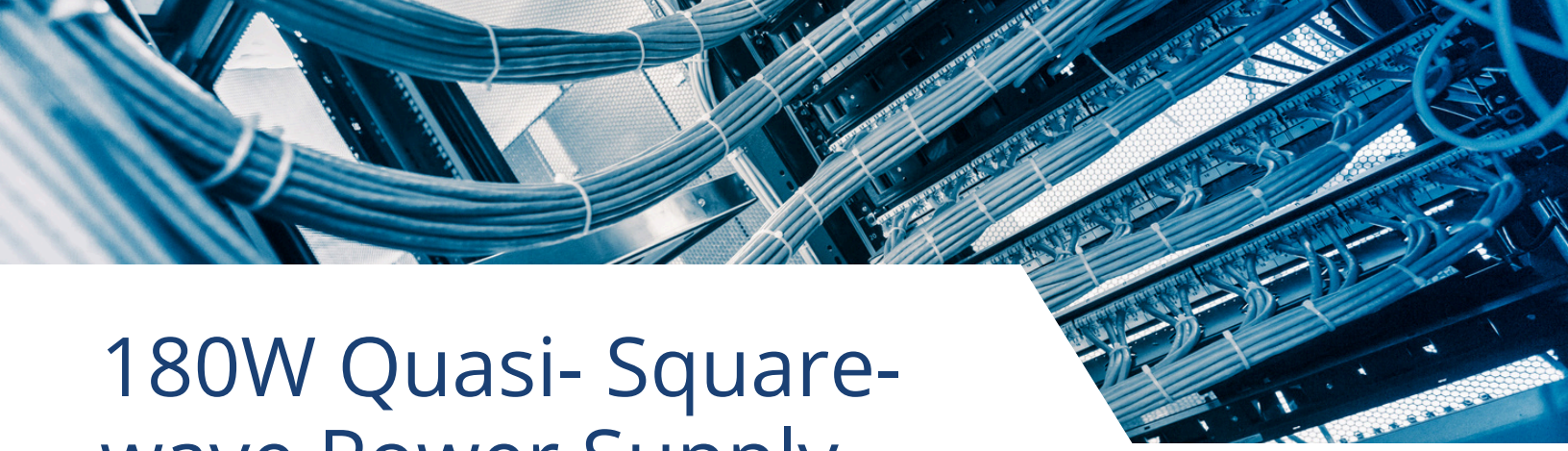

180W Quasi- Square-wave Power Supply

DPQ180E-325 Product Specifications

Overview

The DPQ180E-325 is a wide range Quasi-Square-Wave input voltage range of 40Vac to 90Vac to three voltage output of 25Vdc, 12Vdc and 5.75dc. The Power Converter delivers exceptional performance and efficiency, making it the ideal choice in the Cable and telecommunication industry.

The DPQ180E-325 Power converter is a 90% high efficiency that supports temperature range from -40C to 85C base plate. It is fully protected against over-temperature, over voltage, under-voltage, over current, short circuit. All safety features are Auto Restart.

The DPQ180E-325 meets rigorous standards suitable for harsh operating conditions. It complies with GAP ANSI/SCTE 273-1 American National Standard.

Applications

- Telecommunications: Supports DOCSIS, PON, and wireless networks.
- Cable TV/Broadband: Streamlines the deployment of new technologies with a standardized platform.
- Edge Computing: Facilitates a seamless transition to localized processing models.

Key Features

180W

High Power high performance power supply

Wide Input Range

40 - 90 VAC

Output Voltage

5.75V, 12V, 25V

High Efficiency

90%

Ensuring minimal power loss and maximum performance.

Fully Protected

Over-temperature, over-voltage, under- voltage, over-current, short circuit, and reverse polarity protection.

Protection

IP67

Fully sealed and encapsulated to withstand exposure to harsh environments.

GAP

Complies with GAP ANSI/SCTE 273-1 American National Standard.

Digital Power® Flexible Power Solutions

For quotes and customization requests, please contact us at (877) 634-0982 or sales@digipwr.com

Learn more: www.digipwr.com

Electrical Specifications

Parameter	Specification	Notes
Input Voltage	40-90 Vrms	Supports quasi-squarewave AC input
Output Voltages	Option A: +5.75V, +12V, +25V	Preferred option
	Option B: +5.75V, +25V	Minimum option
Maximum Output Power	180W	
Efficiency	Typical: 90% at >75W load	
	Minimum: 85% under standard conditions	
Ride-Through Time	200ms (preferred)	80ms (minimum)

Environmental

Parameter	Specification
Operating Temperature	-40°C to +85°C baseplate.
Maximum Operating Temperature	-40°C to +90°C baseplate (without permanent damage).
Operating Humidity	5% to 95% non-condensing.
Operating Altitude	Up to 4000m above mean sea level (AMSL).
Operational Shock	63g RMS, half-sine wave shock pulse, 2ms duration, 6 pulses total.
Non-Operational Vibration	7Hz to 30Hz swept sine-wave, 5mm excursion, 30 minutes total duration.
Non-Operational Thermal Shock	Three cycles: -40°C to +60°C transition in less than 1 minute, 60-minute soaks at each temperature.
Operational Vibration	6.3g RMS, 5-2000 Hz, 1.5 hours per axis.

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Compliance and Safety

Standard/Regulation	Compliance Details
Electromagnetic Compatibility	CISPR Class B with a 3dB margin for radiated and conducted emissions.
Electrostatic Discharge (ESD)	IEC61000-4-2 Level 4, Performance Criteria A.
Radiated Susceptibility	IEC61000-4-3, Level 3.
Electrical Fast Transient	IEC61000-4-4, Common Mode.
Surge Immunity	IEC61000-4-5, 6kV.
Conducted RF Immunity	IEC61000-4-6, Level 3.
Safety Compliance	IEC60950-1, EN60950-1, UL60950-1, UL/CSA/IEC 62368-1.
RoHS Compliance	Compliant with RoHS Directive 2015/863.
Material Compliance	Compliant with Waste Framework Directive 2018/851 and EU REACH Directive.
WEEE Compliance	Compliant with WEEE Directive 2012/19/EU.
Conflict Minerals Regulation	Compliant with Conflict Minerals Regulation EU 2017/821.

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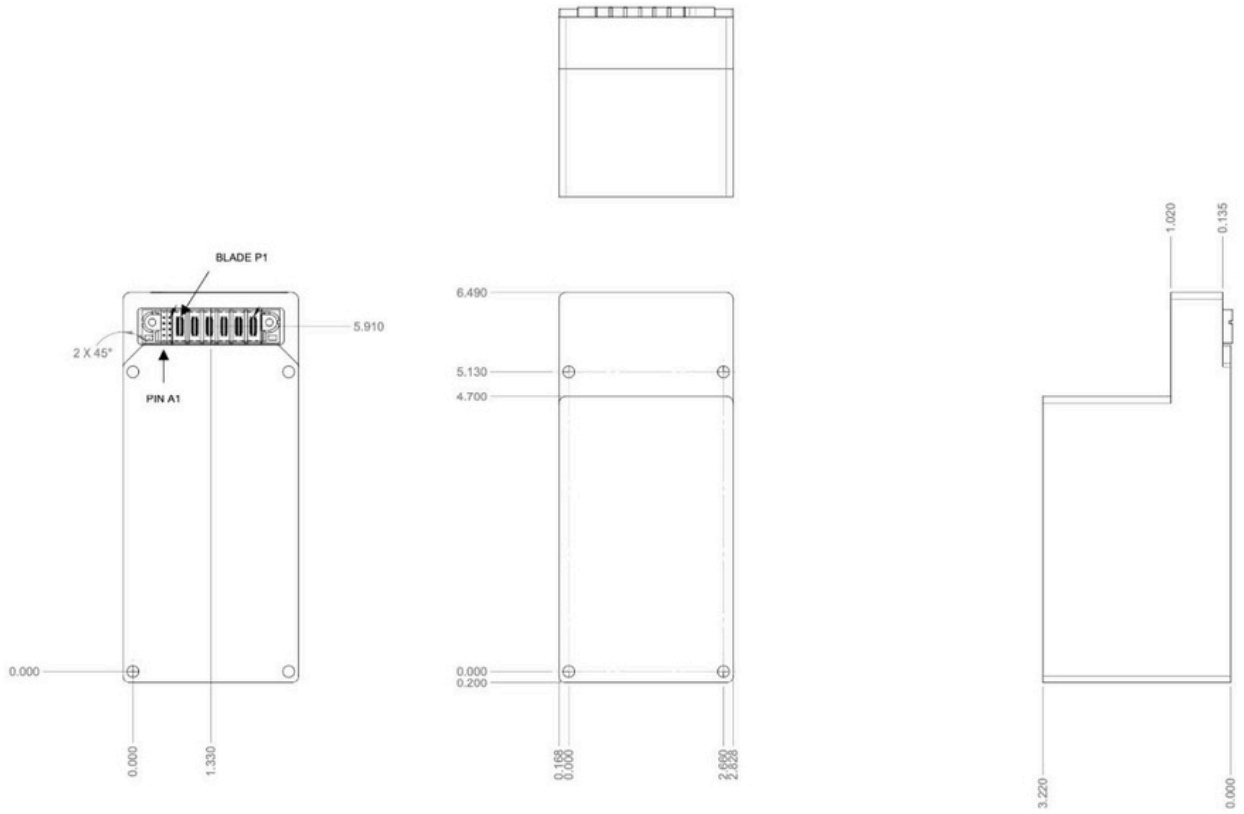
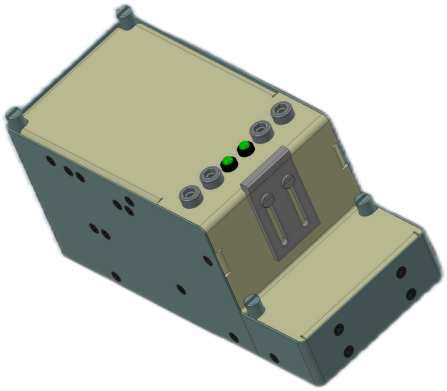
MECHANICAL SPECIFICATION





DPQ180E-325 is typically operating in a still air environment where all cooling is via conduction through the baseplate only inside a GAP-compliant node housing. Internally the supply should use thermally conductive pads to provide good heatsinking of components to the power supply enclosure while externally the power supply enclosure also makes contact with the node housing via a thermal pad.

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