



INPUT SPECIFICATIONS

Input Voltage	90-264 VAC (Universal)
Input Frequency	47-63Hz
Input Current	4.0A _{RMS} at 115VAC / 2.0A _{RMS} at 230VAC
Inrush Current	<20A @ 240 VAC
Power Factor	>0.97
Earth Leakage Current	<250μA @ 264VAC
Patient Leakage Current	<100μA @ 264VAC
Input Protection	Internal T5A / 250V Fuse (Line & Neutral)

OUTPUT SPECIFICATIONS

Output Voltage	See Table
Line Regulation	±0.5%
Load Regulation	±2%
Minimum Load	None
Transient Response	±5%, 50% step-load, slew rate 1A/μS
Ripple / Noise	1% pk-pk typical
Turn-On Delay	3 seconds max @ 115VAC
Hold-Up Time	>15ms at 115VAC Input (Full Load)
Over-Voltage	110-140% Latching
Over-Load	120-150% (Hiccup Mode, Auto-Recovery)
Short Circuit	Hiccup Mode
Over-Temperature	Latching, recycle input and cool to reset

STATUS & CONTROL

Remote On/Off	TTL High = On (isolated optocoupler)
Power Fail	TTL High = Failure (Open Collector)
DC OK	TTL High = OK (Open Collector)
Standby Output	5VSDB @ 750mA

FEATURES

- Medical 60601-1 Safety Approvals
- Small 6.00 x 3.94 x 1.54" U-Frame Package
- Full Load Convection Cooled Operation Up To 40°C
- High Efficiency - 93% Typical At Full Load, 230Vdc
- Remote On/Off, Power Fail
- 5VSDB @ 750mA Output
- Universal AC Input With Active PFC
- EN55011 / FCC Part 15J Class B Emissions
- 3 Year Warranty

GENERAL SPECIFICATIONS

Efficiency	93% typical at 115/230 VAC, full load
Isolation	4000 VAC Input to Output 1500 VAC Input to Ground 500 VDC Output to Ground
MTBF	300K Hours, Mil-217F at 25 °C, full load
Weight	960g

ENVIRONMENTAL SPECIFICATIONS

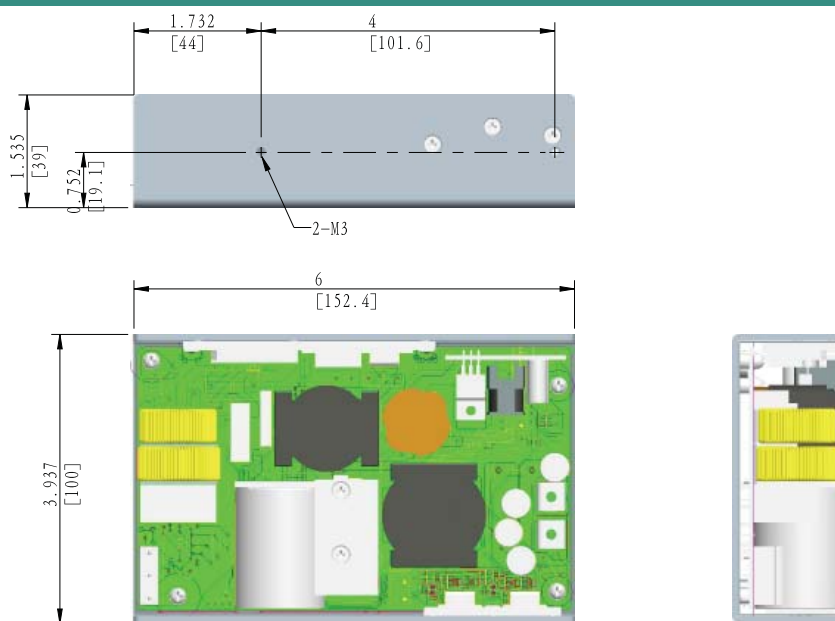
Operating Temperature	0°C ~ +40°C (convection cooled)
Derating	2.5%/°C > 40°C, up to 50°C max
Storage Temperature	-40°C ~ +80°C
Operating Humidity	5~95% (non-condensing)
Operating Altitude	3000M (max)
Shock	294m/s ² (30G), 11mS on 3 axes, total 18 times
Vibration	10-500 Hz, 19.6 m/s ² (2G), 20mins on 3 axes

EMC & SAFETY

Emissions	EN55011, FCC Part J15, Class B, Conducted EN55011, FCC Part J15, Class B, Radiated
Harmonic Current	EN61000-3-2 Class A
Voltage Flicker	EN61000-3-3
ESD	EN61000-4-2, 6kV contact, 8kV Air Discharge
EFT/Burst	EN61000-4-4, Level 3, Criterion A
Surge	EN61000-4-5, Installation Class3, Criterion A
Conducted Immunity	EN61000-4-6, 3V _{RMS} , Criterion A
Radiated Immunity	EN61000-4-3, 3V/m, Criterion A
Magnetic Field	EN61000-4-8, 3A/m, Criterion A
Dips & Interruptions	EN61000-4-11, 0% 10ms, 40% 100ms, 70% 500ms, 0% 5000ms; Criterion A/B/C
Safety Approvals	IEC 60601-1, 3rd Edition ANSI / AAMI ES60601-1 CSA C22.2 No 60601-1 EN60601-1, 3rd Edition CE Mark

MODELS	MAIN OUTPUT VOLTAGE	OUTPUT CURRENT	PEAK CURRENT	RIPPLE & NOISE (MAX)	STANDBY OUTPUT	MAX TOTAL REGULATION
MP300-12	12V	25.0A	29.0A	120mV	5VSDB @ 750mA	±2%
MP300-19	19V	15.8	18.4A	190mV	5VSDB @ 750mA	±2%
MP300-24	24V	12.5A	14.6A	240mV	5VSDB @ 750mA	±2%
MP300-28	28V	10.7A	12.5A	280mV	5VSDB @ 750mA	±2%
MP300-36	36V	8.3A	9.7A	360mV	5VSDB @ 750mA	±2%
MP300-48	48V	6.25A	7.3A	480mV	5VSDB @ 750mA	±2%

OUTLINE DRAWING



AC INPUT

P/N: Molex 10-63-4057 or 09-65-2058 or JST equivalent
Mates With Molex housing 09-50-1051 or JST

L Line

G Earth Ground

N Neutral

DC OUTPUT

Terminal Blocks

+V Output VDC

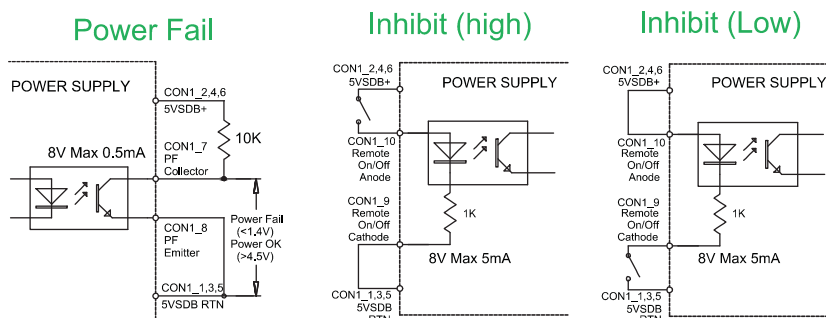
-V Return

SIGNAL CONNECTOR

JST # B10B-PHDSS or equiv.

1	5VSDB Return
2	5VSDB
3	5VSDB Return
4	5VSDB
5	5VSDB Return
6	5VSDB
7	Power Fail (Collector)
8	Power Fail (Emitter)
9	Remote on/off (Cathode)
10	Remote on/off (Anode)

SIGNAL CONFIGURATION



SIGNALS

Power Fail

Isolated optocoupler transistor, turns off 50-500ms after main output when AC is applied, turns on 5ms min.(typical 12ms) before loss of main output after AC failure.

Remote On/Off

Isolated optocoupler diode, power to shut down main output.

NOTES