

Electrical Specification for:			CPCI	- 6U - A	.C - 60	<b>0W</b>			
Telkoor Part Number:	900-6115-0000								
CUSTOMER: GENERAL	SIZE	<u> </u>		S5417	DWG. NO.	6115-DOC1-10		A2	



	REVISION HISTORY											
Rev Level	Rev Date	Change Made	Reason for Change	Effective	Approved By							
Α	13/12/08	Specification Release			S. Sadot							
A1	13/02/09	Change the output current as Follow: +3.3V/70A	Customer Request	Next production	S. Sadot							
A2	08/07/09	Change overload to 105-130%	Spec update	Immediately	S.Sadot							

Approvals									
	Name	Date							
Written by:	S. Sadot	13/12/08							
Engineering:	S. Sadot	13/12/08							
Sales & Marketing:	B. Steinfeld	13/12/08							
Management:	M. Heller	13/12/08							

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**Input:** 

Input Voltage: 85 - 264Vac, auto range, single phase

Frequency: 47-63Hz

Inrush Current: 50 A maximum at 230Vac
Power Factor: 0.98 typical at 230Vac, full load
0.99 typical at 115Vac, full load

Efficiency >80% at 230Vac, full load rated power >76% at 120Vac, full load rated power

Input Protection: Internal Line Fuse: IEC type, 10A 250Vac slow blow.

Brown – Out: 75 to 300Vac for 50Msec

## **Output Voltages & Currents:**

Output	Output Voltage	Adjustment Range	Output Current	Min Load
V1	+5V	4.8 ± 5.4	70A	0
V2	+3.3V	3.1 ± 3.5	70A	0
V3	+15V	0	5.5A	0
V4	-15V	0	1.5A	0

Note: 1) Maximum output power at any combination within this table is 600W

2) Maximum output power on V1+V3 not exceed 386W

Output Power: 600W with 300LFM forced air cooling

Line Regulation:  $\pm 0.5\%$ 

Load Regulation:

V1, V2 ±1% V3 ±5%

 $\pm$ 5% With minimum load of 10A on the 3.3V output

Ripple & Noise 20 MHz bandwidth measured across 1uF ceramic and 120uF electrolytic.

capacitor paralleled

V1 100mV p-p V2 60mV p-p V3 & V4 120mV p-p

Overload & Short Circuit Protection Fully protected against output overload and short circuit

Initial Set Point Tolerance: ±1%

Overshoot & Undershoot: 0% at turn ON
Turn On Delay: 1 sec. Maximum.

Over-voltage Protection: Shut down at 110 to 130% with latched shut down

Temperature Protection: System shutdown due to excessive internal temperature, automatic reset

Hold-UP Time 30mSec Minimum

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**Monitoring Command & Control** 

Remote Sense Available on V1 & V2. Total voltage compensation for cable losses with respect to

the main output 300mV

Inhibit (INH#)

Inhibited with GND or TTL "0" – Pulled up to internal +12V Aux supply

Enable (EN#) Contact closure to external ground to start unit. On shortest pin (last make, first

break)

Power Fail (FAL#) Open collector - Active low signal. Indicates one or more outputs below 90% of

specified rate.

Current Share Accuracy of shared current ±10% with up to 6 parallel units. Single wire current

share on V1 & V2 for 50% to 100% load

Hot Swap Internal O-ring Diode FET's

Over Temperature Warning (DEG#) Open collector active low about  $10^{\circ}$ C before power supply shut down. I<sup>2</sup>C Passive data: s/n, model no., revision, and/or user defined data

**Operation Status Indicators** 

Input Voltage OK Green LED - Indicates when mains input voltage is present.

Output Failure Red LED - Indicates one or more outputs below 90% of specified rate.

## **Environmental Specification:**

Operating Temperature: Operation: -5°C to +55°C full load with 300LFM Forced Air Cooling and de-rating

linearly above 55°C by 2.5% per °C

Storage Temperature -40°C to +85°C

Humidity: Up to 95% RH non-condensing. Shock: Peak acceleration 1GPK max.

Vibration: Random vibration, 10Hz to 500Hz, 3 axis 1.9GRMS max.

Altitude Operation 6K feet Non operation 40K feet.

MTBF 400,000 hours per Bellcore standard B332 Gb 30°C

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## **Safety Regulatory & EMC Specifications:**

Fully compliance to PICMG 2.11 CompactPCI Specification

Safety Agency Compliance UL 60950, EN-60950, CE - MARK

Harmonics EN61000-3-2 Voltage Fluctuation EN61000-4-3

ESD susceptibility EN61000-4-2 level 4 8KV air

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

Radiated susceptibility EN61000-4-3 level 3 10V/m
EFT/Burst EN61000-4-4 level 3 ±2KV
Conducted disturbance EN61000-4-6 level 2 3Vrms

RoHS In full compliance with the RoHS directive # 2002/69/EC

**Dielectric Withstand:** 

Input to Case: 1500VAC.

Input to Output: 3000VAC

Output to Case: 100VDC.

**Mechanical Dimensions** 

Size 10.14"H X 1.60"W X 6.40"D (261.9mm x 40.34mm x 169.4mm)

Weight 1500 gr.

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## OUTPUT CONNECTOR - Positronic-PCIH47M400A1/AA PIN ASSIGNMENT

Pin	Pin Type	Signal Name.	Description
1-4	Normal	V1	V1 Output
5-12	Normal	RTN	V1 and V2 Return
13-18	Normal	V2	V2 Output
19	Normal	RTN	V3 Return
20	Normal	V3	V3 Output
21	Normal	V4	V4 Output
22	Normal	RTN	Signal Return
23	Normal	RTN	Signal Return
24	Normal	RTN	V4 Return
25	Normal	GA-0	Geographic ADD-0 (option)
26	Normal	Reverse	Reverse
27	Short	EN#	Enable
28	Normal	GA-1	Geographic ADD-1 (option)
29	Normal	NC	Not Connected
30	Normal	V1 Sense	V1 Remote Sense
31	Normal	GA-2	Geographic ADD-2 (option)
32	Normal	NC	Not Connected
33	Normal	V2 Sense	V2 Remote Sense
34	Normal	S RTN	Sense Return
35	Normal	V1 Share	V1 Current Share
36	Normal	NC	Not Connected
37	Normal	IPMB_SCL	System Manager Bus (option)
38	Normal	DEG#	Degrade Signal
39	Normal	INH#	Open – ON Low - OFF
40	Normal	IPMB_SDA	System Manager Bus (option)
41	Normal	V2 Share	V2 Current Share
42	Normal	FAL#	Fail Signal
43	Normal	IPMB_PWR	Power–System Manager (option)
44	Normal	NC	Not Connected
45	Long	Chassis GND	Chassis GND
46	Long	AC Neutral	AC input Neutral
47	Long	AC Line	AC Input Line

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