

MINT1110A

110W Single Output Series

Medical – Universal Input Power Supply



2 Year Warranty

- 110W Convection Cooled AC-DC Power Supply
- Universal Input 90-264 VAC
- Less than 1.27" Height
- Rugged EMC Compliant Design
- 3" x 5" Package
- Approved to EN/IEC/UL60601-1 for Medical
-   Compliant (LVD, RoHS)



International Safety Standard Approvals





Specifications

All Specifications are typical at nominal input, full load at 25°C unless otherwise stated.

AC Input 100-240VAC +/- 10%, 47-63 Hz single phase.	Turn On Time Less than 2 seconds under all rated load conditions.
Input Current 115VAC: 1.4A.	Hold-up Time 16 ms at 110W, nominal input (120VAC).
Inrush Current The inrush at 264VAC, at a cold start, will not exceed 40A.	Overvoltage Protection See chart for levels, latching type
Input Fuses F1, F2: 2.5A, 250VAC fuses provided on all models.	Overload Protection Hiccup Mode
Power Factor Complies with EN61000-3-2.	Short Circuit Protection Hiccup Mode
Efficiency 87% typical.	Overtemperature Protection Provided on all models.
Output Power 90 - 110W continuous.	Medical Safety Standards EN/IEC/UL 60601-1, CSA22.2, No. 601.1
Ripple and Noise 1% pk-pk max., 20MHz BW, differential mode. Measured with noise probe directly across output terminals.	Isolation Input-Output: 4000VAC, Input-Ground: 1500VAC, Output-Ground: 500VDC
Output Voltage See chart.	Earth Leakage Current <130µA at 264VAC, 60Hz.
Minimum Load Not required.	Operating Temperature 0° to 70°C (derate from full rated power above 40°C)
Total Regulation See chart.	Output Power Derating Derate Output Power by 2.5% per °C above 40°C, up to 70°C max.
Transient Response 500µs max., 50% load step, typical.	Storage Temperature -40 to +85°C.
	Relative Humidity 5% to 95%, non-condensing

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Model Number	Volts (V)	Output Current	Output Parameters		OVP Threshold	Initial Setpoint Tolerance
			Ripple & Noise	Total Regulation		
MINT1110A1208K01	12V	7.5A	120mV	±2%	15.0 ± 1V	±1%
MINT1110A1508K01	15V	6.5A	150mV	±2%	18.0 ± 1V	±1%
MINT1110A1808K01	18V	5.8A	180mV	±2%	23.0 ± 1V	±1%
MINT1110A2408K01	24V	4.6A	240mV	±2%	28.0 ± 1V	±1%

Specifications (continued)

Vibration

Operating: 0.003 g²/Hz, 1.5 g_{rms} overall, 3 axes, 10 min. / axis
Non-Operating: 0.026 g²/Hz, 5.0 g_{rms} overall, 3 axes, 1 hr. / axis

Shock

Operating: Half-sine, 20 g_{pk}, 10 ms, 3 axes, 6 shocks total
Non-Operating: Half-sine, 40 g_{pk}, 10 ms, 3 axes, 6 shocks total

Enclosure Dimensions

See outline drawing.

Operating Altitude

-500 to 10,000 ft.

Weight

372 grams

Non-operating Altitude

-500 to 40,000 ft.

EMI/EMC Compliance

Conducted Emissions	EN55011 Class B, FCC Part 15, Class B.
Static Discharge Immunity	EN61000-4-2, 6kV Contact Discharge, 8kV air discharge
Radiated RF Immunity	EN61000-4-3, 10V/m.
EFT/Burst Immunity	EN61000-4-4, 2kV/5kHz..
Line Surge Immunity	EN61000-4-5, 1kV differential, 2kV common-mode
Conducted RF Immunity	EN61000-4-6, 3Vrms
Power Frequency Magnetic Field Immunity	EN61000-4-8, 3A/m
Voltage Dip Immunity	EN61000-4-11 240VAC, 0%/0.5 cycle, 40%/5cycles, 70%/25 cycles
Line Frequency Harmonics	EN61000-3-2, Class A

Model Number Key

MINT 1 110 A 12 08 K 01

01 = Standard Configuration. 02 and higher indicate modified model.

Input Connector

Output Connector

Output Voltage

Model Configuration

Output Power (Watts)

of Outputs

Product Family: "M" = Medical, "I" = Internal, "NT" = New Technology

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Outline Drawing

INPUT CONNECTOR:

J1 LANDWIN 3361P03E3TSN02

PIN 1) AC LINE

PIN 2) AC NEUTRAL

OUTPUT CONNECTOR:

J2 LANDWIN P/N 3361P08E3T

PIN 1) +Vout PIN 5) -Vout

PIN 2) +Vout PIN 6) -Vout

PIN 3) +Vout PIN 7) -Vout

PIN 4) +Vout PIN 8) -Vout

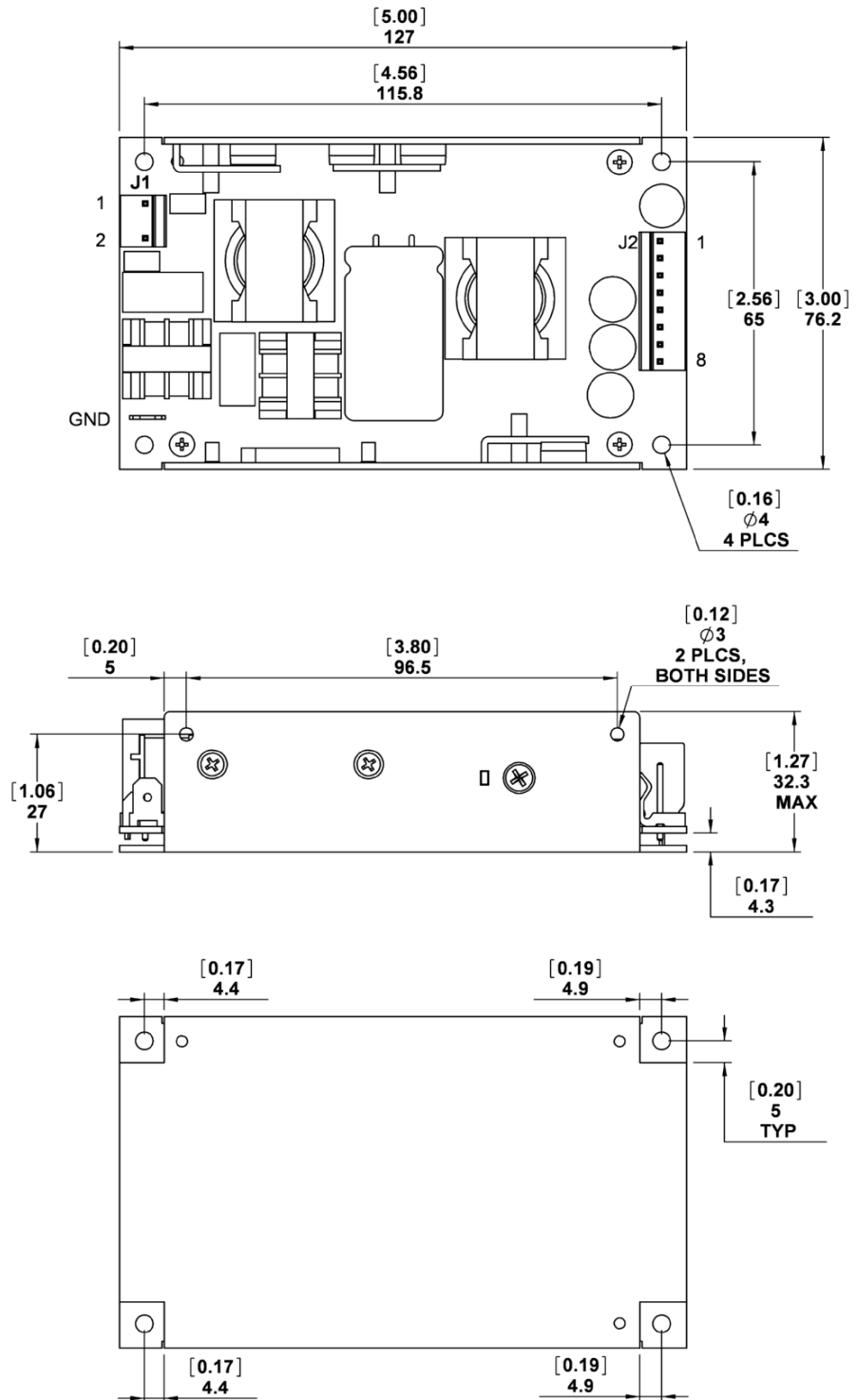
MATING CONNECTORS:

P1 AMP P/N MTA-156-3P

P2 AMP P/N MTA-156-8P

GROUND CONNECTION

0.250" FASTON TAB



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