# 150W, Dual Output, Rugged, AC/DC Industrial Power Supply with Universal Input MIW 152 Series

- Rugged industrial quality
- Dual output
- Conduction/convection cooled
- Full electronic protection
- Field proven design
- N+1 redundancy available



The MIW 152 Series rugged, dual output AC/DC industrial quality power supply uses field-proven technology to deliver 150W 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 for the stand-alone version. The unit has full electronic protection. 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 MIW 152 is manufactured at our plant under strict quality control.

# **SPECIFICATIONS**

# Input Voltage

95V to 264Vac 47 - 420Hz DC-input also available. Please consult factory.

#### **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

Designed to meet EN 60950 and corresponding UL and CSA standards

**EMI** EN55022 Class A as a minimum

Switching Frequency 47 kHz +/-2kHz

Hold Up Time Minimum 5ms at full load for 5% drop of output voltage at 120Vac and higher input **Output Voltage/Current** 5V/12A & 12V/3A or 5V/12A & 15V/3A are standard. Consult factory for other voltages

# **Redundancy Diode**

None Built-in redundancy diode available as option.

Line/Load Regulation +/- 1% combined from zero load to full load on each output

# Dynamic Response

Max 5% voltage deviation for 10% to 50% load step, with better than 1msec recovery time

# **Output Ripple / Noise**

Less than 1% of output voltage peak to peak or 0.2% RMS of the output voltage (20MHz BW)

## **Output Overload Protection**

Rectangular current limiting with hiccup mode short-circuit protection on both outputs Thermal shutdown in case of insufficient cooling (self resetting)

**Output Overvoltage Protection** Double regulator loop on main output. Transzorb on second output. **Efficiency** Output voltage dependent. Typically 80% at full load

**Operating Temperature Range** 0 to 50 °C for full specification installed on heat-sinking surface with good air flow Extended temperature ranges available

**Temperature Drift** 0.03% per °C over operating temperature range

### Cooling Stand alone version: conduction via

base plate and convection

Plug-in version: convection only

**Environmental Protection** Basic ruggedizing Full ruggedizing and conformal coating available as an option

## 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 on standard version

Control Input None

Alarm Output None on standard version Available as option

Packaging/Connections: <u>Open PCB version:</u> PCB size 4" x 6.3" (100mm x160mm) Connector: H15 DIN or barrier-type terminal block

Weight: 0.384 kg (0.85 lb)

Enclosed case version (F1): 114 x 51 x 201 mm (W x H x L) (4.5" x 2" x 7.9") including terminal block and flanges Connector: barrier-type terminal block Weight: 0.8 kg (1.8 lb)

<u>Plug-in (Eurocard) Module (E1):</u> 3U x 160mm x 10HP (H x D x W) Connector: H15 DIN

**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.



Binder Caption: AC/DC & Power Systems

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