

CPCI-DC-3U-300



CompactPCI 3U 8HP 300 Watt DC power supply

Product Description

Industry's leading CPCI power supply delivering 300W continuous power. Compliant with the PICMG 2.11' Telkooor's unique design using 2 converters in parallel' one for the 3.3V and one for the 5V enable max. current draw on the two outputs together.

Telkooor Part Number:

900-4003-0000

Product Specifications:

Input

DC Input Voltage	36 - 72 VDC
Input Inrush Current	20A Max
Input Reflected Ripple	FCC-68 part 15 & EN55022 Class B with the use of an external line filter
Efficiency @ 48/24VDC	83% @ 48VDC
Input Line Protection	Non-User Serviceable Fuse

Output

V1/Current	+5VDC / 30A
V2/Current	+3.3VDC / 40A
V3/Current	+12VDC /5A
V4/Current	-12VDC /1A
Aux V/Current	N/A
Total Output Power	300W with 250LFM
Line Regulation	+/- 0.5%
Hot-Swap	Yes
Current Share	Single Wire - on V1 & V2
Remote Sense (Open sense lines protected)	On +5VDC & +3.3VDC
Long Term Stability	0.1% over 10 Hours after 10min. Warm Up

Transient Response	For a step Load of 50%max Load peak transient < 5%. & output Recovers to 1% in Less than 0.5mSec.
Over-Voltage Protection	110% - 125% of V1/V2 & V3 with Latched Shut Down
Short Circuit Protection	Available On All Outputs
Temperature Protection	Excess Temp will Shut Down the Unit - with Auto recovery
Load Regulation	
V1&V2	+/- 1%
V3&V4	+/- 5%
Min. Load Requirement	No
Overshoot/Undershoot at Turn-On	Less than 1%
Turn-On Delay	1Sec Max.
Initial Setting Accuracy	+/- 0.4% for V1 & V2 +/- 2% for V3 & V4
Voltage Set point (Internal trim-pot) V1/V2	+/- 5%
Ripple @ Noise with 20MHz Bandwidth mesured across 10uF Load Capcitor Paralleled with 0.1uF Ceramic Cap.	
V1	60mV p-p
V2	60mV p-p
V3 & V4	120mV p-p
Overload Protection	
V1 & V2	125% Max.
V3	200% Max.
V4	250% Max.

Enviromental

Temperature

Operation	-5C to +55C with 250LFM Forced Air Cooling
Storage	-40C to +85C
Cooling	250LFM Forced Air Cooling
Humidity	Up to 95% RH Non-Condensing
Shock & Vibration	Storage: EN 300 019-2-1 Storage class 1.2' EN 300 019-2-2 Transportation class 2.3' EN 300 019-2-3 Use class 3.3
Conducted & Radiated Emmision	EN55022 Class B and EN-61000. Measured with input filter
Surge	EN61000-4

MTBF	> 400'000 Hours per Bellcore Standard B332 Gb 50C
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Dielectric Isolation

Input to Case	1500Vdc
Input to Output	1500Vdc
Output to Case	100Vdc

Safety, Regulations and EMI Specifications

Safety Approvals	UL60950' EN60950' cUL & CE Marking
Dielectric Withstand Voltage	1500VDC Input to Output' 1500VDC Input to Chassis Ground
ESD Susceptibility	EN61000-4-2 4Kv Contact 8Kv Air
Radiated Susceptibility	EN61000-4-3 10V/m
EFT/Burst	EN61000-4-4 1Kv
Conducted Disturbance	EN61000-4-6 3Vrms
Power frequency magnetic field	EN610000-4-8 1A/m

Monitoring Command & Control

Inhibit	Open Collector Inhibited with GND.
Power FAIL (Flt #)	Open Collector LOW Signal Indicates Outputs Out of Range
Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
DEG #	Open Collector Activated LOW before Thermal Shut-Down
I2C Bus	Yes for Pre-Programmed Static Parameters
Input AC Connector	Standard PICMG 47 Pin Positronics
Current Share	Yes
Remote Sense	On V1 & V2 for Cable Loss Correction of up to 300mV
Output Connectors V1/V2	Standard PICMG 47 Pin Positronics
Output Connectors V3/V4	Standard PICMG 47 Pin Positronics
I2C Data Bus	Yes for Pre-Programmed Static Parameters
Front Panel Green LED	Outputs OK
Front Panel Red LED	Outputs Failure

Mechanical Dimesions

Size in cm (Inch)	3U High 8HP wide 169.6mm Deep
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Weight in Grams (Oz)

950gr. 1.75lbs. Max.

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4003-DOC1-10

Outline Drawing

All characteristics are subject to change without prior notice.