150W, Rugged, Industrial Quality AC/DC Power Supply with PFC Input
PFC 150-FT Series

- Rugged Industrial quality
- Electronic power factor correction (PFC)
- Conduction/convection cooling
- Single output
- Full electronic protection

The PFC 150 series rugged, industrial quality AC/DC power supply with power factor corrected input uses a field proven design to generate 150W output power. It has an excellent track record in numerous demanding applications. Cooling is via baseplate to a heatsinking surface and by natural convection. The unit has full electronic protection. Low component count, large design headrooms, and the use of components with established reliability result in a high MTBF. It is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage
Universal 90 - 264VAC
47 - 63Hz
Other inputs available on request

Power Factor
Min.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 EN 60950 and corresponding UL and CSA standards, but not UL or CSA listed.

EMI
EN55022 Class A minimum

Switching Frequency
50-150KHz Boost section (dependent on the load)
47KHz +/-2KHz for the DC/DC section

Output Voltage/Current
12V/12A, 24V/6A or
48V/3A are standard
Output is floating; either terminal can be grounded
Other outputs available on request

Redundancy Diode
Not installed

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

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

Output Overvoltage Protection
Double regulator loop completely stable and independent of main loop

Efficiency
Output voltage dependent.
Typically 80% at full load

Operating Temperature Range
0°C to +50°C for full specification
Extended temperature range available

Temperature Drift
0.03% per °C over operating temperature range

Cooling
Conduction to customer heatsink or chassis and natural convection

Environmental Protection
Basic ruggedizing
Heavy ruggedizing and conformal coating available as an option

MTBF
150,000 hours @ 45°C
Demonstrated MTBF is significantly higher.

Indicators
Output ON LED (green) visible through the cooling slots

Control Input
None

Alarm Output
None

Package / Dimensions
F1: 114 x 51 x 201 mm
(4.5" x 2" x 7.9") including terminal block and flanges
Mounting holes are clear.

Weight
0.8 kg (1.8 lb)

Connections
9 pole screw type terminal block, 3/8" spacing

RoHS Compliance
Fully compliant

Warranty
Two years subject to application within good engineering practice

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