

## 300W, Rugged, Industrial Quality AC/DC Power Supply with PFC-Input PFC 65-FT Series



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

The PFC 65 Series industrial quality AC/DC power supply with power factor corrected input uses a field proven design to generate 300W output power. It has an excellent track record in numerous applications. Cooling is via baseplate to a heatsinking 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

12V/25A, 24V/13A, 48V/6.5A or  
125Vdc/2.4A  
Consult factory for other voltages

#### 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

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

#### Temperature Drift

0.03% per °C over operating temperature range

#### Cooling

Conduction via base plate to customer heatsink or chassis and/or 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

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

#### Indicators

None

#### Alarm Output

None on standard version  
Available as an option

#### Dimensions

F3: 132 x 64 x 300 mm  
(5.2" x 2.5" x 11.8") including terminal block and flanges  
Mounting holes are clear

#### Weight

2 kg (4.4 lb)

#### 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 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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