

## 200W, Rugged Industrial Quality AC/DC Power Supply PFU 200-FT-1U Series



- Electronic power factor correction (PFC)
- Rugged industrial quality
- Conduction/convection cooling, no fans
- Full electronic protection
- N+1 redundancy available

This rugged, industrial quality AC/DC power supply with PFC input uses field proven technology to generate up to 200W output power. It is built on 3.6" x 10.6" size PCB and installed in a standard F4212 package. An optional built-in redundancy diode allows for parallel and N+1 operation. The cooling is combined: natural air convection and conduction via base plate. Full electronic protection, low component count, large design headroom, and the use of components with established reliability result in a high MTBF. The unit is manufactured at our plant under strict quality control.

### SPECIFICATIONS

#### Input Voltage

95-264Vac (Universal) 47... 63Hz  
Input Current: 2.6Arms max.at 95V  
Power Factor is better than 0.97 at full load for the entire input range.  
Meets EN61000-3-2

#### Input Protection

Inrush current limiting  
Varistor  
Internal safety fuse  
Lower voltage than the specified minimum input will not damage the unit

#### Isolation

2250VDC input to chassis  
4300VDC input to output  
8mm spacing  
500VDC output to chassis

#### Standards

Designed to meet EN60950-1 and related standards.  
Meets requirements for CE marking

#### EMI

EN 55022 Class A with margins

#### Switching Frequency

50-150kHz input stage (load dependent)  
55kHz +/-3kHz for the output stage

#### Output Voltage/Current

24Vdc  $\pm$  0.3V/8A  
48Vdc  $\pm$  0.3V/4A or  
125Vdc  $\pm$  0.3V/1.6A  
200W continuous  
Output is floating; either terminal can be grounded  
Consult factory for other outputs

#### Redundancy Diode

Not installed  
Available as option

#### Line/Load Regulation

+/- 1% combined from zero load to full load

#### Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

#### Output Ripple/Noise

Better than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHz BW)

#### Overload Protection

Rectangular current limiting with short-circuit protection (no hiccup)  
Thermal shutdown in case of insufficient cooling (self resetting)

#### Output Overvoltage Protection

Second regulator loop, completely stable and independent of main regulator loop

#### Efficiency

Output voltage dependent  
Typically 80% at full load

#### Operating Temperature

0°C to 50°C cold plate temperature range for full specification  
Extended temperature range available on request

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Conduction via base plate to customer heatsink or chassis and natural convection

#### Environmental Protection

Basic ruggedizing  
Heavy ruggedizing and conformal coating as option

#### Shock/Vibration

IEC 61373 Cat 1 A&B

#### Humidity

5-95% non-condensing

#### MTBF

130,000 hours @45°C  
Demonstrated MTBF is significantly higher.

#### Indicators

Green "Output ON" LED visible through the cooling slots

#### Control Input

None

#### Alarm Output

None

#### Package / Dimensions (W x H x L)

F4212: 102 x 43 x 305 mm  
4.0" x 1.7" (1U) x 12.0"  
Mounting holes are clear

#### Weight

1kg (2.2 lb)

#### Connections

8-pole barrier type terminal block with 3/8" spacing

#### RoHS Compliance

Fully compliant

#### Warranty

Two years subject to application within good engineering practice

#### Terminal Block Pin-out

AC INPUT			DC OUTPUT				
N	PH	GND	N/A	N/A	N/A	-	+
1	2	3	4	5	6	7	8

Enhancements to these general specifications and customizing can be accommodated upon request. Specifications are subject to change.

*Designer and manufacturer of quality converters, inverters, UPS systems, complete rack mount systems and DC-input fluorescent lamp inverters since 1982. Custom or standard. Absopulse is a BABT-approved Facility*



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