

1500W Rugged, Industrial Power Supply with PFC-Input in 5" X 5" X 12" Package PFC 1500 Series



- Electronic power factor correction (PFC)
- Rugged, industrial quality
- Field-proven design
- Adjustable single output
- Full electronic protection
- N+1 redundancy as an option

The PFC 1K5 Series rugged, industrial quality AC/DC power supply with power factor corrected input uses a field proven design to generate up to 1500W output power. It has an excellent track record in numerous heavy-duty applications. Cooling is by a built-in fan, with additional conduction via the baseplate. It has full electronic protection. Low component count, large design headroom, and the use of components with established reliability result in a high MTBF. The chassis has four M6 PEM nuts for mounting on the under-surface. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

Universal 90 ... 264VAC
47 - 63Hz

Power Factor is 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 min.
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

EMI

EN55022 Class A as minimum

Switching Frequency

100KHz PFC section
55KHz +/-3KHz for the
output section

Hold Up Time

Min. 10ms at any input for 5%
drop in the output voltage

Output Voltage/Current

12Vdc/120A, 24Vdc/60A,
28Vdc/53A, 48Vdc/30A, 54Vdc/27A
or 125Vdc/12A
are standard.
Consult factory for other voltages

Redundancy Diode

Optional
Not available for 12V version

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% 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 Over-voltage Protection

Second regulator loop completely
stable and independent of the
main regulator loop.

Efficiency

80% - 84% at full load,
depending on output voltage

Operating Temperature Range

0 to +50°C for full specification
with proper cooling
Extended temp. range available

Temperature Drift

0.03% per °C over operating
temperature range

Cooling

Forced air by two built-in fans and
conduction to customer heatsink
or chassis

Environmental Protection

Basic ruggedizing
Heavy ruggedizing and conformal
coating available as option

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

120,000 hours @ 45 °C
Demonstrated MTBF is significantly
higher.

Indicators

None

Control Input

None

Alarm Output

Optional

Package / Dimensions

U5512: 127 x 127 x 316mm
(5" x 5" x 12.5") enclosed case
Four M6 PEM nuts for mounting
on the under-surface

Weight

5.2 kg (11.5 lbs)

Connections

Barrier-type terminal block and
brass studs for higher output
current

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 ABBT-approved Facility.



ABOPULSE ELECTRONICS LTD

110 Walgreen Road
Ottawa, Ontario. K0A 1L0. CANADA
Tel: +1-613-836-3511 Fax: +1-613-836-7488
E-mail: absopulse@absopulse.com
<http://www.absopulse.com>