

## Very High Power DC to DC Converter

### Features

- Input Voltage 10VDC to 60VDC
- 8 wire (4 Pair) 56VDC High POE Output
- High Power Output to 70W
- Dual DC Inputs for Connecting 2 Power Sources
- Gigabit Data Throughput
- Low self consumption power (<2W)
- Short Circuit, Over Current and Reverse/Over Voltage Protection
- Industrial Temperature Range to 70C



TP-DCDC-1256Gx-VHP

### Applications

- 12VDC / 24VDC Remote Power Systems
- 48VDC or -48VDC Remote Power Systems
- Ubiquiti airFiber™ Antennas
- Axis Q6032-E, Q6034-E and Q6035-E PTZ Security Cameras
- High PoE 4 Pair Powered Cameras and Radio's

### Description

The Gigabit compatible TP-DCDC-1256G-VHP and TP-DCDC1256GD-VHP are special very high power DC to DC converters / POE inserters designed especially for Ubiquiti airFiber™ antenna systems and other systems which require high power passive POE such as Axis High Power POE PTZ security cameras. The unique POE inserter supplies 56VDC POE power on all 8 Ethernet wires (4 Pair).

The wide input voltage range (10VDC to 60VDC) makes these units universal in battery powered applications. The units input and output is isolated so they work in a negative ground or positive ground system. They have two DC inputs for connecting 2 power sources, like a primary and backup power source. They have various protections for surge, short circuit and overload. The units come complete with a DIN Rail mounting kit for mounting to a standard DIN rail.

### 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-1256G-VHP	TP-DCDC-1256GD-VHP
<b>Input Voltage</b>	+/- 10VDC to 60VDC	
<b>DC Input Connector</b>	Removeable Screw Type Compression Wire Terminal, 5 Pin (12 AWG Max)	
<b>POE Specification</b>	Passive ( 8 Wire , 4 Pair )	IEEE 802.3at (4 Pair) Compatible
<b>Output Voltage (+/-2.5%)</b>	56VDC	
<b>Data in &amp; Data/POE Output Connector</b>	RJ45 (Shielded)	
<b>Output Current (max)</b>	1.25A Total	
<b>Output Power (max)</b>	70W Total	
<b>Self-Consumption Power</b>	2W	
<b>Efficiency</b>	80% Min (10VDC to 60VDC Input)	
<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 +85°C (-40 to +185°F)	
<b>Dimensions (LxWxH)</b>	90 x 118 x 40mm (3.5 x 4.6 x 1.57")	
<b>Weight</b>	335g (11.8oz)	

**Notes:**

- All shipments F.O.B. Bluffdale, UT 84065
- Tycon Power Systems Power Sources carry a 1 year warranty

*DIN Rail Adapters Included*

### System Ordering:

**TP-DCDC-1256G-VHP** +/- 10-60VDC IN, 56VDC POE OUT, 70W DC to DC Converter with 4 Pair Passive POE Inserter for UBNT airFiber™ antennas and other High PoE Devices.

**TP-DCDC-1256GD-VHP** +/- 10-60VDC IN, 56VDC POE OUT, 70W DC to DC Converter with 4 Pair IEEE 802.3at compatible POE Inserter for Axis Q60 series PTZ Cameras and other High PoE devices.

### For further information contact:

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