

RAM Technologies

PFC175SFX 175 WATT MEDICAL GRADE POWER SUPPLY



The PFC175SFX is a 175 Watt SFX micro ATX power supply. Specifically designed for powering micro ATX medical applications. The PFC175SFX is available with our optional patented Ultra capacitor based UPS.

MADE IN THE USA

Specifications

Input

Input Voltage Range: 100 to 250 VAC +/-10%
Supply overvoltage: Cat Two <300V
Input current: 2.5 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 5A 250V Line & Neutral

Output

Max output power: 175 Watts cont.
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	-5V	+5Vsb
Output current max.	10A	15A	15A	1.0A	0.5A	2.0A
Ripple mV P-P	100	50	50	100	50	50

1. Max output from +5V & +3.3V= 125 Watts. When loading the +5 & +3.3V, multiply total load by 1.2 and subtract from 175 Watts.
2. Output derates from 100 VAC to 85VAC 3.5W/Volts.
3. Total output from all outputs shall not exceed 175 Watt.
4. Initial voltage tolerance +/-3%

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 9840 FT
Storage Altitude: -500 to 40.000 FT
Pollution Degree Class: Two

Reliability

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

EMC Compliance

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
IEC60601-1 2nd & 3rd edition
RoHS compliant UL file E191947 ISO9001:2008
Lead free ROHS and REACH compliant
ECCN# EAR99

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Safety Approved to the following standards
 ANSI/AAMI ES 60601-1:2005 ME-Part 1 and CSA C22.2
 No. 60601-1:08(ME-Part 1: General Requirements for
 Basic Safety and Essential Performance)
 IEC 60601-1:2005 (ME Part 1: General Requirements for
 Basic Safety and Essential Performance – Edition 3)



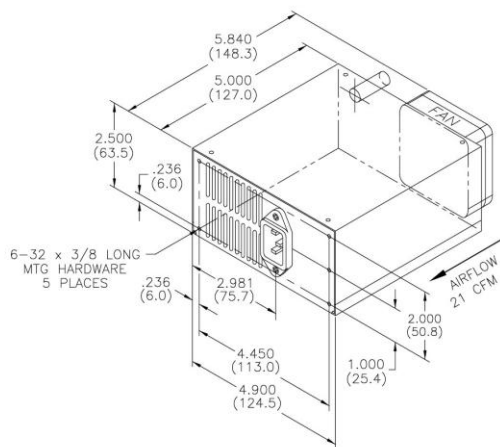
For Continued protection equipment must be grounded at all times in accordance with the requirements of class 1 devices.



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

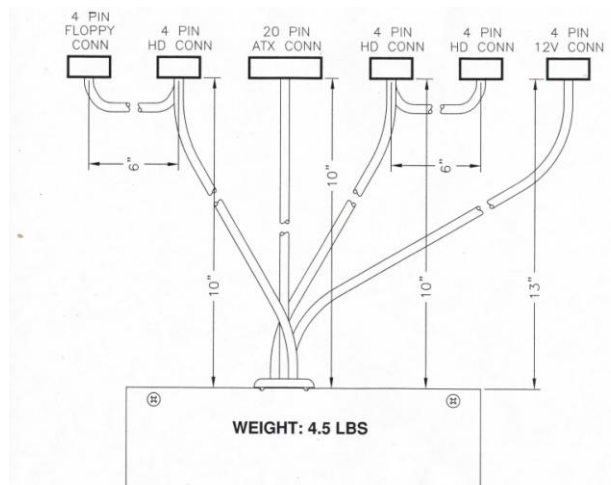


Caution

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.

Intended Use: The PFC175SFX is intended to power imbedded ATX style motherboards in mission critical medical applications.



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

RAM P/N
#620012
Order #
0012

GND	Black	1	5	White (+12V)
GND	Black	2	6	White (+12V)
GND	Black	3	7	White (+12V)
GND	Black	4	8	White (+12V)

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

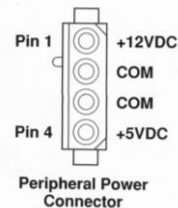
ATX12V Connector

(+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)



Floppy Drive
Power Connector

Example:
PFC400PCX-0016

24 PIN Optional
PCI-X Connector

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