

CPCI-DC-3U- 300/24



CompactPCI 3U 8HP 300 Watt DC power supply' 24V
input

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' 24VDC input

Telkooor Part Number:

900-4011-10

Product Specifications:

Input

DC Input Voltage	20 - 36 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	82% @ 24VDC
Input Line Protection	Non-User Serviceable Fuse

Output

V1/Current	+5VDC / 25A
V2/Current	+3.3VDC / 36A
V3/Current	+12VDC / 5A
V4/Current	-12VDC / 0.5A
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	150% Max.
V4	250% Max.

Enviromental

Temperature

Operation	-5C to +55C with 250LFM Forced Air Cooling
Storage	-40C to +85C
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
Dielectric Isolation	
Input to Case	1500Vdc
Input to Output	1500Vdc
Output to Case	100Vdc

Safety, Regulations and EMI Specifications

Safety Approvals	Designed to meet UL60950' EN60950' UL1604' 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
Input Surge	
Conducted Disturbance	EN61000-4-6 3Vrms
Power frequency magnetic field	EN61000-4-8 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
Weight in Grams (Oz)	950gr. 1.75lbs. Max.

Telkooor Document Number

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Outline Drawing

All characteristics are subject to change without prior notice.