

## Very High Power DC to DC Converter

### Features

- Input Voltage 24VDC (18-36VDC) or 48VDC (36-72VDC)
- 8 wire 56VDC 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-xx56G-VHP

### Applications

- 24VDC Remote Power Systems
- 48VDC or -48VDC Remote Power Systems
- Ubiquiti airFiber™ Antennas
- High PoE Compatible Security Cameras

### Description

The Gigabit compatible TP-DCDC-2456G-VHP and TP-DCDC4856G-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.

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.

### 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-2456G-VHP	TP-DCDC-4856G-VHP
<b>Input Voltage</b>	+/- 18VDC to 36VDC	+/- 36VDC to 72VDC
<b>DC Input Connector</b>	Removeable Screw Type Compression Wire Terminal (12 AWG Max)	
<b>POE Specification</b>	Passive ( 8 Wire , 4 Pair )	
<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 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>	80%	
<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>	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>MTBF (Mean Time Between Failures)</b>	55,489 Hours	
<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>	3 Years	

**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-2456G-VHP** +/- 18-36VDC IN 56VDC PoE OUT, 70W DC to DC Converter with Passive PoE Inserter for UBNT airFiber™ antennas and Axis Q60 series PTZ Cameras.

**TP-DCDC-4856G-VHP** +/- 36-72VDC IN 56VDC PoE OUT, 70W DC to DC Converter with Passive PoE Inserter for UBNT airFiber™ antennas and Axis Q60 series PTZ Cameras.

**For further information contact:**

Tyconsystems.com

