

300W, Rugged Industrial Quality Plug-in AC/DC Power Supply Module LOT 65-EH Series



- Rugged construction
- Internal output separation diode
- Convection cooling
- Full electronic protection
- Field-proven track record

This rugged, industrial quality, plug-in AC/DC power supply module has an excellent track record established over many years in a broad range of applications. It is a rugged design with large headroom and is rated for operation over the specified temperature range without de-rating. Cooling is by natural air convection. Heat generating components are installed on an aluminum heat-sink block, which is connected to the heat-sink plate on the side of the module. The unit has a built-in redundancy diode for parallel connection or N+1 redundant operation, including hot-insertion. The built-in redundancy also makes the module suitable for operation with back-up battery connected to the output. Input and output filtering are in compliance with EN 55022 EMI standards. Low component count and the use of components with established reliability result in a high MTBF. The unit is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

115/230Vac $\pm 15\%$, 47 - 63Hz
jumper selectable
Please consult factory for other voltages and ranges

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

EN 60950 and corresponding UL and CSA standards

EMI

EN55022 Class A with large headroom

Switching Frequency

55kHz +/-3kHz

Hold Up Time

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

Output Voltage/Current

12Vdc/25A, 24Vdc/12.5A,
48Vdc/6.25A, 110Vdc/2.7A or
125Vdc/2.4A
300W continuous
Output is floating, either terminal can be grounded
Consult factory for other voltages

Redundancy Diode

Installed internally
Hot insertion allowed

Line/Load Regulation

Better than $\pm 1.5\%$ combined from zero load to full load, including redundancy diode

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

Efficiency

Dependent on output voltage
Typically 80% at full load

Operating Temperature Range

0°C to +50°C without derating
Extended temperature range available

Temperature Drift

0.03% per °C over operating temperature range

Cooling

Natural air convection

Environmental Protection

Basic ruggedizing
Full ruggedizing and conformal coating as option

Shock/Vibration

IEC 61373 Cat 1 A&B

Humidity

5-95% non-condensing

MTBF

125,000 hours @ 45 °C
Demonstrated MTBF is significantly higher

Indicators

On the front-panel of the module:
Green "Output ON" LED
Test Points

Control Input

None on standard version
Adjustment potentiometer on front-panel as option

Alarm Output

Module fail alarm via optocoupler, C-E.

Package/Dimensions

4U x 16HP x 305mm Eurocard

Weight

2.2kg (4.9 lbs)

Connections

H15 DIN connector

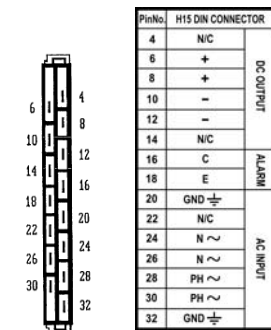
RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Pin-out drawing, H15 connector



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 BABT-approved Facility



ABSOPULSE 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>