

RP-PGC1224

802.3af/at to passive PoE Converter, 12V/24V Switchable

RP-PGC1224 serves as a flexible 802.3at to passive Gigabit PoE Converter, drawing power from an IEEE 802.3af/at PoE switch or injector and delivering it to the remote device through a passive PoE port.

Equipped with the capability to switch between 12V and 24V output voltages, RP-PGC1224 offers flexibility to accommodate various power requirements. The converter incorporates short circuit protection, ensuring that the output short GND terminal will not damage the power supply, and it features an auto-reset function for added convenience. RP-PGC1224 is user-friendly with LED indicators. The LED Green Indicates that the input supply is 802.3at while the red LED Indicates that the input supply is 802.3af or DC IN, providing clear visual cues about the converter's operational mode.

With these features, RP-PGC1224 presents a cost-effective and efficient solution for upgrading network systems to a PoE configuration, making it an ideal choice for businesses seeking to enhance their infrastructure without the need for a complete switch replacement.

Features

- Dual Voltage Output 12V and 24V for flexible power options.
- Wide Input Voltage Range: Compatible with DC40V to DC60V for diverse power sources.
- Efficient Power Conversion: Maintains a minimum of 80% efficiency for optimal power transfer.
- Under Voltage Lockout: Enhances stability by preventing operation below DC 32V
- Short Circuit Protection: Safeguards devices with auto-reset after a short circuit.
- LED Indicators: Green for input supply is 802.3at., red for input supply is 802.3af or DC in.
- Cost-Effective PoE Upgrade without replacing the existing switch.



Specifications

Input Voltage	<ul style="list-style-type: none"> • Input Voltage: DC40V to DC60V → NORMAL= 56V • Under Voltage Lockout: DC 32V 																								
Output Voltage	<ul style="list-style-type: none"> • Output Voltage & Current: 12V/24V switchable <table border="1" data-bbox="671 383 1315 786"> <thead> <tr> <th>OUTPUT</th> <th>+12V</th> <th>+24V</th> </tr> </thead> <tbody> <tr> <td>Max. load</td> <td>1A</td> <td>1.041A</td> </tr> <tr> <td>Power</td> <td>12W Max</td> <td>25W Max</td> </tr> <tr> <td>Min. Load</td> <td>0A</td> <td>0A</td> </tr> <tr> <td>Load reg. %</td> <td>5%</td> <td>5%</td> </tr> <tr> <td>Line reg. %</td> <td>1%</td> <td>1%</td> </tr> <tr> <td>Ripple %</td> <td>2%</td> <td>2%</td> </tr> <tr> <td>Noise %</td> <td>5%</td> <td>5%</td> </tr> </tbody> </table> <p data-bbox="727 797 1259 835" style="text-align: center;">TOTAL POWER :25W, 12V only 12W</p> <ul style="list-style-type: none"> • <u>Note 1</u>: Ripple & Noise bandwidth is from DC to 20Mhz. • Terminated With a 47uF Capacitor and 0.1uf MPE Capacitor of Proper Polarity. 	OUTPUT	+12V	+24V	Max. load	1A	1.041A	Power	12W Max	25W Max	Min. Load	0A	0A	Load reg. %	5%	5%	Line reg. %	1%	1%	Ripple %	2%	2%	Noise %	5%	5%
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Ripple %	2%	2%																							
Noise %	5%	5%																							
Efficiency	<ul style="list-style-type: none"> • 80% min @56Vin dc 																								
Protection	<ul style="list-style-type: none"> • Short Circuit Protection output Short GND Terminal will not damage the Power Supply and will Auto-Reset. • Operation frequency is 150KHZ (min) • Isolation Voltage: 1500Vdc • Isolation Resistance:100M ohms (min) • Input Set c lass Resistance: 25K ohms • Maximum Capacitive Load: 470UF (24V = 100UF) 																								
LED Indications	<ul style="list-style-type: none"> • Input supply is 802.3af or DC IN (Red) • Input supply is 802.3at (Green) • Output DC no display light signal 																								
General description	<ul style="list-style-type: none"> • Operation Temperature: -25 ~ +50°C • Storage Temperature: -40 ~ +85°C • Operation Humidity: 5% ~ 90% 45°C • SIZE: 85x78x36 (LxWxH)m/m 																								
EMI	<ul style="list-style-type: none"> • Meet FCC Class B standard Meet EN55022 Class B standard 																								

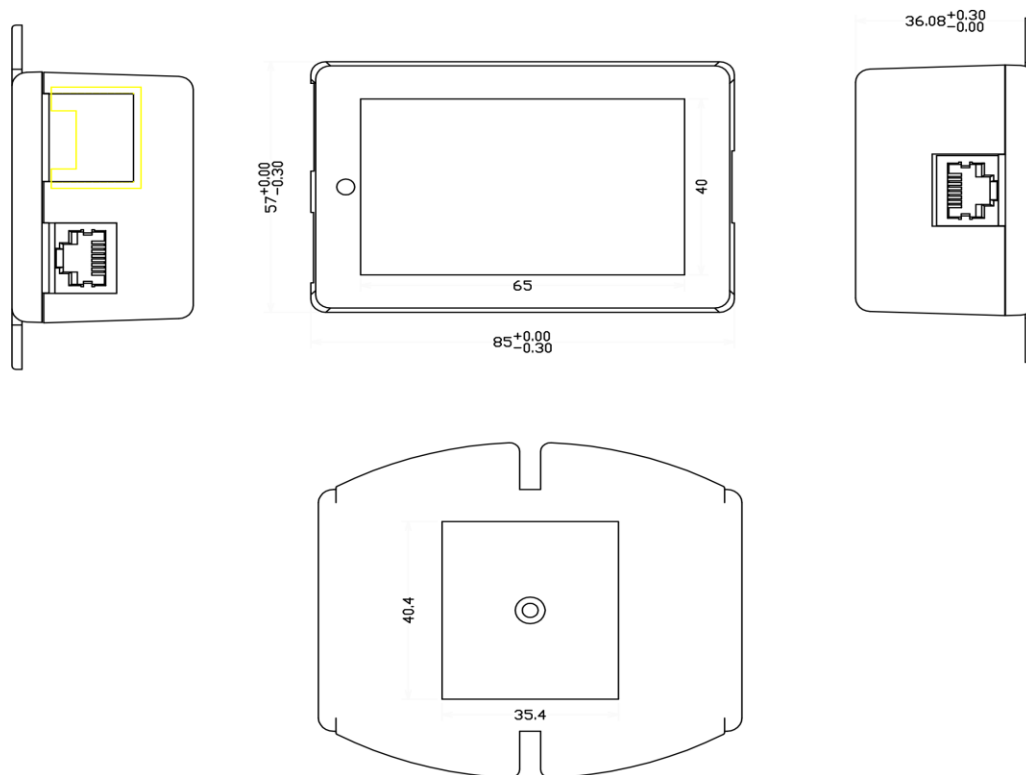
Channel connectors & pinout

- Power-Hub RJ45 Socket (per channel) data & Power-Hub RJ45 Socket

RJ-45 Input (Data & Power)		
Pin	Symbol	Description
1	BI_DA+, Vin +/-	Data Pairs A+/ Feeding power(+/-)
2	BI_DA-, Vin +/-	Data Pairs A-/ Feeding power(+/-)
3	BI_DB+, Vin +/-	Data Pairs B+/ Feeding power(+/-)
4	BI_DC+, Vin +/-	Data Pairs C+/ Feeding power(+/-)
5	BI_DC-, Vin +/-	Data Pairs C-/ Feeding power(+/-)
6	BI_DB-, Vin +/-	Data Pairs B-/ Feeding power(+/-)
7	BI_DD+, Vin +/-	Data Pairs D+/ Feeding power(+/-)
8	BI_DD-, Vin +/-	Data Pairs D-/ Feeding power(+/-)
9	Shield	Connector shielding

RJ-45 Output (Data & Power)		
Pin	Symbol	Description
1	BI_DA+	Data Pair A+
2	BI_DA-	Data Pair A-
3	BI_DB+	Data Pair B+
4	BI_DC+, Vo+	power(+)+Data Pair C+
5	BI_DC-, Vo+	power(+)+Data Pair C-
6	BI_DB-	Data Pair B-
7	BI_DD+, Vo-	power(-)+Data Pair D+
8	BI_DD-, Vo-	power(-)+Data Pair D-
9	Shield	Connector shielding

Dimension



Ordering Information

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