

**Model:** MIW 100-12FTND (Standard ND Stock Version)  
**OSD :** 1337 0397 SPND  
**Summary description:** 100W Single Output, Power Supply  
 12V/8A



**Product description:**

This unit is a high reliability rugged power converter built on 3" x 5" PCB size and installed in standard F0 package with clear mounting holes. The input accepts any AC voltage from 95V to 264V as well as DC voltage from 120V to 360V. It has combined cooling; conduction via baseplate and natural air convection. Low component count and the use of components with established reliability results in an high MTBF. The unit is manufactured at our plant under strict quality control.

**Special Feature:** These stock units are individually packed and ready for immediate delivery

**SPECIFICATIONS**

**Input Voltage**

115-240V<sub>acc</sub> (-15% and +10%)  
 95-264V<sub>ac</sub> range  
 47 – 63Hz  
 110 ... 360V<sub>dc</sub>  
 Input Current 2A max

**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 & CSA standards

**EMI**

EN55022 Class A as minimum

**Hold Up Time**

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

**Switching Frequency**

47kHz +/- 2kHz

**Output Voltages/Currents**

12VDC/8A  
 Adjustable 11.8...15.2V  
 The output is floating, either terminal can be grounded

**Redundancy diode**

None

**Line/Load Regulation**

+/- 1% combined from no 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**

Better than 30mV<sub>rms</sub> or 120mV<sub>pp</sub> (@ 20MHz BW)

**Output Overload Protection**

Rectangular current limiting with hiccup type short-circuit protection (hiccup mode)  
 Current Limit: 9A +/- 0.5A

**Output Overvoltage Protection**

Double regulator loop  
 OVP Setting: 16V +/- 0.7V

**Efficiency**

Min. 80% at full load

**Operating Temperature Range**

0° + 50°C for full specification with proper installation

**Temperature Drift**

0.03% per °C over operating temperature range

**Cooling**

Natural convection and conduction via customer chassis

**Environmental Protection**

Basic ruggedizing

**MTBF**

150,000 hours @ 45°C

**Indicators**

None

**Control Input**

None

**Alarm Outputs**

None

**Package/ Dimensions (WxHxL)**

F0: 86mm x 154mm x 48mm  
 (3.4" x 1.9" x 6.1")  
 Mounting holes are clear

**Weight**

0.45 kg (1 lb)

**Connections**

6-pole barrier-type terminal block, with 3/8" spacing

**RoHS Compliance**

Fully compliant

**Warranty**

Two years subject to application within good engineering practice

Drawn by TS/bh	Date July 23, 2009
Checked by PW	Drawing No./ Rev. SCD 1337 0397NDA2
Approved by TS	

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