

CPCI Series Up to 500W

VME/CPCI Plug-in Power Supplies



Product Highlights:

- 115VAC and 28VDC Input versions
- Fixed Frequency Operation
- On/Off Logic Control (Inhibit)
- Conduction and Convection Cooled versions
- Output w/ low noise Pk-Pk Noise Filter
- Mil-Std-461E Input EMI Filter
- Mil-Std-704A, Mil-Std-1399 Type 1
- Mil-Std-810F Environments
- Over-Temperature Shutdown
- -40°C to +85°C standard operating temperature

| General Specifications | | | | | | |
|------------------------|--|---|---|---|---|--|
| | CPCI-C-102 6U 4HP | CPCI-C-103 6U 8HP HS | CPCI-C-105 6U 4HP | CPCI-C-106 6U 8HP HS | CPCI-C-108 3U 4HP | CPCI-C-116 3U 4HP |
| Input Voltage | 115/230VAC | 18-36VDC | 115/230VAC | 18-36VDC | 115/230VAC | 18-36VDC |
| Frequency Range | 1Φ 47-63Hz | N/A | 1Φ 47-63Hz | N/A | 1Φ 47-63Hz | N/A |
| Output Voltages | 3.3V @ 26A 5.0V @ 9.0A 12V @ 2.0A -12 V@ 0.2A | 3.3V @ 15A 5.0V @ 20A 12V @ 4A -12 V@ 4A | 3.3V @ 25A 5.0V @ 20A 12V @ 3A -12 V@ 1A | 3.3V @ 24A 5.0V @ 24A 12V @ 3A -12 V@ 2A | 3.3V @ 12A 5.0V @ 20A 12V @ 2A -12 V@ 1A | 3.3V @ 8A 5.0V @ 34A 12V @ 0.5A -12 V@ 0.5A |

| Electrical Specifications | | | | | | |
|--|--|--------------|--------------|----------------------------|--------------|--------------|
| | CPCI-C-102 | CPCI-C-103 | CPCI-C-105 | CPCI-C-106 | CPCI-C-108 | CPCI-C-116 |
| Line Regulation (Lo Line to Hi Line) | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% | 0.3% |
| Load Regulation 1/2- FL (w/ remote sense) | 1% (0.2%) | 1% (0.2%) | 1% (0.2%) | 1% (0.2%) | 1% (0.2%) | 1% (0.2%) |
| PARD (Ripple/Noise) DC- 20MHz % Eo | 1% | 1% | 1% | 1% | 1% | 1% |
| Current limiting | Autorecovery | Autorecovery | Autorecovery | Autorecovery | Autorecovery | Autorecovery |
| Overvoltage Protect. | 115% ±10% | 115% ±10% | 115% ±10% | 115% ±10% | 115% ±10% | 115% ±10% |
| Load Step Recovery (1/2 to FL) typical | 0.5mS | 0.5mS | 0.5mS | 0.5mS | 0.5mS | 0.5mS |
| Efficiency (minimum) | 70% | 78% | 70% | 78% | 72% | 78% |
| Isolation | > 100MΩ @ 500VDC, Input to Output and Input to Case; > 100MΩ @ 50VDC Output(s) to Case | | | | | |
| EMI Filtering | Mil-Std-461E, CE101 and CE102 on the input, CS101, CS114, CS116, RE101, RE102, RS103 | | | | | |
| Spikes and Surge Protection | Mil-Std-704 | Mil-Std-704 | Mil-Std-704 | Mil-Std-1275 Fault Free | Mil-Std-704 | Mil-Std-704 |
| Active PFC at FL | Yes >0.98 | N/A | Yes >0.98 | N/A | Yes >0.98 | N/A |
| Output Power | 157W | 246W | 239W | 260W | 176W | 210W |

| Temperature Specifications | |
|---|---|
| Operating Temperature: Conduction or Convection | -40°C to +85°C Baseplate or -40 C to +50°C Ambient 250CFM min |
| Storage Temperature | -55°C to +100°C |
| Temperature Coefficient | 0.02%/°C |

Note: Other output voltages and Environmental Screening also available. Please consult factory for details.



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Note: Specifications subject to change without notice.

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| Environmental Specifications | |
|------------------------------|--|
| Pressure-Altitude | Per MIL-STD-810F, Method 500.4, Procedure I and II |
| High Temperature | Per MIL-STD-810F, Method 501.4, Procedure I and II |
| Low Temperature | Per MIL-STD-810F, Method 502.4, Procedure I |
| Humidity | Per MIL-STD-810F, Method 507.4, Procedure I |
| Fungus | Per Mil-Std-810F, Method 508.5, Procedure I |
| Salt Fog | Per Mil-Std-810F, Method 509.4, Procedure I |
| Sand and Dust | Per Mil-Std-810F, Method 510.4, Procedure I and II |
| Explosive Atmosphere | Per Mil-Std-810F, Method 511.4, Procedure I |
| Acceleration | Per MIL-STD-810F, Method 513.5, Procedure I and II |
| Vibration | Per MIL-STD-810F, Method 514.5, Procedure I, Category 1, 4, 7 thru 14 and 16 thru 21 |
| Shock | Per MIL-STD-810F, Method 516.5, Procedure I, IV |

| Physical Characteristics | |
|---|---|
| Maximum Case Size: Conduction or Convection | 9.58"H x 6.58"D x 0.79"W (6U x 4HP) or Convection 1.59"W (6U x 8HP) |
| Cooling Method – Conduction or Convection | Conduction cooled via baseplate or Convection cooled via heat sink |
| Conformal Coat | Clear HumiSeal 1A 20 |
| Enclosure Finish | Black Anodized per Mil-A-8625F, Type II, Class 2 |
| Baseplate Finish | Gold Iridite Mil-C-5541E, Class 1A |
| Input/Output Connectors & Terminations – typical | J1: WTBV14PCSYL & J2: WTBV40PC (See Pin-out Table) |
| Mounting: Conduction Cooled Baseplate 4HP Convection Cooled Heatsink 8HP | Conduction: Wedge locks with Baseplate cooled version Convection: Captive Screws, Panel mtg. Heatsink/250 LFM airflow min. |
| Weight | 48 oz. approx. Conduction or 72 oz. approx. Convection |

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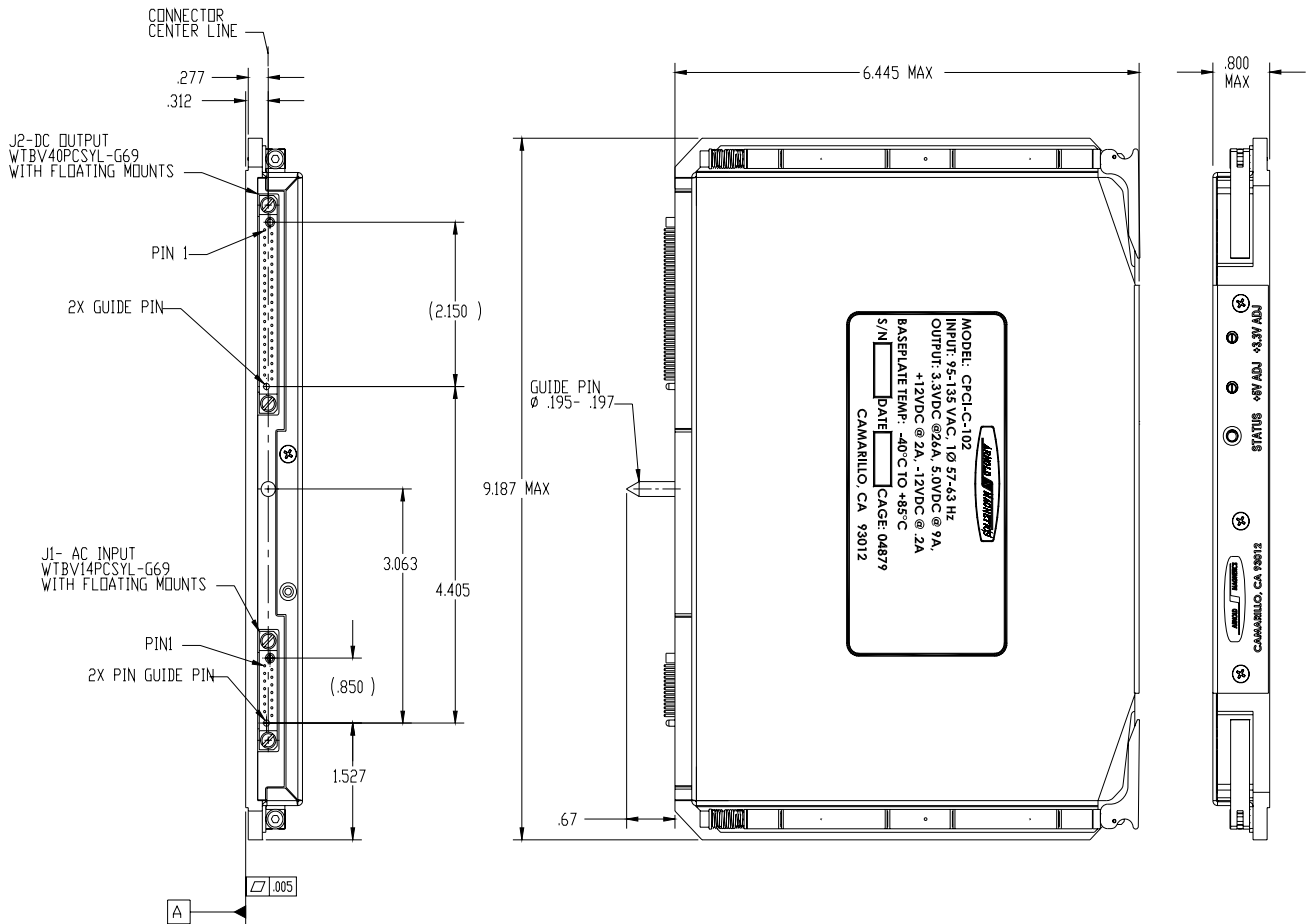
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Outline & Mounting Information:



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- Notes:
- 1) Guide pin and mating connector offset dimensions as specified.
 - 2) Conduction Cooled 6U 4HP CPCI-C-102 version drawing & tables are shown.
 - 2) Above Dimensions and tolerance per ANSI-STD-14.5
 - 3) Tolerance .xx = 0.03, xxx = 0.005
 - 4) See Factory for Convection Cooled Version



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Connector and Pin out Assignments:

| Table I. CPCI-C-102 DC OUTPUTS | | | |
|------------------------------------|-------------|-----|-----------------|
| J2 WTBV40PCSYL-G69 | | | |
| Mate: WTB40SAD9SYL-D54 Bkpl Recep. | | | |
| Pin | Signal Name | Pin | Signal Name |
| 1 | + 5V DC | 21 | + 5V RTN |
| 2 | + 5V DC | 22 | + 5V RTN |
| 3 | + 5V DC | 23 | + 5V RTN |
| 4 | + 5V SENSE | 24 | + 5V SENSE RTN |
| 5 | SPARE | 25 | SPARE |
| 6 | + 12V DC | 26 | + 12V RTN |
| 7 | + 12V DC | 27 | + 12V RTN |
| 8 | SPARE | 28 | SPARE |
| 9 | - 12V RTN | 29 | - 12V DC |
| 10 | SPARE | 30 | SPARE |
| 11 | +3.3V DC | 31 | +3.3V RTN |
| 12 | +3.3V DC | 32 | +3.3V RTN |
| 13 | +3.3V DC | 33 | +3.3V RTN |
| 14 | +3.3V DC | 34 | +3.3V RTN |
| 15 | +3.3V DC | 35 | +3.3V RTN |
| 16 | +3.3V DC | 36 | +3.3V RTN |
| 17 | +3.3V DC | 37 | +3.3V RTN |
| 18 | +3.3V DC | 38 | +3.3V RTN |
| 19 | +3.3V SENSE | 39 | +3.3V SENSE RTN |
| 20 | SPARE | 40 | SPARE |

| Table II. CPCI-C-102 AC INPUT | | | |
|-------------------------------------|----------------|-----|-----------------|
| J1 WTBV14PCSYL-G69 | | | |
| Mate: WTB14SAD9SYL-D54 Bkpl. Recep. | | | |
| Pin | Signal Name | Pin | Signal Name |
| 1 | AC LINE INPUT | 8 | CHASSIS GND |
| 2 | AC LINE INPUT | 9 | CHASSIS GND |
| 3 | SPARE | 10 | SPARE |
| 4 | AC NEUTRAL | 11 | ON/OFF + |
| 5 | AC NEUTRAL | 12 | ON/OFF - |
| 6 | OUTPUT FAULT + | 13 | HOLDUP + (OPT.) |
| 7 | OUTPUT FAULT - | 14 | HOLDUP - (OPT.) |

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