

## Very High Power DC to DC Converter

### Features

- Input Voltage 24VDC (18-36VDC)
- 8 wire 24VDC Passive POE Output
- High Power Output to 70W
- Dual DC Inputs for Connecting 2 Power Sources
- Gigabit Data Thruput
- Low self consumption power (<2W)
- Short Circuit, Over Current and Reverse/Over Voltage Protection
- Industrial Temperature Range



TP-DCDC-2424GR-VHP

### Applications

- 24VDC Remote Power Systems
- Ubiquiti airFiber x™ Radios

### Description

The Gigabit compatible TP-DCDC-2424GR-VHP are special very high power DC to DC converters / PoE inserters designed especially for Ubiquiti airFiber x™ wireless radio systems and other systems which require high power passive PoE (High PoE). The unique POE inserter supplies 24VDC PoE power on all 8 Ethernet wires (4 pair) with the following pinout: 1,2,4,5 V+ and 3,6,7,8 V-

They have two isolated inputs for connecting 2 power sources, like a primary and backup power source. They have various protections for surge, short circuit and overload. The input and output are isolated.

The units are DIN rail mountable with available adapters: Model DIN-ClipKit-Uni

### Device Pinouts

RJ-45 Input (Data Only)			RJ-45 Output (Data & Power)	
Pin	Symbol	Description	Symbol	Description
1	BI_DA+	Data Pair A+	BI_DA+, Vo+	Data Pair A+, Ch1 POE+
2	BI_DA-	Data Pair A-	BI_DA-, Vo+	Data Pair A-, Ch1 POE+
3	BI_DB+	Data Pair B+	BI_DB+, Vo-	Data Pair B+, Ch1 POE-
4	BI_DC+	Data Pair C+	BI_DC+, Vo+	Data Pair C+, Ch2 POE+
5	BI_DC-	Data Pair C-	BI_DC-, Vo+	Data Pair C-, Ch2 POE+
6	BI_DB-	Data Pair B-	BI_DB-, Vo-	Data Pair B-, Ch1 POE-
7	BI_DD+	Data Pair D+	BI_DD+, Vo-	Data Pair D+, Ch2 POE-
8	BI_DD-	Data Pair D-	BI_DD-, Vo-	Data Pair D-, Ch2 POE-

## Specifications

	TP-DCDC-2424GR-VHP
<b>Input Voltage</b>	+/- 18VDC to 36VDC
<b>DC Input Connector</b>	Removeable Screw Type Compression Wire Terminal (12 AWG Max)
<b>POE Specification</b>	Passive PoE ( 8 Wire , 4 Pair )
<b>PoE Pinout</b>	1,2,4,5 V+ and 3,6,7,8 V-
<b>Output Voltage (+/-2.5%)</b>	24VDC
<b>Data in &amp; Data/POE Output Connector</b>	RJ45 (Shielded), Shield is connected to FG (Frame Ground) Input
<b>Output Current (max)</b>	Up to 2.9A
<b>Output Power (max)</b>	70W Total Note: Output power up to 70W at 40C. Derate by 1W for every 1 Deg C above 40C ambient. Example: 60W at 50C
<b>Self-Consumption Power</b>	2W
<b>Efficiency (min)</b>	85%
<b>Line Regulation, Ripple, Noise</b>	1%
<b>Load Regulation</b>	5%
<b>EMC Standards</b>	FCC Class B EN55022 Class B
<b>Safety Standards</b>	UL1950, CSA 22.2 &TUV EN60950
<b>Operating Temperature</b>	-40 to +70°C (-40 to +158°F)
<b>Operating Humidity (RH)</b>	5% - 90%
<b>Storage Temperature</b>	-40 to +80°C (-40 to +176°F)
<b>Dimensions (LxWxH)</b>	125 x 75 x 38mm (4.9 x 3 x 1.5")
<b>Weight</b>	255g (9oz)
<b>Warranty</b>	1 Year



### DC Input Connector

FG		Frame Ground Do Not connect to VIN-
VIN-		DC (-) Voltage In
VIN+		DC (+) Voltage In Isolated Input #1
VIN+		DC (+) Voltage In Isolated Input #2

### System Ordering:

**TP-DCDC-2424GR-VHP** +/- 18-36VDC IN 24VDC POE OUT, 70W DC to DC Converter with Passive POE Inserter for UBNT airFiber™ antennas.

### For further information contact:

[Tyconpower.com](http://Tyconpower.com)



14641 S 800 W Suite A  
Bluffdale, UT 84065  
PH: 801-432-0003  
FAX: 801-618-4220