

CPCI-6U Series

350 – 650 Watt Compact PCI Power Supply

Product Description

The **Digital Power CPCI 6U Series** power supplies offer industry-leading performance for the Military, Commercial, Telecom and Industries markets, with a full range of AC Input, 24 VDC and 48 VDC input products. The entire range of products are compliant to the PICMG 2.11 power interface specification and provide from 350-650 Watts of output power. Key features include:

Key Features

- 350–650 watts
- 6U cabinet
- Ruggedized construction
- Universal AC input with PFC
- 24 VDC and 48 VDC input models available
- Active load current share (+5 V and 3.3 V output)
- O’ring diodes/FETs for N+1 parallel operation
- RoHS compliant
- PICMG 2.11 compliant
- International regulatory approvals



INPUT

• Input—AC Models	90–264 VAC, 47–63 Hz
- Power Factor	>0.90/0.95 typical @ 110/220 VAC (full load)
- Hold-Up Time	16 ms minimum (full load)
- Inrush Current	<35/65 A @ 110/230 VAC
• Input—48 V Input Models	36–72 VDC Input range
• Input—24 V Input Models	18–36 VDC Input range

OUTPUT

• Line Regulation	±0.5% for minimum to maximum voltage input
• Transient Response	>0.90/0.95 typical @ 110/220 VAC (full load)
• Over-Voltage Protection	110–125% of V1/V2/V3 (latched shutdown)
• Overload Protection	V1 and V2: 125% / V3 and V4: 200%
• Load Regulation	V1 and V2: ±1% maximum V3 and V4: ±5% maximum
• Min Load Requirement	None
• Turn-On Delay	2 seconds maximum
• Initial setting Accuracy	±1%
• Ripple/Noise	V1 and V2: 60 mV V3 and V4: 120mV (20M Hz bandwidth)

ENVIRONMENTAL CONDITIONS

• Operating Temperature	–5°C to 55°C (23°F to 131°F); De-rate of 2.5% per 1°C to 70°C (34°F to 158°F)
• Storage Temperature	–40°C to 85°C (–40°F to 185°F)
• Cooling	400–500 W = 250LFM/600–650 W=400 LFM airflow
• Humidity	400–500 W = 250LFM/600–650 W=400 LFM airflow
• Shock & Vibration	Up to 95% RH non-condensing
• MTBF	>400,000 hours per Belcore 332 issue 6

STATUS AND CONTROL

• Remote Inhibit	Active Low = Off
• DC Fail	Open collector ACTIVE low
• Over Temperature Warning	Open collector ACTIVE low
• Remote Sense	Compensates for < 500 mV drop
• Current Share	Single wire (V1 and V2)
• Front Panel Green LED	Outputs OK
• Front Panel Red LED	Fault condition

ELECTROMAGNETIC COMPATIBILITY

• Electrostatic Discharge	EN61000-4-2, ±2kV contact / ±8kV air discharge
• Radiated Susceptibility	EN61000-4-3, 26–1000 MHz, 10V/m, 80% AM
• EFT/Bursts	EN61000-4-4, ±2 KV
• Surges	EN61000-4-5, ±2 KV line-earth, ±1KV line-line
• Conducted Immunity	EN61000-4-6, 0.15–800 MHz, 10 V,80% AM
• Voltage Dips	EN61000-4-11, 30% dip for 10 ms, 60% Dip for 100 ms
• Voltage Interruptions	EN61000-4-11, 95% reduction, 5 seconds
• Fluctuations & Flicker	EN61000-3-3

SAFETY AND EMISSIONS

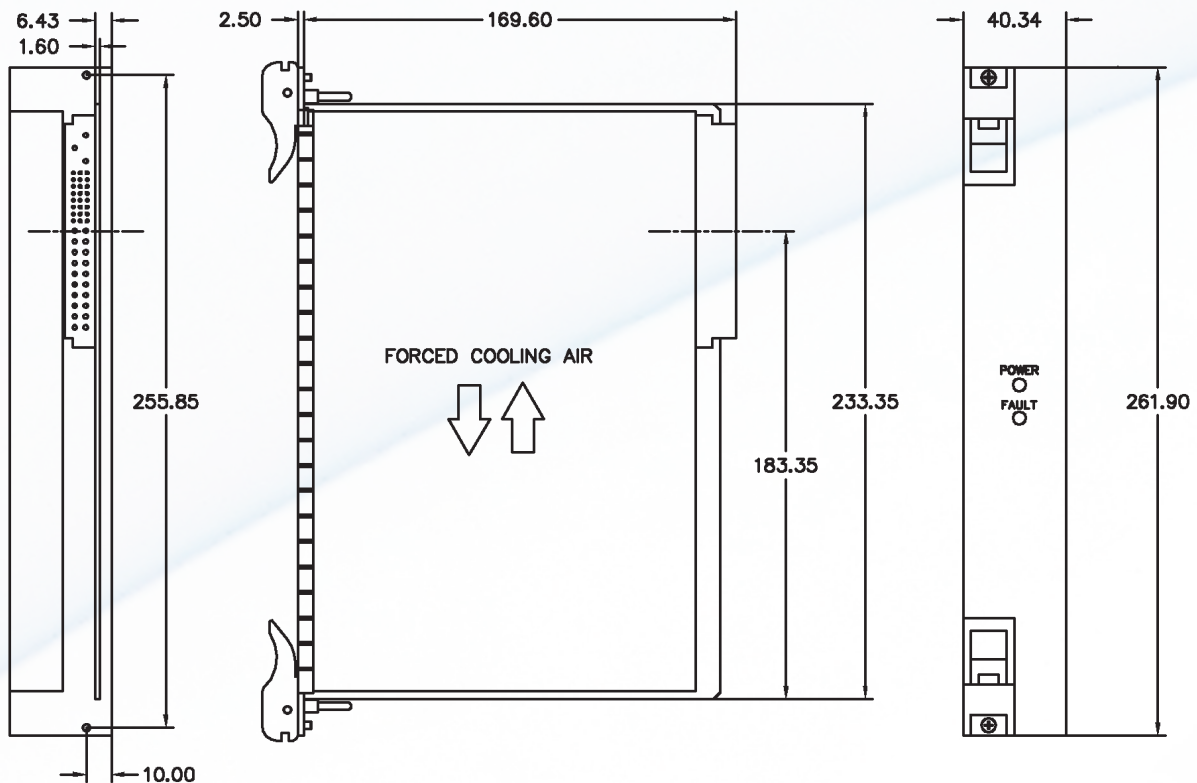
• Safety Approvals	UL/cUL 60950-1, IEC/EN 60950-1
• Emissions	EN55022 Level B

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Model Selection Guide

Model	Input	Power	V1	V2	V3	V4
CPCI-AC-6U-400	90–264 VAC	400 W	+5 V/50 A	+3.3 V/80 A	+12 V/7.5 A	–12 V/1.5 A
CPCI-AC-6U-500	90–264 VAC	500 W	+5 V/65 A	+3.3 V/80 A	+12 V/12 A	–12 V/1.5 A
CPCI-AC-6U-600	90–264 VAC	600 W	+5 V/70 A	+3.3 V/70 A	+12 V/7 A	–12 V/1.5 A
CPCI-AC-6U-650	90–264 VAC	650 W	+5 V/80 A	+3.3 V/70 A	+12 V/7 A	–12 V/1.5 A
CPCI-DC-6U-350/24	18–36 VDC	350 W	+5 V/50 A	+3.3 V/60 A	+12 V/7 A	–12 V/1.5 A
CPCI-DC-6U-400/48	36–72 VDC	400 W	+5 V/50 A	+3.3 V/80 A	+12 V/7.5 A	–12 V/1.5 A
CPCI-DC-6U-500/48	36–72 VDC	500 W	+5 V/65 A	+3.3 V/80 A	+12 V/12 A	–12 V/1.5 A
CPCI-DC-6U-600/48	36–72 VDC	600 W	+5 V/70 A	+3.3 V/70 A	+12 V/7 A	–12 V/1.5 A
CPCI-DC-6U-650/48	36–72 VDC	650 W	+5 V/80 A	+3.3 V/70 A	+12 V/7 A	–12 V/1.5 A



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