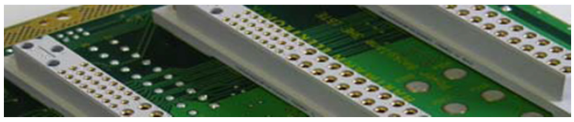
POWER SUPPLY

HARTMANN ELECTRONIC

6U 8HP 400Wt | CPCI DC/DC



Partnumber: D575.00410

Key figures:

- 406Wt 6U 8HP Eurocard package
- Wide operating temperature range of -40° C to +70° C
- Hot swappable
- Active current charing
- Internal or-ing diodes for N+1 redundancy
- EMI meet EN 55022 / FCC class A
- Fully compliant with PIGMG / CE marking compliance

General specification:

- Storage temperature: - 40° C to +85° C
- Operating temperature: - 40° C to +70° C with 600LFM air flow (siehe Note 3)
- Derate linearly from 100% power at +50° C to 50% power at +70° C (refer to derating curve)
- Cooling: At least 20CFM(600 LFM) moving air is required to achieve full rating power 406W in a confined area
- Power Density: 3,66 Watts/ Cubic Inch (max.)
- Efficiency: Typ. 81,8 %
- Switching Frequency: 120K Hz
- Circuit Topology: Forward circuit
- Transient Response: Peak transient less than 250mV and recovers within 3mS after 25% load change
- Safety Standard: IEC 60950-1 Class I
- Construction: Eurocard 3U 8HP 160mm; CompactPCI format, Front Panel with Extractor handle

NOTE:

1) All measurement are at nominal input, full load and +25°C unless otherwise specifications.

2) Tantalum capacitors connected to system is suggested for bettering Ripple&Noise against operating temperature from -40°C to +0°C

3) A warm-up time 3 minutes is required to maintain VO3 +12V within specific spec. After cold start at temperature from -40°C to +0°C

4) Due to requests in market and advances in technology, specifications subject to change without notification

CE

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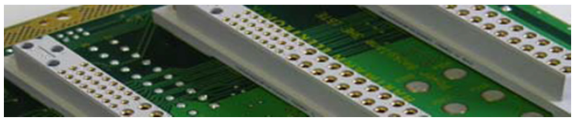
6U 8HP 400Wt	CPCI DC/DC	

ELECTRICAL SPECIFICATION

INPUT SPECIFICATION

Input Voltage:	Typ. 18-36Vdc, nominal input 24Vdc
Under Voltage Shutdown:	Installed
Soft Start:	Installed
Input Connector:	Positronic 47-pin PCIH47M400A1
Inrush Current:	56,5A (peak) at 36Vdc
Input Current:	19,7A at nominal input 24Vdc (Full load)
Dielectric Withstand:	Meet IEC 60950-1 regulation
EMI:	Meet CISPR EN 55022 Class A
Remote ON/OFF:	Available at [INH#] & [EN#] pins
Power Fail Signal:	Available at [FAL#] pin
Thermal Protection (OTP):	Installed NTC for thermal sensor at [DEG#] pin
Status LED:	<Green> means valid input voltage <Amber> means a critical fault

OUTPUT SPECIFICATION

Output Voltage:	See Ratings Chart
Output Current:	See Ratings Chart
Output Power:	Max. 406 Watt
Output Connector:	Positronic 47-pin PCIH47M400A1
Line Regulation:	Typ. 0,5%
Load Regulation:	Typ. VO1and VO2±1,5%; VO3 ±3%; VO3 ±5%
Total Regulation:	Typ. VO1and VO2±2%; VO3 ±4%; VO3 ±5%
Noise & Ripple:	Typ. 1% peak to peak or 50mV, whichever is greater
OVP:	Built-in at all outputs (Latch)
Adjustability:	Available for all outputs
Output Trim:	Electrical trim available at VO1/VO2.[ADJ #]
Remote Sensing:	Available at VO1,VO2 & VO3
Hot-Swap:	Available
N+1 Redundancy:	Installed with internal OR-ing diodes, all outputs for N+1 redundancy operation
Current Sharing:	Active current sharing at VO1, VO2 & VO3
Power OK Signal:	Available for all outputs
DC OK Signal:	Available for all outputs
Over Current Protection(OCP):	Installed at each rail
Overload Protection (OLP):	Fully protected

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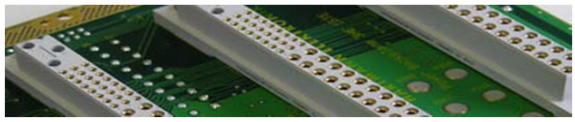


Part. Nr.: D575.00410

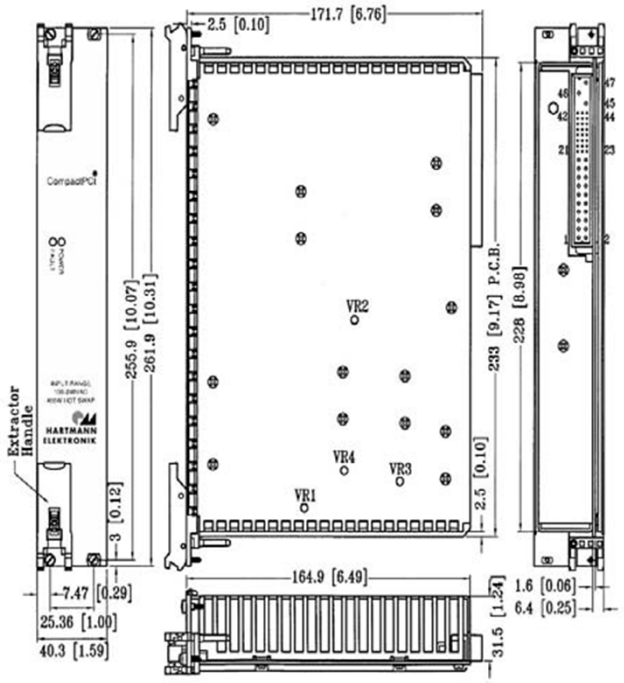
Output Voltage / Current Ratings Chart

MAIN +VO1 @★⊙#≡					AUX. +VO2 @★⊙#≡					AUX. +VO3 ▲@★⊙#≡					AUX. –VO4 ▲@★⊙				
Min	Typ	Volt	Max	Pk	Min	Typ	Volt	Max	Pk	Min	Typ	Volt	Max	Pk	Min	Typ	Volt	Max	Pk
0A	33A	+5V	50A	50A	0A	33A	+3,3V	50A	50A	0A	7A	+12V	10A	10A	0A	2A	-12V	4A	5A

Symbol: "★" OVP built-in. "@" Adjustable. "#" Remote sensing. "≡" Active Load Sharing. "⊙" Installed with Or-ing diode.
"▲" Magnetic Amplifier. "●" Installed with Post-regulator.

Remark: Peak load less than 60sec. with duty cycle <10%.

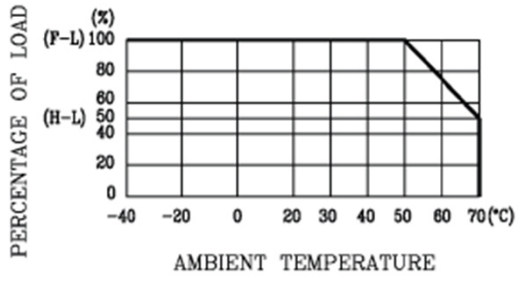
Max. load is the continuous operating load of each rail. But the max. load of each rail can't be drawn from all outputs at the same time. Total max. power of VO1 and VO2 should be less than 350W



Mechanical dimensions: mm (inches)
Weight: 1,67 kg (3,68lb.)

For the details of safety approval, please consult the factory

DERATING CURVE



Input & Output connectors pin assignment

	DC INPUT			STATUS/CONTROL			
ASSIGNMENT	+Vin	-Vin	G	EN#	DEG#	INH#	FAL#
CNTR &PIN #	46	47	45	27	38	39	42
	QUAD OUTPUT						
ASSIGNMENT	VO1	VO1S+	VO1S-	VO1Adj.	VO1C.S.	VO2	VO2S+
CNTR &PIN #	1,2, 3,4	30	34	29	35	13,14, 15,16, 17,18	33
ASSIGNMENT	VO2Adj.	VO2C.S.	VO3	VO3S+	VO3C.S	VO4	DC COM
CNTR &PIN #	32	41	20	36	44	21	5,6,7,8,9 10,11,12, 19,24