

450W, Rugged, Industrial Quality AC/DC Power Supply with PFC-Input PFC 319-FT 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 319 Series industrial quality AC/DC power supply with power factor corrected input uses a field proven design to generate 450W output power. It has an excellent track record in numerous applications. Cooling is via base plate to a heat-sinking surface and by natural convection. 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. Fan cooled versions are also available for higher power rating.

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

50-150KHz Boost section
(dependent on the load)
55 KHz +/-3KHz for the DC/DC (half-bridge) section

Hold Up Time

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

Output Voltage/Current

12Vdc/37.5A, 24Vdc/18.7A,
48Vdc/9.4A, 54Vdc/8.3A or
125Vdc/3.6A 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.
Typically set at 120% of nominal output voltage

Efficiency

Output voltage dependent .
Typically 80% at full load

Operating Temperature Range

0 to+50 °C for full specification,
Extended temp. 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
Full ruggedizing and conformal coating on request

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5 - 95% non-condensing

MTBF

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

Indicators

None

Alarm Output

Optional

Dimensions

F4: 130 x 62 x 353 mm
(5.1x 2.43" x 13.9") including terminal block and flanges
Mounting holes are clear.

Weight

2.2 kg (4.4 lbs)

Connections

12 pole barrier type terminal block with 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 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 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>