

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
Input Voltage	+/- 18VDC to 36VDC	+/- 36VDC to 72VDC
DC Input Connector	Removeable Screw Type Compression Wire Terminal (12 AWG Max)	
POE Specification	Passive (8 Wire , 4 Pair)	
Output Voltage (+/-2.5%)	56VDC	
Data in & Data/POE Output Connector	RJ45 (Shielded)	
Output Current (max)	1.25A Total	
Output Power (max)	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	
Self-Consumption Power	2W	
Efficiency (min)	80%	
Line Regulation, Ripple, Noise	1%	
Load Regulation	5%	
EMC Standards	FCC Class B EN55022 Class B	
Safety Standards	CSA 22.2 &TUV EN60950	
Operating Temperature	-40 to +70°C (-40 to +158°F)	
Operating Humidity (RH)	5% - 90%	
MTBF (Mean Time Between Failures)	55,489 Hours	
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)	

Notes:

- All shipments F.O.B. Bluffdale, UT 84065
- Tycon Power®, Power Sources carry a 3 year warranty

**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.

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