

CompactPCI 3U 8HP 300 Watt AC power supply



Product Description

Industry's leading CPCI power supply delivering 300W continuous power. Compliant with the PICMG 2.11. Telkoor'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.

Telkoor Part Number: 900-4002-0000

Product Specifications:

Input

AC Input Voltage	90-264 VAC, auto range, single phase
Input Inrush Current	50A max @230 VAC
Input Reflected Ripple	EN55022 Class B with the use of an external line filter
Active Power Factor Correction	0.98 typical at 230Vac, full load 0.98 typical at 115Vac, full load
Efficiency @ 230VAC Full Load	>80% typical at 230Vac, full load rated power
Efficiency @ 115VAC Full Load	>76% typical at 120Vac, full load rated power
Input Line Protection	Internal Line Fuse: IEC type, 6.3A 250Vac quick acting
Hold-up Time	14mSec typical at full load and 220VAC input

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 forced air
•	cooling

Line Regulation	+/- 0.5%
Hot-Swap	Yes
Current Share	Single Wire – on V1 & V2
Remote Sense (Open sense	On +5VDC & +3.3VDC
lines protected)	
Over-Voltage Protection	110% - 130% 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	+/- 4%
Min. Load Requirement	No
Overshoot / Undershoot at	Less than 1%
Turn-on	
Turn-on Delay	2 Sec Max.
Initial Setting Accuracy	+/- 1%
Voltage Set Point (Internal	+/- 4%
trim-pot) V1 / V2	
Ripple @ Noise with 20MHz B	andwidth measured across
120µF Load Capacitor Paralleled with 1µF Ceramic Cap.	
V1	60mV p-p
V2	90mV p-p
V3 & V4	120mV p-p
Overload Protection	
V1 & V2	145% Max.
V3	155% Max.
V4	155% Max.

Environmental

Temperature	
Operation	-5°C to +55°C full load with 250LFM Forced Air Cooling and de-rating linearly above 55°C by 2.5% per °C
Storage	-40°C to +85°C
Humidity	Up to 95% RH Non-Condensing
Shock & Vibration	Shock: Peak acceleration 20GPK max. Vibration: Random vibration, 10Hz to 500Hz, 3 axis 1.9GRMS max.
Conducted & Radiated Emission	EN55022/CISPR22 Class B with an external TBD line filter
Surge	EN6100 -4-5 level 3 line-to-line 1KV line to chassis 2KV
MTBF	300,000 Hours per Belcore Standard B332 Gb 30°
Dielectric Isolation	
Input to Case	2200VAC.
Input to Output	4200VAC

Output to Case	100VDC

Safety, Regulations and EMI Specifications

Safety Approvals	UL60950, EN60950 & CE marking
ESD Susceptibility	EN61000-4-2 level 4 8KV air
Radiated Susceptibility	EN61000-4-3 level 3 10V/m
EFT / Burst	EN61000-4-4 level 3 ±2KV
Input Surge	EN6100 -4-5 level 3 line-to-line 1KV line to chassis 2KV
Conducted Disturbance	EN61000-4-6 level 2 3Vrms
Power frequency magnetic field	EN61000-4-8 3A/m

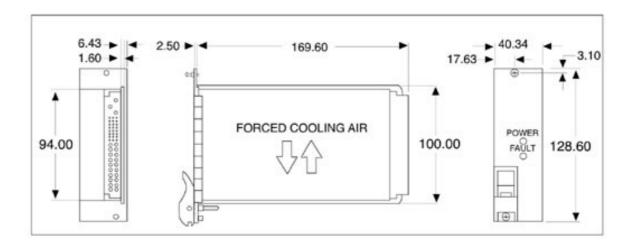
Monitoring Command & Control

Remote	N/A
Inhibit	TTL Compatible
Power OK	N/A
Power FAIL (Fit #)	TTL Compatible
Current Share	On V1 & V2 Allows +/- 10% Current Share with a Similar Unit
DEG #	Open Collector Activated LOW 10°C before Thermal Shut-Down
Input AC Connector	Standard PICMG 47 Pin Positronics
Remote Sense	On V1 & V2 for Cable Loss Correction of up to 200mV
Output Connectors V1/ V2	Standard PICMG 47 Pin Positronics
Output Connectors V3/ V4	Standard PICMG 47 Pin Positronics
Aux. Output	N/A
I ² C Data Bus (optional)	Yes for Pre-Programmed Static Parameters
Front Panel Green LED	Inputs OK
Front Panel RED LED	Output Failure

Mechanical Dimensions

Size	3U High 8HP wide 169.6 mm Deep
Weight	800 gr
Cover	N/A

Outline Drawing



All characteristics are subject to change without prior notice.