

RAM Technologies

PFC600PCX 600 WATT MEDICAL GRADE POWER SUPPLY



The PFC600PCX is the latest generation ATX/EPS12V power supply and is designed to meet both the ATX12V and EPS12V server standard.

The high efficiency design is an affordable solution for powering the most critical medical applications. Standard features include low noise dual Smart Fan Technology and optional interface to our Ultra capacitor or SLA based UPS modules.

MADE IN THE USA

Specifications

Input

| | |
|----------------------|---------------------------|
| Input Voltage Range: | 100 to 250 VAC +/-10% |
| Input current: | 7.5 A MAX |
| Frequency: | 50/60 HZ |
| Inrush Current: | 45A Cold @ 264 VAC |
| Efficiency: | 75% to 80% TYP. |
| PFC Correction: | Active > .95 |
| Leakage Current: | < 250uA @ 264 VAC 60HZ |
| Input Fuses: | 2X 8A 250V Line & Neutral |

Output

| | |
|---------------------------|-------------------------------------|
| Maximum continuous power: | 550 Watts 600 W peak for 12 seconds |
| Hold-up Time: | >40ms @ full load |
| Overvoltage Protection: | +15% of set voltage |
| Thermal Protection: | Auto Recovery/ cycle pwr. on |
| Minimum Loading: | None |
| Cross regulation: | <0.5% |
| Line Regulation: | <0.05% |
| Load Regulation: | <1% +/- cable factor |
| AC turn on time: | < 2 sec |

| | | | | | |
|---------------------|------------|-----|-------|------|-----------|
| Output Voltage | +12V | +5V | +3.3V | -12 | +5Vsb |
| Output current max. | 45.8A/ 50A | 24A | 24A | 0.5A | 3.0A/3.5A |
| Ripple mV P-P | 100 | 50 | 50 | 50 | 50 |

1. Max output from +5V & +3.3V= 140 Watts. When loading the +5 & +3.3V, multiply total load by 1.2 and subtract from 550/600W.
2. Over current for +12V reset is accomplished by cycling power on signal
3. Over current for +5V, +3.3V, -12V, & +5Vsb auto resetting
4. Derate output 5W/volt input from 100 vac to 90 vac

Environmental

| | |
|--------------------------|-------------------|
| Operational Temperature: | 0 to 50°C |
| Storage Temperature: | -40 to 80°C |
| Operational Humidity: | 0 to 95%NC |
| Storage Humidity: | 0 to 95%NC |
| Operational Altitude: | -500 to 10,000 FT |
| Storage Altitude: | -500 to 40,000 FT |

Reliability

MTBF (demonstrated): > 500,000 hours

EMC Compliance

EMI: Self contained EMI filtering for compliance to the following standards; (All measurements were made with unit mounted in chassis.)
EN61000-4-2 ESD level3
EN61000-4-3 RF susceptibility 3v/m
EN61000-4-4 EFT level3
EN61000-4-5 Surge Level3
EN61000-3-2 Harmonics
EN61000-3-3 Flicker
EN61000-4-11 Voltage Dips, Short Interruptions
EN55011 Conducted and radiated emissions

STANDARDS Compliance

Desktop Platform Form Factors: REV 1.1 March 07
EPS12V: REV 2.92 IEC60601-1
RoHS compliant
ISO9001:2008 compliant, CE mark, UL60601-1, CB

RAM Technologies LLC · 29 Soundview Road Suite 12 · Guilford CT 06437 USA.


Phone: (203) 453 3916 · Fax: (203) 453 3913 · Email: info@ramtechno.com

www.ramtechno.com

PFC600PCX MEDICAL GRADE POWER SUPPLY

Safety

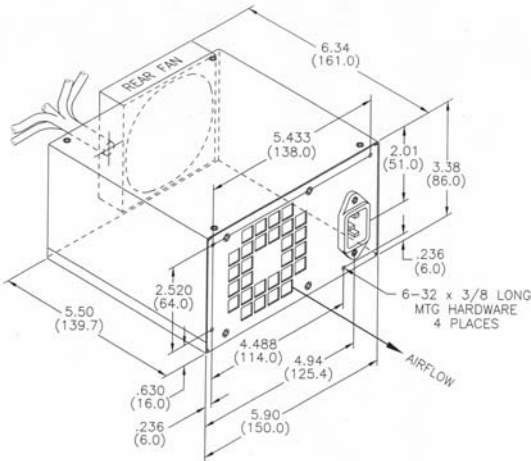
Certified to UL60601-1, (File #E191947) 2003 and the standard for medical electrical equipment, part 1: general requirements for safety, Can/CSA C22.2 No. 125-M1984 and Can/ CSA C22.2 no. 601-1-M90 and IEC 601-1. CB report

 For Continued protection equipment must be grounded at all times in accordance with the requirements of class 1 devices.


 RAM TECHNOLOGIES LLC declares that the PC and PCX power supplies are in conformity with the provisions of the low voltage directive.


See website [DOWNLOADS](#) for enclosure CAD files

Mechanical Specifications



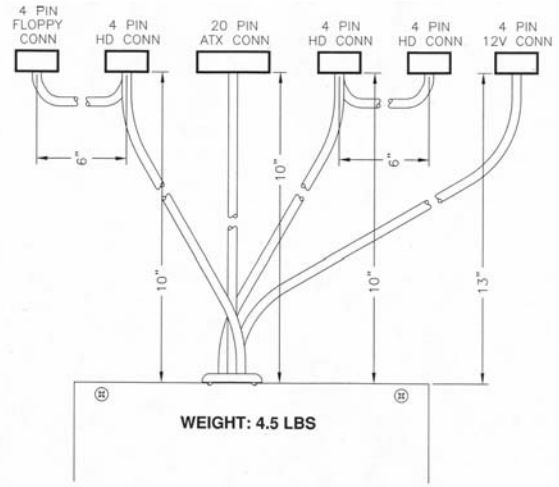
Symbols Used

 Attention, consult accompanying documents

 Protective earth ground

Power Good Signal

The Power Good Signal asserts itself high 200ms after all outputs have reached their operational values. Power Good Signal will go low when input stored energy can no longer support the outputs.



WE OFFER A WIDE VARIETY OF OUTPUT CABLES PLEASE CONTACT FACTORY FOR DETAILS

RAM P/N
#620012
Order #
0012

| | | |
|------------|-----|--------------|
| 3ND) Black | 1 5 | White (+12V) |
| 3ND) Black | 2 6 | White (+12V) |
| 3ND) Black | 3 7 | White (+12V) |
| 3ND) Black | 4 8 | White (+12V) |

| | | |
|-------------|-----|---------------|
| (GND) Black | 1 3 | Yellow (+12V) |
| (GND) Black | 2 4 | Yellow (+12V) |

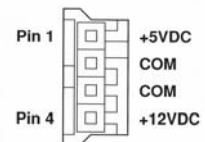
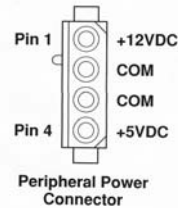
ATX12V Connector

| | | |
|----------------|-------|----------------|
| (+3.3V) Orange | 1 11 | Orange (+3.3V) |
| (+3.3V) Orange | 2 12 | Blue (-12V) |
| (GND) Black | 3 13 | Black (GND) |
| (+5V) Red | 4 14 | Green (PS-ON) |
| (GND) Black | 5 15 | Black (GND) |
| (+5V) Red | 6 16 | Black (GND) |
| (GND) Black | 7 17 | Black (GND) |
| (PG) Gray | 8 18 | White (-5V) |
| (+5VSB) Violet | 9 19 | Red (+5V) |
| (+12V) Yellow | 10 20 | Red (+5V) |

20 Pin ATX Connector

RAM P/N
#620002
+
#620031

| | | |
|----------------|-------|----------------|
| (+3.3V) Orange | 1 13 | Orange (+3.3V) |
| (+3.3V) Orange | 2 14 | Blue (-12V) |
| (GND) Black | 3 15 | Black (GND) |
| (+5V) Red | 4 16 | Green (PS-ON) |
| (GND) Black | 5 17 | Black (GND) |
| (+5V) Red | 6 18 | Black (GND) |
| (GND) Black | 7 19 | Black (GND) |
| (PG) Gray | 8 20 | White (-5V) |
| (+5VSB) Violet | 9 21 | Red (+5V) |
| (+12V) Yellow | 10 22 | Red (+5V) |
| (+12V) Yellow | 11 23 | Red (+5V) |
| (+3.3V) Orange | 12 24 | Black (GND) |



Example:
PFC400PCX-0016

24 PIN Optional
PCI-X Connector

RAM Technologies LLC • 29 Soundview Road Suite 12 • Guilford CT 06437 USA.
Phone: (203) 453 3916 • Fax: (203) 453 3913 • Email: info@ramtechno.com

www.ramtechno.com