

cPS-H325/WDC

3U CompactPCI® 8HP 16.6-160VDC Input Railway Power Module

Features

- PICMG® 2.11 CompactPCI® Power Interface compliant
- 16.6 to 160VDC 10:1 wide input range
- 310W 3U, 8HP CompactPCI package
- EN 50155 Class S2 and C2 compliant for power stability
- -40°C to 85°C operating temperature with derating
- Hot-swap support for N+1 redundant systems



Specifications

Model Name: cPS-H325/WDC

PICMG® Standards

PICMG® 2.11 CompactPCI® Power Interface compliant
 Form Factor: 3U cPCI (100 x 160mm), 2-slot (8HP) wide
 Input Voltage: 16.6 to 160 VDC
 Input Frequency: DC

General

Efficiency: (120W) Typical 85% at 24VDC; (310W) 88% at 48VDC & 89% at 110VDC
 Switching Frequency: 120KHz at nominal I/P 110VDC
 Dielectric Withstand: I/P-O/P: 3000VAC; I/P-GND:1500VAC; O/P-GND:1000VAC
 Circuit Topology: Resonant Forward circuit
 Transient Response: Peak transient < 300mV & recovers within 3mS for 25% load-change
 Remote ON/OFF: Available at [INH#] & [EN#] pins

Input Current

F-L/120W: 6A at 24VDC, 1.3A at 110VDC
 F-L/300W: 7.5A at 48VDC, 3.3A at 110VDC
 No-Load: 0.35A at 24VDC, 0.45A at 110VDC

Inrush Current

Peak 27A at nominal 110VDC

Input /Output Connector

Positronic 47-pin PCIH47M400A1

Output Voltage/Current

+5V: Typ. 20A, Max. 33A, peak 35A
 +3.3V: Typ. 20A, Max. 33A, peak 35A
 +12V: Typ. 11A, Max. 20A, peak 23A
 -12V: Typ. 1A, Max. 2A, peak 3A

Max. load is the continuous operating load of each rail individually. The max. load of each rail cannot be drawn from all outputs simultaneously.

Output Wattage: Typical 120W (fanless) and 300W (forced air)
 Line Regulation: Typical 0.2%

Load Regulation

Typical ±1% for V1 & V2
 Typical ±2% for V3
 Typical ±5% for V4

Output Voltage Sense

Available at 5V, 3.3V, and +12V outputs and current sharing
 N+1 Redundancy: Equipped with internal OR-ing diodes
 Remote ON/OFF: Available at [INH#] & [EN#]

Power Failure Signal

Available at [FAL#] pin

Protections

Over Temperature Protection (OTP): Installed NTC for thermal sensor at [DEG#] pin
 Over Current Protection (OCP): Installed at each rail
 Over Load Protection (OLP): Typical 120% max. load, fully protected against output overload or short circuit
 Over Voltage Protection (OVP): Built-in at all outputs
 Input-Under & Over-Voltage: Installed
 Input Reverse Voltage: Installed
 Conformal Coating: Available

Status LEDs

Power LED: valid input voltage (green)
 Fault LED: critical fault (red)

Operating Temp.

-40°C to +85°C with de-rating

Storage Temp.

-45°C to +90°C

Humidity

5% to 95% non-condensing

Shock

15g peak-to-peak, 11 ms duration, non-operating

Vibration

Six degree of freedom random 10Hz 150Hz, 10G

Certifications

CE, FCC, Class A, EN 61000-4-3, EN 61000-4-5, EN 61000-4-6, EN 55022, IEC 60950 Class I

Ordering Information

• cPS-H325/WDC

PICMG® 2.11 47-pin hot-swap redundant 3U CompactPCI® 8HP 310W power module with 16.6-160VDC Input

*Conformal coating model available by request.