

M449 SERIES

3 SPLIT DC OUTPUTS
(SAME OUTPUT VOLTAGE)
AC & DC INPUT CONVERTERS
UP TO 150W

APPLICATIONS

Military, Ruggedized, Telecom, Industrial

SPECIAL FEATURES

- Three (3) DC outputs, of which one is used as a charger.
- High efficiency
- Wide input range
- AC Input / Output isolation
- Fixed switching frequency (330KHz)
- EMI/RFI filters included
- Indefinite short circuit protection with auto-recovery
- Over-voltage protection
- Thermistor battery input
- Battery Discharge Pin

ENVIRONMENTAL

Meets or exceeds MIL-STD-810E
Method 510.3, Proc. I & II,
MIL-STD-1275A, FCC part 15/J1
UL 1950 Approved.

Temperature:

Operating -25°C to +50°C

Storage -55°C to +125°C

RELIABILITY

150'000 hours, calculated per
MIL-STD-217F at +50°C,
ground fixed.

*Specifications are subject to change without
prior notice by the manufacturer



ELECTRICAL SPECIFICATIONS

INPUTS

DC Input range: 16 to 33 VDC

AC Input - Universal:

90 ÷ 264 VAC, 47 ÷ 440Hz, Single Phase

Operates from either or both AC and DC inputs
(if both are applied, the AC input is selected)

Input transient protection:

All models meet or exceed (no damage)

MIL-STD-1275A (100V for 50mSec, 9V for 1Sec)

MIL-STD-704A, MIL-STD-704D (80V for 0.1 Sec)

Efficiency: up to 85% (DC input) & 75% (AC input)

EMI/RFI:

Design to meet or exceed MIL-STD-461D

CE101, CE102, CS101, CS114,

RE102, RE103, RS101, RS103

Isolation:

2000V between AC Input and Output

2000V between AC Input and Case

200V between DC Input and Case

DC OUTPUT (floating to AC)

Line /load regulation:

Less than 2% (no load to full load, -25°C to +50°C)

Ripple and noise: 500mVp-p, typical (max. 2%)

Current limiting (Foldback & Hiccup):

Continuous protection for unlimited time.

Over voltage protection:

Passive transzorb on outputs.

SELECTION GUIDE

Model	Output #1	Output #2	Output #3 (Battery Charge)
M449	32V / 3.3A	32V / 1A	700mA

PIN ASSIGNMENT

Pin Name	J1 Pin Function
L	PHASE
N	NEUTRAL
1	CHASSIS

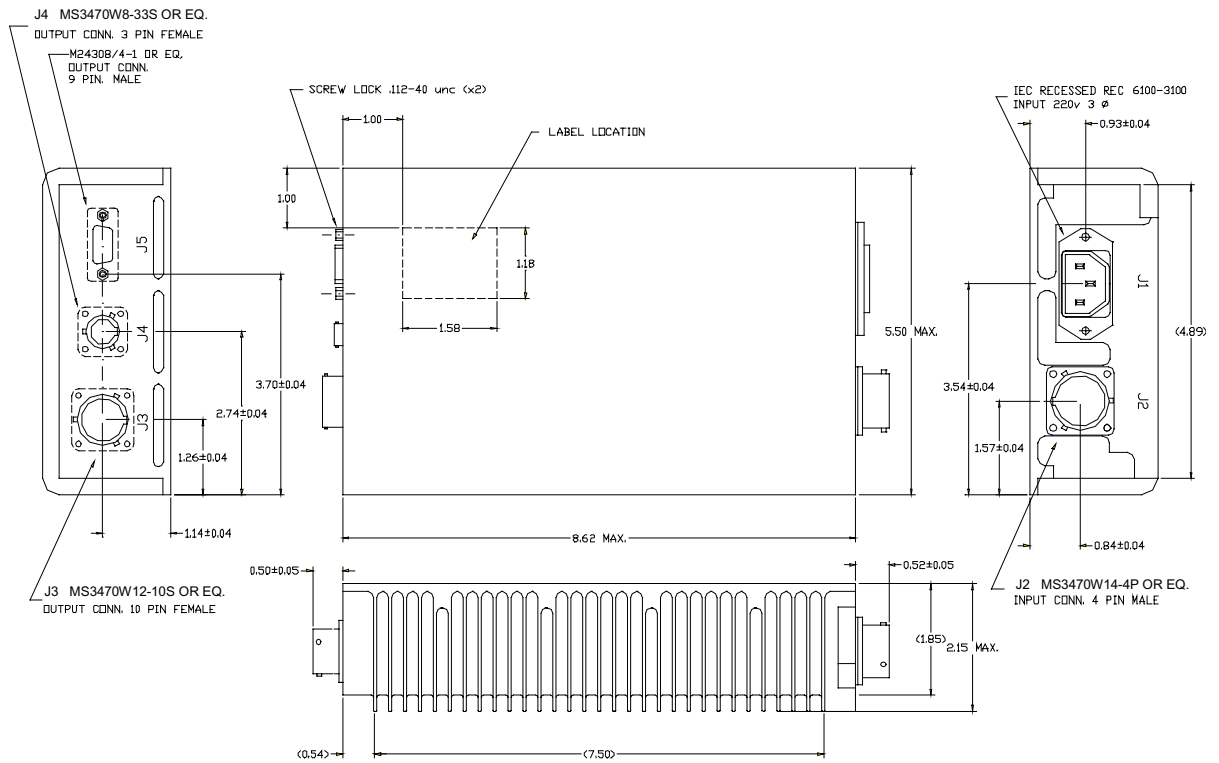
Pin Name	J2 Pin Function
A	+28VDC
B	+28VDC
C	+28VDC RTN
D	+28VDC RTN

Pin Name	J3 Pin Function
A	+32VDC
B	+32VDC RTN, B. THM.-
C	CHASSIS
D	+32VDC
E	+32VDC RTN, B. THM.-
F	ABM. THERMISTOR +
G	BATTERY CHR. +
H	B. THM. +, AMB THM. -
J	BATTERY RTN
K	N.C.

Pin Name	J4 Pin Function
A	CHASSIS
B	+32VDC
C	+32VDC RTN

Pin Name	J5 Pin Function
1	N.C.
2	BATTERY DIS. +
3	N.C.
4	N.C.
5	BATTERY THM. -
6	BATTERY CHR. +
7	ABM. THERMISTOR +
8	B. THM. +, AMB THM. -

OUTLINE DRAWING



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Notes

1. Dimensions are in Inches [mm]
2. Tolerance is:
 .XX ±.02 IN
 .XXX ±.01 IN
3. Weight: 4 lb (1800gr)