



Specification for:

CPCI AC 6U 400W - R
Compact PCI 6U 8HP 400 Watt AC COTS Power Supply

ADVICE Part Number – 900-6602-0000



Input:

Input Voltage: 85-264VAC
 Input Frequency: 47 – 440 Hz
 Inrush Current: 60A Max. @230V
 Efficiency: 81% @ 230VAC full load
 79% @ 115VAC full load
 Power Factor: > 0.95 typical at 230Vac, full load.
 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	65A	0
V2	+3.3	3.1 ÷ 3.5	80A	0
V3	+12	N/A	7.5A	0
V4	-12	N/A	1.5A	0.1

Output Power: 400W with 250LFM forced air cooling.
 Line Regulation: ±1%
 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 130% 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.



<u>Monitoring Command & Control</u>	
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.
Over Temperature Warning (DEG#)	Open collector active low about 10°C before power supply 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
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.
<u>Environmental Specifications:</u>	
Temperature:	Operation: -40 °C to +55 °C with 250LFM forced air cooling. De-rated linearly above +55°C by 2.5 % per °C Storage: -40°C to +85°C
Cooling:	250LFM 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
Altitude	Operation 10K ft Non operation 40K ft.
MTBF	>400,000 hours per Bellcore standard B332 Gb 50°C
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 62368 EN-62368 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:	4200VDC
Output to Case:	50VDC.
Leakage current:	1.0mA max. @220VAC



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

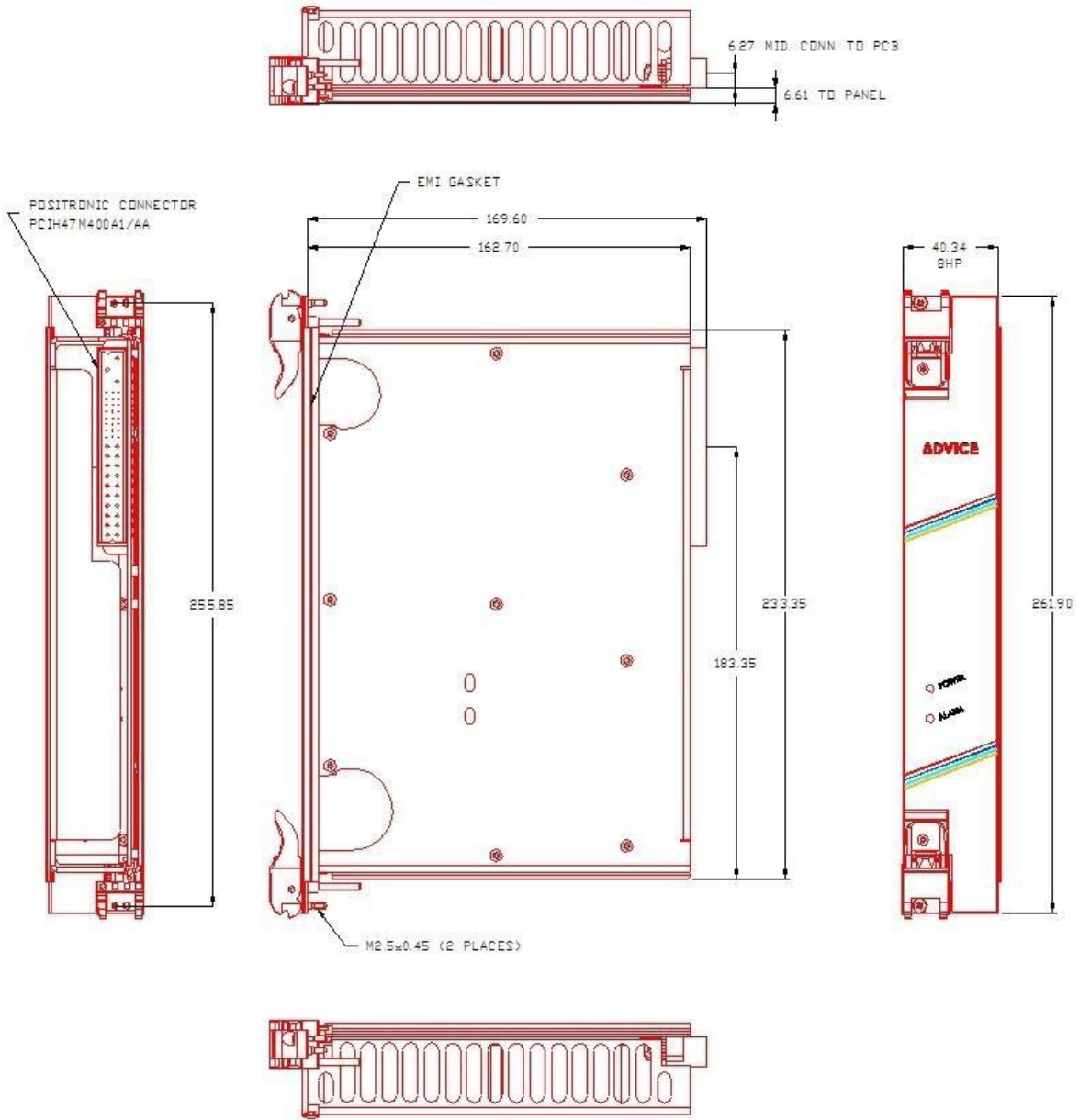
Outline Drawing:




Figure 1 – Vibration Graph

