Standards</b>	RoHs
<b>MTBF</b>	96,803 Hours
<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 (Lx W x H)</b>	125 x 75 x 38mm (4.9 x 3 x 1.5")
<b>Weight</b>	300g (10.6oz)
<b>Warranty</b>	3 Years

DIN Rail Mounting Option: Using kit #DIN-ClipKit-UNI

**System Ordering:**

**TP-POE-HP-48G-RC** 48V 50W High Power Passive Gigabit PoE Power Source with US Power Cord\*

\*Add an "E" suffix for Euro power cord

**For further information contact:**

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