

## 300W, Rugged AC/DC Industrial Power Supply HBC 65-FT Series



- Rugged, industrial quality
- Single regulated and adjustable output
- Convection/conduction cooling
- Full electronic protection
- Field-proven design
- N+1 redundancy available

The HBC 65 Series rugged AC/DC industrial quality power supply utilizes a field proven topology to deliver 300W output power. It is a mature design with a track record in numerous applications. Cooling is by conduction via baseplate to a heatsinking surface and by natural convection. The unit features full electronic protection and low output noise. Low component count, large design headroom, and the use of components with established reliability result in a high MTBF. Additional ruggedizing and conformal coating are available for operation in extreme environments. An optional built-in redundancy diode allows for parallel and N+1 operation. The unit is manufactured at our plant under strict quality control. Customized versions and fan-cooled versions with increased output power are also available.

### SPECIFICATIONS

<p><b>Input Voltage</b> 115/230VAC +/- 15% 47 - 63Hz Voltage selection by internal jumper</p>	<p><b>Output Voltage/Current</b> 12VDC/25A, 24VDC/12.5A, 48VDC/6.25A or 125VDC/2.4A Consult factory for other voltages</p>	<p><b>Efficiency</b> Output voltage dependent. Typically 80% at full load</p>	<p><b>Indicators</b> None on standard version</p>
<p><b>Input Protection</b> Inrush current limiting Varistor Internal safety fuse Lower voltage than the specified minimum input will not damage the unit</p>	<p><b>Redundancy Diode</b> Optional</p>	<p><b>Operating Temperature Range</b> 0 to 50°C for full specification without de-rating. Extended temp. range available</p>	<p><b>Control Input</b> None</p>
<p><b>Isolation</b> 2250VDC input to chassis 4300VDC input to output; 8mm spacing 500VDC output to chassis</p>	<p><b>Line/Load Regulation</b> +/- 1% combined from zero load to full load</p>	<p><b>Temperature Drift</b> 0.03% per °C over operating temperature range</p>	<p><b>Alarm Output</b> None on standard version Available as option</p>
<p><b>Standards</b> Designed to meet EN 60950 and corresponding UL and CSA standards</p>	<p><b>Dynamic Response</b> Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time</p>	<p><b>Cooling</b> Conduction to customer heatsink or chassis and natural convection</p>	<p><b>Package/Dimensions (WxHxD)</b> F3: 132 x 62 x 300 mm (5.2" x 2.43" x 11.8" ) including mounting flanges and terminals</p>
<p><b>EMI</b> EN55022 Class B</p>	<p><b>Output Ripple / Noise</b> Less than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHZ BW)</p>	<p><b>Environmental Protection</b> Basic ruggedizing Optional conformal coating</p>	<p><b>Weight</b> 2 kg (4.4 lb)</p>
<p><b>Switching Frequency</b> 55 KHz +/-3KHz</p>	<p><b>Output Overload Protection</b> Rectangular current limiting with short-circuit protection (no hiccup) Thermal shutdown in case of insufficient cooling (self resetting)</p>	<p><b>Humidity</b> 5 – 95% non-condensing</p>	<p><b>Connections</b> 12 pole barrier type terminal block with 3/8" spacing</p>
<p><b>Hold Up Time</b> Minimum 10ms at full load for 5% drop of output voltage at nominal input</p>	<p><b>Output Overvoltage Protection</b> Double regulator loop completely stable and independent of main loop</p>	<p><b>MTBF</b> 150,000 at 45°C Demonstrated MTBF is significantly higher</p>	<p><b>RoHS Compliance</b> Fully compliant</p>
			<p><b>Warranty</b> Two years subject to application within good engineering practice</p>

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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