



FEATURES

- Medical (BF) Safety Approvals
- Small 4 x 2 x 1.35" Package
- Class I or Class II Construction
- Remote On/Off, Power Fail, Remote Sense
- 5VSD @ 0.5A Output & Fan Output 12V 0.4A
- Universal AC Input with Active PFC
- EN55011 / FCC Part 15J Class B Emissions
- 3 Year Warranty

INPUT SPECIFICATIONS

Input Voltage	90-264 VAC (Universal)
Input Frequency	47-63Hz
Input Current	3.0A _{RMS} at 115VAC / 1.5A _{RMS} at 230VAC
Inrush Current	<80A @ 240 VAC, Cold Start
Power Factor	>0.95
Earth Leakage Current	<100μA @ 264VAC (Class I)
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% For Main & 5VSD @ 0.5A; ±20% For Fan
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	>20ms at 115VAC Input (Full Load)
Over-Voltage	110-140% Latching
Over-Load	120-150% (Hiccup Mode, Auto-Recovery)
Short Circuit	Hiccup Mode
Over-Temperature	Auto-Recovery

STATUS & CONTROL

Remote On/Off	Power LED to Shut Down (Isolated Optocoupler)
Power Fail	TTL High = Failure (Open Collector) 12ms Warning Time
Standby Output	5VSD @ 500mA
Fan Output	12V 400mA
Remote Sense	Compensates Up To 0.4V

GENERAL SPECIFICATIONS

Efficiency	90% typical at 115/230 VAC, full load
Isolation	4000 VAC Input to Output 1500 VAC Input to Ground (Glass I) 500 VDC Output to Ground (Glass I)
MTBF	300K Hours, Mil-217F at 25 °C, full load
Weight	210g

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	0°C ~ +40°C
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	294 m/s ² (30G), 10mS on 3 axes
Vibration	10-500 Hz, 19.6 m/s ² (2G), 20mins on 3 axes

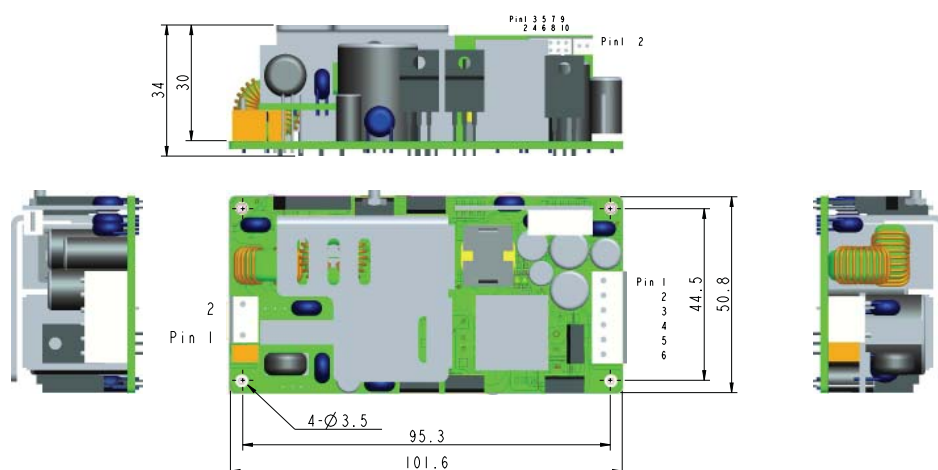
EMC & SAFETY

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 (CONVECTION)	OUTPUT CURRENT ¹⁾ (FORCED-AIR)	STANDBY OUTPUT	FAN OUTPUT
MP120-12	12V	10.0A	12.5A	5V 500mA	12V 0.4A
MP120-19	19V	6.32A	7.90A	5V 500mA	12V 0.4A
MP120-24	24V	5.00A	6.25A	5V 500mA	12V 0.4A
MP120-28	28V	4.30A	5.36A	5V 500mA	12V 0.4A
MP120-48	48V	2.50A	3.13A	5V 500mA	12V 0.4A

1) Max. Rated Current with 1.2 m/s (15CFM) forced air flow.

OUTLINE DRAWING



AC INPUT

JST P/N: B3P2-VH (LF)(SN)
Mates With: JST VHR-3N

Pin 1 Neutral
Pin 3 Line

DC OUTPUT

JST P/N: B6P-VH (LF)(SN)
Mates With: JST VHR-6N

Pin 1, 2, 3 Output VDC
Pin 4, 5, 6 Return

SIGNAL CONNECTOR

JST P/N : B10B-PHDS
Mates With : JST PHDR-10VS

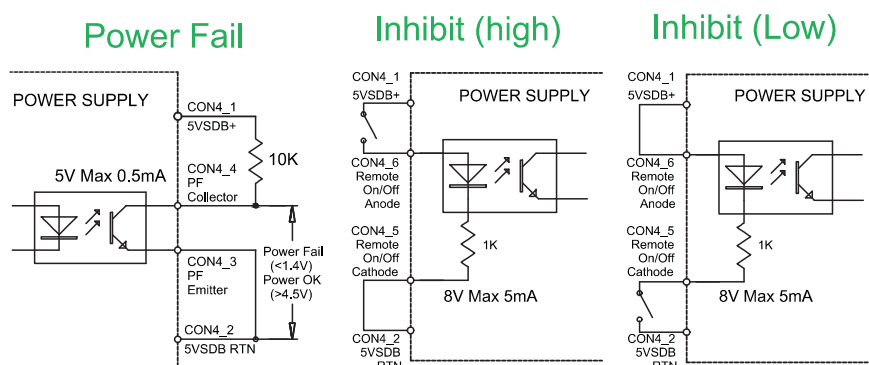
1	5VSDB
2	5VSDB Return
3	PF Emitter
4	PF Collector
5	Remote on/off (Cathode)
6	Remote on/off (Anode)
7	Remote Sense +
8	Remote Sense -
9	Vo
10	Return

FAN CONNECTOR

Landwin P/N: 2511P0200T
Mates With 2600S0200

Pin 1 Fan Return
Pin 2 Fan Output +

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