



### TPDIN<sup>®</sup> DCDC PoE Injector

#### Features

- 11-60VDC Input, 802.3bt 90W Output
- Industrial Temperature Range: -40 to +70C
- Up to 5Gigabit Data Passthru with Surge Protection
- DIN Rail Mounting

#### Applications

- 12VDC and 24VDC Remote Power Systems
- 48VDC or -48VDC Remote Power Systems
- IEEE802.3bt Industry Standard Device Power from Batteries



#### Description

The TPDIN-1256GD-BT is a high power DCDC converter and up to 5Gbps PoE injector with a wide voltage input range (11-60VDC), a wide operating temperature range (-40 to +70C) and a high power 802.3bt 90W output.

The unit has dual DC inputs for primary and backup power sources. The input to output is isolated so the unit can accept -48VDC Input, making it compatible with legacy telecom systems. The green DC connector is a locking type that accepts wires up to 12AWG. The “FG” input is used to provide chassis or earth ground.

The device is fan-less and uses natural air flow for cooling. It mounts to a standard DIN Rail commonly used in industrial installations.

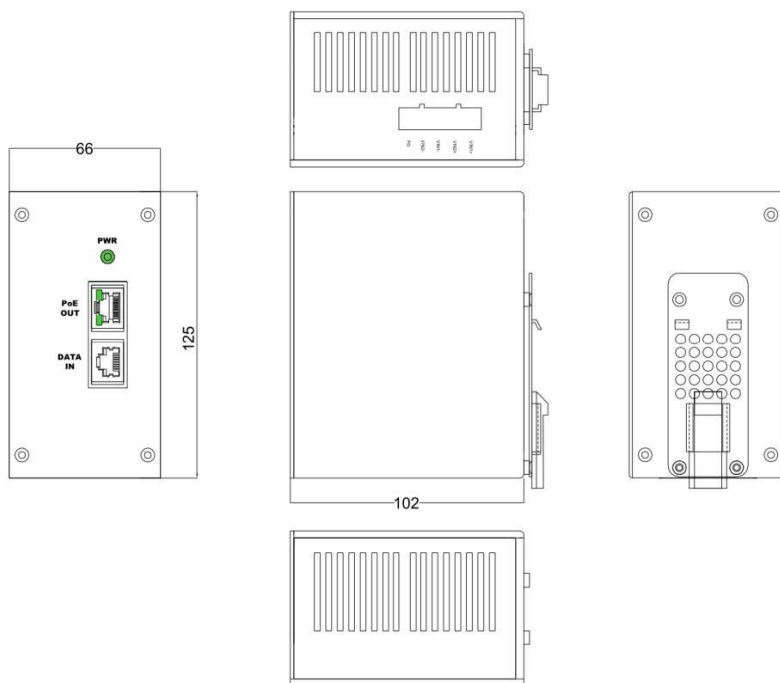
#### Device Pinouts

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

#### Specifications

TPDIN-1256GD-BT	
<b>Input Voltage</b>	11V to 60VDC, Dual Inputs
<b>Input Current</b>	9.86A @ 11VDC IN (Full Load) 4.446 @ 24VDC IN (Full Load) 2.26A @ 48VDC IN (Full Load)
<b>Output Voltage</b>	IEEE802.3bt 56VDC ; Load Reg = 5%, Line Reg = 1%
<b>Output Current / Max Watts</b>	1.67A / 95W with 34VDC to 60VDC Input 1.43A / 80W with 11VDC to 33VDC Input

<b>Ripple &amp; Noise</b>	1%
<b>Efficiency</b>	>90% at 34-60VDC Input ; >86% at 11-33VDC Input
<b>Protections</b>	Short Circuit, Reverse Voltage
<b>Over Current Protection</b>	802.3bt Class 8 (96.6W)
<b>Low Voltage Detect (LVD)</b>	Device with stop drawing all current when input voltage drops below 8-9VDC
<b>Misc Protections</b>	Short Circuit, Reverse Voltage
<b>Data PassThrough</b>	10/100/1000/5000Mbps ; Gigabit
<b>Data Protection</b>	Pin to Pin (1-2, 3-6, 4-5, 7-8) Clamp Voltage: 3.3V ESD, IEC61000-4-2: +/- 30KV contact and air EFT, IEC61000-4-4: 40A (5/50us) Lightning, IEC61000-4-5: 15A (8/20us)
<b>Connections</b>	Removable Wire Terminal
<b>Wire Size</b>	12AWG Max
<b>LED Function</b>	Green Power LED = Input Power is OK RJ45 Green LED = 802.3bt negotiation and output is OK
<b>Mounting</b>	DIN Rail
<b>Operating Temperature</b>	-40C to +70C (-40F to 158F)
<b>Humidity (RH)</b>	5% - 90% Non-Condensing
<b>Dimensions (LxWxD)</b>	125 x 66 x 102 mm (4.9" x 2.6" x 4")
<b>Weight</b>	0.6kg (1.30lb)
<b>Warranty</b>	3 Years



## Ordering:

**TPDIN-1256GD-BT**

TPDIN® DCDC 11-60VDC IN, 802.3bt 90W Out, Gigabit PoE Injector

## For further information contact:

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