

## 2250W MODULAR POWER SUPPLY SYSTEM WITH PFC PFC 419 SERIES

- Electronic power factor correction (PFC)
- Adjustable single output
- Up to 2250W per 19" shelf
- Up to 450W per plug-in module
- Full electronic protection
- Industrial quality
- Field-proven design topology
- Plug-in or stand-alone package
- Hot swappable, N+1 redundant



The PFC419 is a modular AC/DC power supply with power factor corrected input designed for demanding environments. The system is comprised of up to five, 450W plug-in modules assembled in a 4U x 19" card-frame. It delivers a maximum of 2250W or 1,800W with N+1 redundancy. Standard outputs available for each module are 24V/18A and 48V/9A. The hot-insertable modules have built-in redundancy diodes, a feature which makes the unit suitable for battery charging. Fan-cooling provides sufficient airflow for operation without de-rating up to 50°C ambient temperature. Suitable for a wide range of applications, the PFC419 features full electronic protection, high efficiency and low output noise.

### SPECIFICATIONS

#### Input Voltage

Universal 90 ... 264VAC  
47 - 420Hz  
Input current 6Arms max.

#### Input Protection

Inrush current limiting  
Internal safety fuse  
Varistor S14K 275  
Lower voltage than the specified min.  
input will not damage the unit

#### Power Factor

Min. 0.97 at full load for the entire  
input range. Meets EN61000-3-2

#### 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 minimum

#### Hold Up Time

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

#### Switching Frequency

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

#### Output Voltage/Current

24V/18A & 48V/9A standard.  
Consult factory for other voltages

#### Redundancy Diode

On request

#### 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

Double regulator loop.

#### 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 tempera  
range

#### Cooling

Forced air by internal fans

#### Environmental Protection

Basic ruggedizing

#### MTBF

150,000 hours @ 45°C  
(fans excluded)

#### Indicators

V-out (green LED)

#### Alarm Output

Output Fail Alarm Via  
opto-coupler (normal operation:  
C-E contacts)

#### Package / Dimension

Plug-in module:  
4U x 16HP x 304mm (12")  
Enclosed package:  
FX: 152 x 67 x 351 mm  
(6" x 2.6" x 13.8") including terminal  
block and mounting flanges

#### Connections

H15 Connector for plug-in 9-pole  
terminal block for FX

#### 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.*



#### ABSOPULSE ELECTRONICS LTD

110 Walgreen Road  
Ottawa, Ontario. K0A 1L0. CANADA  
Tel: (613) 836-3511 Fax: (613) 836-7488  
E-mail: [absopulse@absopulse.com](mailto:absopulse@absopulse.com)  
[www.absopulse.com](http://www.absopulse.com)