



REV: 04112011

PRODUCT FEATURES:

- Designed for Medical Equipment Applications
- Universal AC Input
- Active PFC for EN61000-3-2 Class D Compliance
- Low-Cost Open-Frame Design
- Compact Size: 4.0" x 6.0" Footprint
- Low Profile: 1.50" Height for 1U Applications
- High Efficiency: $\geq 87\%$
- Convection Cooling (No Fans)
- Conducted EMI Meets EN Class B (CISPR11)



INPUT SPECIFICATIONS:

VOLTAGE	Universal AC Input (90 - 264 VAC)
FREQUENCY	47-63Hz
INRUSH	< 18A @ 230VAC Full Load
CURRENT	2.10A @ 115 VAC / 0.82A @ 230 VAC, Max Cont
PROTECTION	Single 3.15A Fuse / 250V Rating
LEAKAGE	<300uA max @ 264 VAC
HOLD-UP	≥ 20 ms @ 230 VAC (Full Load)
EFFICIENCY	$\geq 87\%$ (typical)
HARMONICS	EN61000-3-2 Class D Compliant (>98 PF)

OUTPUT SPECIFICATIONS:

OUTPUT VOLTAGE	Main Output (see Table); 3.3Vdc (Auxiliary)
OUTPUT CURRENT	Main Output (see Table); 150mA (Auxiliary)
LINE REGULATION	$\pm 0.5\%$ max, over entire input range
LOAD REGULATION	$\pm 0.5\%$ max, over entire load range
RIPPLE	≤ 130 mV p-p max (20MHz BW)
SETPOINT ACCURACY	$\pm 1\%$
EXCURSION	$\pm 5\%$ max (25% Step Load)
RECOVERY	≤ 100 ms
OVER-CURRENT	110-130% (Auto-Recovery)
OVER VOLTAGE PROTECTION	105-120% (Recycle input to reset)

STATUS & CONTROL SPECIFICATIONS:

REMOTE ON/OFF	R/C Pin Low = Unit ON R/C Pin High = Unit OFF
REMOTE SENSE	Active feature [if not used, connect S(+) to Vout(+), S(-) to Vout(-) at module]

GENERAL SPECIFICATIONS:

OPERATING TEMPERATURE	-10°C to +50°C
STORAGE TEMPERATURE	-40°C to +85°C
OPERATING HUMIDITY	10%-95% (non-condensing)
STORAGE HUMIDITY	5%-95% (non-condensing)
COOLING	Convection Cooled
VIBRATION	10-55Hz, 2G, 3Min Period, / 60 min each (3 axes)
SHOCK	20G Peak Acceleration
RELIABILITY	>100K Hours (per Mil STD 217F)
SIZE (INCHES)	6.0" x 4.0" x 1.50"

EMISSIONS:

EMISSIONS	EN55011:2007 Class B (Conducted)
ELECTROSTATIC DISCHARGE	EN61000-4-2, 4KV Contact / 8KV Air
RADIATED SUSCEPTIBILITY	EN61000-4-3, 26-1000MHz, 10V/M, 80%AM
EFT / BURSTS	EN61000-4-4, ± 2 KV
SURGES	EN61000-4-5, 2KV Earth, 1KV Line-Line
CONDUCTED IMMUNITY	EN61000-4-6, 0.15-800MHz, 10V 80%
VOLTAGE DIPS	EN61000-4-10, 95% Dip & 10ms, 30% Dip & 500ms
VOLTAGE INTERRUPTIONS	EN61000-4-11, 95% reduction, 5ms
FLUCTUATIONS & FLICKER	EN61000-3-3

SAFETY STANDARDS:

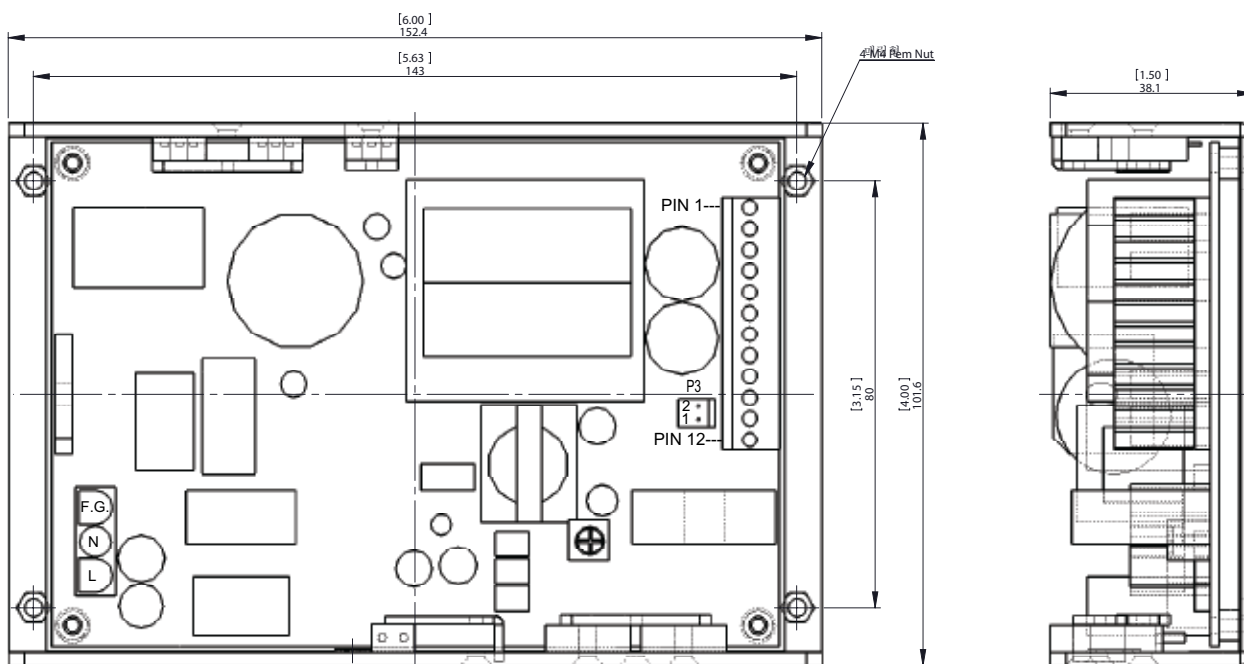
UL	60601-1, 1st Edition (Medical Equipment)
EN	60601-1-2:2001+A1:2006 (Medical Equipment)
CSA	CAN/CSA-C22.2 No. 601.1-M90 (Medical Equipment)
CE	Medical Devices Directive 93/42/EEC



OUTPUT MODELS:

Output Models:	Output #1			Output #2			Safety Certification
	VDC	Io (Min)	Io (Max)	VDC	Io (Min)	Io (Max)	
MPSU-150-5	5V	0.1A	20.0A	3.3V	0.0A	150mA	Approved
MPSU-150-12	12V	0.1A	12.5A	3.3V	0.0A	150mA	Approved
MPSU-150-15	15V	0.1A	10.0A	3.3V	0.0A	150mA	Approved
MPSU-150-24	24V	0.1A	6.25A	3.3V	0.0A	150mA	Approved
MPSU-150-48	48V	0.1A	3.13A	3.3V	0.0A	150mA	Approved

OUTLINE DRAWING:



INPUT CONNECTOR

Mating Connector: AMP 350766-1

Pin --- Assignment

- 1 ---- F.G. (Frame Ground)
- 2 ---- Neutral
- 3 ---- Line

Remote Sense CONNECTOR (P3)

Mating Connector: Molex 2201-1022

Crimp Terminal: 2759, 5159

- 1 ---- Sense (+)
- 2 ---- Sense (-)

OUTPUT CONNECTOR

Mating Connector (Housing): MOLEX 09-52-4124

Crimp Terminal: 2478, 5167

Pin --- Assignment

- 1 ---- Vout (+)
- 2 ---- Vout (+)
- 3 ---- Vout (+)
- 4 ---- Vout (+)
- 5 ---- Vout (+)
- 6 ---- Vout (-)
- 7 ---- Vout (-)
- 8 ---- Vout (-)
- 9 ---- Vout (-)
- 10 ---- Vout (-)
- 11 ---- R/C (Remote ON/OFF)
- 12 ---- AUX Out (+3.3V)

