

RAM Technologies

PFC800PCX MEDICAL-GRADE POWER SUPPLY



The PFC800PCX 800W ATX PSU is the solution for your high-power medical device applications. It features RAM's unique MultiLoop Technology, which reduces stress loading and dramatically improves reliability. Able to run two high-end graphics cards, the power supply is ideally suited for imbedded applications in graphics-intensive systems.

Includes dual low-noise fans with Smart Fan Technology and choice of output cables. Made in the USA.

Input

Input Voltage Range: 100 to 240 Vac \pm 10%
Supply Overvoltage: Cat Two < 300V
Input Current: 10A max.
Frequency: 50/60 Hz
Inrush Current: 45A cold @ 240 Vac
Efficiency: 80% typ.
PFC Correction: Active > .95
Leakage Current: < 250uA @ 264 Vac 60 Hz
Input Fuses: 2X 10A 250V Line & Neutral

Output

Max. Output Power: 750W cont. 800Wp (see note 5)
Hold-Up Time: > 40ms @ full load
Overvoltage Protection: +15% of set voltage
Minimum Loading: None
Cross Regulation: < 0.5%
Line Regulation: < 0.05%
Load Regulation: < 1% \pm cable factor
AC Turn-On Time: < 2 sec

Output Voltage (\pm 3%)	+12V	+5V	+3.3V	-12V	-5Vsb
Output Current Max.	62.5A/67A	24A	24A	0.5A	3.0A/3.5A
Ripple mV p-p	100	50	50	100	50

Reliability

MTBF (demonstrated): > 500,000 hours
Expected Life: > 8 years when used as specified

Environmental

Op. 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 9840 ft
Storage Altitude: -500 to 40,000 ft
Pollution Degree Class: Two

EMC Compliance

EN55011 Conducted and Radiated Emissions
EN61000-3-2 Harmonics
EN61000-3-3 Flicker
EN61000-4-2 ESD Level 3
EN61000-4-3 RF Susceptibility 10V/m
EN61000-4-4 EFT Level 3
EN61000-4-5 Surge Level 3
EN61000-4-6 RF Conducted Immunity
EN61000-4-11 Voltage Dips, Short Interruptions
EN61000-4-39 Magnetic Fields

Standards Compliance

ATX 3.0
ISO 9001:2015
EN60601-1 / ES60601-1 3rd edition
UL file E191947
Desktop Platform Form Factors: 2018 Rev 002
Lead free RoHS and REACH compliant
ECCN# EAR99 Conflict Material compliant
Recommended Line Cord: SJT, 3X16 or 3X14 AWG

Notes:

1. Max. output from +5V & +3.3V = 140W. When loading the +5V and +3.3V, multiple total load by 1.2 and subtract from 750W/800W
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 9W/volt input from 100 Vac to 90 Vac
5. 10s every 50s





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Safety Standards

IEC 60601-1: 2005 + CORR. 1 (2006) + CORR. 2 (2007)
ANSI/AAMI ES60601-1:2005 (Medical Electrical
Equipment - Part 1: General Requirements for Basic
Safety and Essential Performance)
CAN/CSA-C22.2 No. 60601-1 (2008) (Medical Electrical
Equipment - Part 1: General Requirements for Basic
Safety and Essential Performance)
Patient Protection: Two MOPP

 For continued protection, equipment must be grounded at all times in accordance with the requirements of Class I devices.

 RAM Technologies, LLC declares that the power supplies are in conformity with the provisions of the low-voltage directive.

Symbols Used

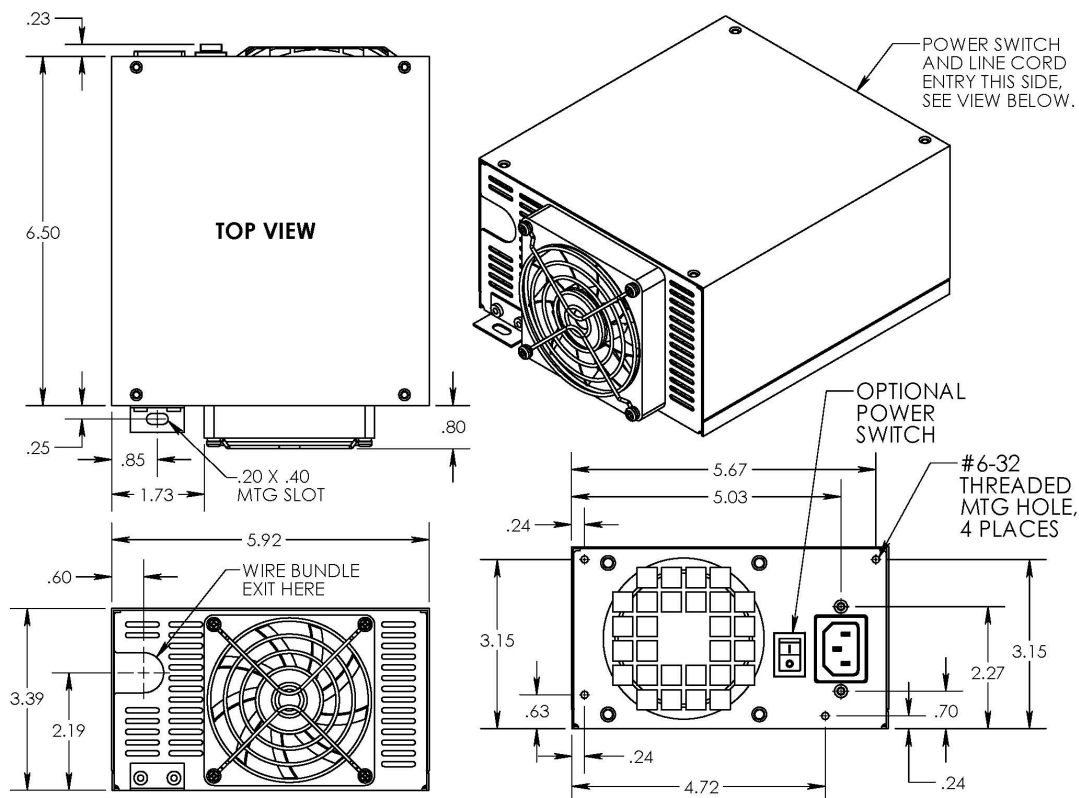
-  Attention, consult accompanying documents
-  Protective earth ground
-  Caution

Power Good Signal

The Power Good Signal asserts itself high 200ms after all outputs have reached their operational values.

Intended Use

The PFC800PCX is intended to power imbedded ATX/EPS-style motherboards in mission-critical medical and industrial applications.



For output cable selections, please refer to the cable order form on our website.

