

**Electrical  
Specification for:**

**CPCI AC 6U 400W - R**

Rugged Compact PCI 6U 8HP 400 Watt AC Power Supply

**Telkoor Part  
Number:**

900-6602-0000

CUSTOMER:	SIZE	CAGE CODE	S5417	DWG. NO.	6602-DOC1-10	REV	C1
GENERAL	SCALE	RELEASE DATE	19/6/06	SHEET	1	OF	5

REVISION HISTORY				
Rev Level	ECO	Change Made	Reason for Change	Effective
A		Preliminary product release		31/10/05
A1		5V Ripple to 100mV p-p	Reflect actual unit performance	19/6/06
B	6602-002	5V Ripple to 50mV p-p	Customer requirement	17/7/06
C		Vibration level revised to 4 Grms	Customer requirement	3/8/06
C1		Lower Operation Temp -40 °C	Customer requirement	30/7/12

Approvals		
	Name	Date
<b>Written by:</b>	<b>S. Sadot</b>	<b>31/10/05</b>
<b>Engineering:</b>	<b>M. Heller</b>	<b>19/6/06</b>
<b>Sales &amp; Marketing:</b>	<b>M. Allon</b>	<b>19/6/06</b>
<b>Management:</b>	<b>Y. Ben-Ami</b>	<b>19/6/06</b>

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**Input:**

Input Voltage: 85-264VAC  
 Input Frequency: 56.7 – 63.3 Hz  
 Inrush Current: 60A Max. @230V  
 Efficiency: 81% @ 230VAC full load  
 79% @ 115VAC full load  
 Power Factor: > 0.95  
 Input Protection: Non-User Serviceable Fuse  
 Hold up Time: 16mSec @ full load

**Output Voltages & Currents:**

<i>Output</i>	<i>Output Voltage</i>	<i>Adjustment Range</i>	<i>Output Current</i>	<i>Min Load</i>
V1	+5	4.8 ÷ 5.4	50A	0
V2	+3.3	3.1 ÷ 3.5	80A	0
V3	+12	N/A	7.5A	0
V4	-12	N/A	1.5A	0

Output Power: 400W with 250LFM forced air cooling  
 Line Regulation: ±0.5%  
 Load Regulation:  
     V1 & V2 ±1%  
     V3 & V4 ±5%  
 Ripple & Noise with 20 MHz bandwidth measured cross 10uF load capacitor paralleled  
     V1 50mV p-p  
     V2 50mV p-p  
     V3 & V4 120mV p-p  
 Over current Protection  
     V1 & V2 125% max  
     V3 200% max  
     V4 250% max  
 Initial Set Point Tolerance: +/- 0.4%for V1 & V2 +/- 2% for V3 & V4  
 Overshoot & Undershoot: Less than 5% at turn ON-OFF  
 Transient Load Response: For a step load of 50% max load peak transient < 5% and output recovers to 1% in less than 0.5mSec  
 Turn On Delay: 2 sec. Maximum.  
 Over-voltage Protection: 110 to 150% of V1, V2 & V3 with latched shut down  
 Temperature Protection: Excess temp will shut down the unit – with auto recovery  
 Current Share: Yes  
 Hot Swap: Yes  
 Remote Sense: On +5VDC & 3.3VDC

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**Monitoring Command & Control**

Remote	N/A
Inhibit	Open collector inhibited with GND
Power O.K	N/A
Power Fail (flt#)	Open collector high signal indicates output in range, low signal indicates DC Fail
DEG #	Open collector activated low before thermal shut-down
I/O Connector	Standard PICMG 47 pin Positronics
Remote Sense	On V1 & V2 cable loss correction of up to 300mV
Aux. Output	N/A
12C Data Bus	Optional – static and dynamics parameters
Front Panel Green Led	Outputs O.K
Front Panel Red Led	Outputs Failure

**Environmental Specifications:**

Temperature:	Operation: -40 °C to +70 °C with 40 CFM Forced-Air Cooling. De-rated linearly above +55 °C by 2.5 % per °C Storage: -40 to +80°C
Cooling:	40 CFM forced Air Cooling
Humidity:	Up to 95% RH non-condensing.
Vibration:	See Figure 1 below - Vibration Graph
Shock:	20g ±3g 20mSec (17-23mSec) half sine duration of shock pulse
Conducted & radiated emission	EN55022 Class B & EN61000. Measured with a mains input filter.
Surge	EN61000-4
MTBF	>400,000 hours per Bellcore standard B332 Gb 50C
Conformal coating:	In accordance to IPC-CC-830 for PCB only

**Safety Regulatory & EMC Specifications:**

MEETS FCC CLASS B, EN55022 CLASS B – With an external line filter	
Safety Agency Compliance	UL 60950 EN-60950 CE - MARK
EN61000-4-2 4Kv contact 8Kv air	ESD susceptibility
EN61000-4-3 10V/m	Radiated susceptibility
EN61000-4-4 1Kv	EFT/Burst
EN61000-4-6 3Vrms	Conducted disturbance
EN61000-4-8 1A/m	Power frequency magnetic field

**Dielectric Withstand:**

Input to Case:	2200VDC.
Input to Output:	2200VAC
Output to Case:	100VDC.
Leakage current:	1.0mA max. @115VAC

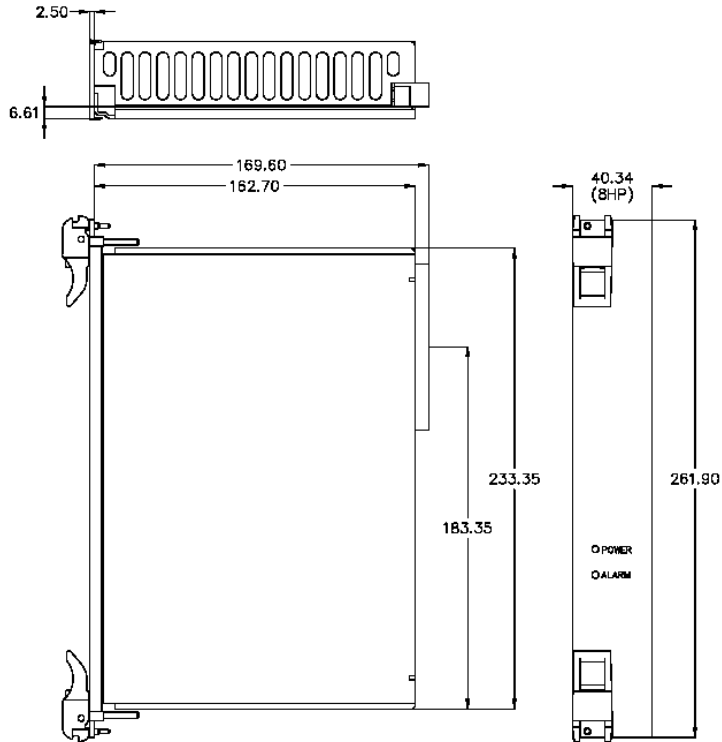
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**Mechanical Dimensions**

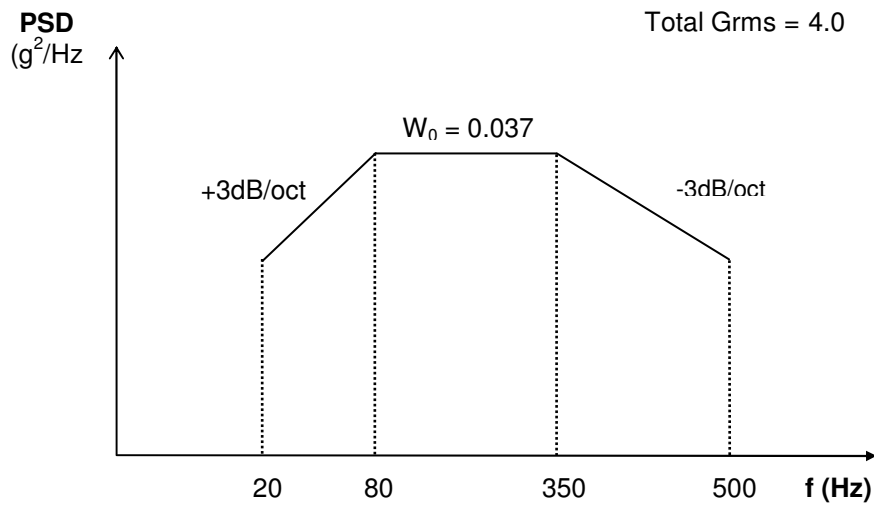
Size  
Weight

6U High 8HP WIDE 169.6mm Deep  
1.88Kg 3.2lbs. Max.

**Outline Drawing**



**Figure 1 – Vibration Graph**



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