150W, Rugged, Dual Output, Industrial Quality AC/DC Power Supply MIW 162 Series

- Rugged field proven design
- Dual output
- Conduction/convection cooled
- Full electronic protection



This rugged, dual output, industrial quality AC/DC power supply uses field-proven technology to generate up to 150W output power depending on output voltage combination. The main output (V1) is fully regulated, adjustable, with the second output (V2) tracking the main. Each output is limited to 8A. This mature design has a track record in numerous applications. Cooling is by conduction via base plate to a heat-sinking surface and by natural convection. 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 harsh environments. The series is manufactured at our plant under strict quality control.

SPECIFICATIONS

Input Voltage

47 - 63Hz DC-input also available. Consult factory for other voltages

95V to 264Vac universal

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 500Vdc between outputs

Standards

Designed to meet EN 60950 and related standards

ЕМІ

EN55022 Class A with margins

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

Various outputs are possible: 2 x 12/6A, 2 x 24/3A or 2 x 48V/1.5A

V1: regulated and adjustable V2: tracking V1 Consult factory for other outputs

Redundancy Diode

None

Line/Load Regulation

V1: ±1% combined from no load to full load V2: ±5% from 10% to full load with constant load of ≥20% on V1

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 Thermal shutdown in case of insufficient cooling (self resetting)

Output Overvoltage Protection

V1 output: double regulator loop V2 output: transzorb

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 ranges available

Temperature Drift

0.03% per $^{\circ}\text{C}$ over operating temperature range

Cooling

Conduction via base plate to customer heatsink or chassis and natural convection

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

140,000 hours @ 45 °C Demonstrated MTBF is significantly higher

Indicators

Green "Output ON" LED visible through the cooling slots

Control Input

None

Alarm Output

None on standard version Available as option

Package/Dimensions (W x H x L)

F1: 114 x 51 x 201 mm (4.5" x 2" x 7.9") including terminal block and flanges Mounting holes are clear

Weight

0.8 kg (1.8 lb)

Connections

9-pole barrier type terminal block, 3/8" spacing.

RoHS Compliance

Fully compliant

Warranty

Two years subject to application within good engineering practice

Terminal Block Pin-out

O/P V1		O/P V2					INPUT		
+	_	+	_	N/A	N/A	GND	(+) 원	(-) ^N	
1	2	3	4	5	6	7	8	9	



European Stocking Distributor
Phone: +41 44 730 33 53