



# **DATA SHEET**

# **High Power Dual Output PoE Injectors**

#### **Features**

- Input Voltage 12VDC, 24VDC or 110VAC
- Dual 802.3af/at outputs
- High Power Output to 70W
- Surge Protected to 15kV
- Dual DC Inputs for Connecting 2 Power Sources
- 10/100/1000 Data Compatibility, Shielded Connectors
- Short Circuit, Over Current and Reverse/Over Voltage Protection
- Industrial Temperature Range, DIN Rail Mountable

TP-POE-48GDx2

## **Applications**

- 12VDC or 24VDC Remote Power Systems running on batteries
- 110/220VAC Backup Power Systems
- Power a Camera and Wireless using a single PoE Injector
- Power a Wireless AP and Backhaul using a single PoE injector

## **Description**

The TP-DC-xx48GDX2-HP and TP-POE-HP-48GDX2 are unique high power PoE injectors with Dual 802.3af/at compatible outputs. This means that two devices can be powered from a single PoE injector. The data path between the devices is handled by the injector so no PoE switch is required.

There are models that will run on 12VDC or 24VDC as well as 110/220VAC grid power. The different models have different total combined outputs up to 70W.

They have two DC inputs for connecting 2 power sources, like a primary and backup power source. They have various protections for short circuit, overload and surges caused by ESD or lightning. The built-in surge protection protects sensitive connected devices from damage due to surges on data and PoE lines. All 8 wires are protected.

The input voltage and output voltage are isolated to avoid any grounding or negative voltage issues.

# **Gigabit Device Pinouts**

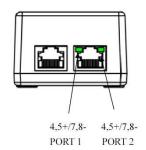
RJ-45 #1 ("POE1")			RJ-45 #2 ("POE2")	
Pin	Symbol	Description	Symbol	Description
1	BI_DA+	Data Receive(+)	BI_DA+	Data Receive(+)
2	BI_DA-	Data Receive(-)	BI_DA-	Data Receive(-)
3	BI_DB+	Data Transmit(+)	BI_DB+	Data Transmit(+)
4	BI_DC+, Vo+	Data $RX(+)$ , DC power(+)	BI_DC+, Vo+	Data RX(+), DC power(+)
5	BI_DC-, Vo+	Data RX(-), DC power(+)	BI_DC-, Vo+	Data RX(-), DC power(+)
6	BI_DB-	Data Transmit(-)	BI_DB-	Data Transmit(-)
7	BI_DD+, Vo-	Data RX(+), DC power(-)	BI_DD+, Vo-	Data RX(+), DC power(-)
8	BI_DD-, Vo-	Data RX(-), DC power(-)	BI_DD-, Vo-	Data RX(-), DC power(-)

**Specifications** 

	TP-DC-1248GDX2-HP	TP-DC-2448GDX2-HP	TP-POE-HP-48GDX2		
Input Voltage	+/- 10VDC to 16VDC	+/- 18VDC to 36VDC	90-264VAC 47-63hz		
Input Connector	Screw Type Compression Wire Terminal (12 AWG Max) IEC C13 (incl. Power C				
POE Specification	Active PoE 802.3af/at (Mode B, 2 Pair)				
Output Voltage (+/-2.5%)	56VDC				
Ethernet Connectors	RJ45 (Shielded) 10/100 & Gigabit Compatible				
Output Current (max)	0.38A X 2	0.63A X 2	0.45A X 2		
Output Power (total)	42W	70W	50W		
Self-Consumption Power	2W				
Efficiency (min)	80%				
Line Regulation, Ripple, Noise	1%				
Load Regulation	5%				
Surge Protection	IEC61000-4-2 (ESD) ±15kV (air), ±8kV (contact)				
Operating Temperature	-40 to +70°C (-40 to +158°F)		-25 to +50°C (-13 to 122°F)		
Operating Humidity (RH)	5% - 90%				
Storage Temperature	-40 to +80°C (-40 to +176°F)				
Dimensions (LxWxH)	125 x 75 x 38mm (4.9 x 3 x 1.5")				
Weight	255g (9oz)				
Warranty	3 Years				

#### LED Functions

Port 1 is connector labelled "POE1" Port 2 is connector labelled "POE2" LED will light when port is powered





#### **DC Input Connector**

FG Do Not connect to VIN-VIN+DC (+) Voltage In Isolated Input #1

VIN+DC (+) Voltage In Isolated Input #1

DC (+) Voltage In Isolated Input #2

FG = Frame Ground Connect to Chassis or Earth Ground.

# System Ordering:

 TP-DC-1248GDX2-HP
 +/- 10-15VDC IN, 2x Gigabit 802.3at PoE Outputs, 42W

 TP-DC-2448GDX2-HP
 +/- 18-36VDC IN, 2x Gigabit 802.3at PoE Outputs, 70W

 TP-POE-HP-48GDX2
 110/220VAC IN, 2x Gigabit 802.3at PoE Outputs, 50W

### For further information contact:

