



Medical



Industrial

FEATURES AND BENEFITS

3" x 5" x 1.4" Package	Approved to EN/CSA/IEC/UL62368-1
300W with 100LFM Air	Approved to EN/CSA/IEC/UL60601-1-1, 3rd Ed
200W Convection Cooled	3 Years Warranty
Fits 1U Applications	Universal Input 80-264 VAC
Class B Conducted and Radiated EMI	RoHS Compliant



MODEL SELECTION

Model Number	Volts	Output Current		Minimum Load	Ripple & Noise**	Total Regulation	OVP Threshold***
		w/100LFM air	Convection*				
SLB300S12K	12V	25.0A	16.7A	0A	120mV pk-pk	±3%	14.0 ± 1.1V
SLB300S15K	15V	20.0A	13.3A	0A	150mV pk-pk	±3%	18.5 ± 1.2V
SLB300S18K	18V	16.7A	11.1A	0A	180mV pk-pk	±3%	21.5 ± 2.0V
SLB300S24K	24V	12.5A	8.35A	0A	240mV pk-pk	±3%	29.0 ± 2.5V
SLB300S36K	36V	8.34A	5.55A	0A	360mV pk-pk	±3%	33.5 ± 2.5V
SLB300S48K	48V	6.25A	4.20A	0A	480mV pk-pk	±3%	36.0 ± 3.0V
SLB300S56K	56V	5.35A	3.58A	0A	560mV pk-pk	±3%	41.0 ± 3.0V

Notes : * Consult factory for availability of all models as some models will be part of the initial product release.

** Total convection power is 200 Watts.

*** Measured with noise probe directly across output terminals, and load terminated with 0.1µF ceramic and 10µF low ESR capacitors.

INPUT

AC Input	100-240VAC, ±10%, 47-63Hz, 1Ø 120-370V DC
Input Current	80-264VAC, 47-63Hz, 1Ø. (100-240Vac,+/-10%)
Inrush Current	115VAC: TBDA, 230VAC: TBD
Input Fuses	264VAC, Cold start: will not exceed TBDA
Earth Leakage Current	F1, F2: TBDA, 250VAC fuses provided on all models <100µA @ 264VAC, 60Hz, NC; <0.5mA SFC
Efficiency	92% typical

OUTPUT

Hold-up Time	16ms at 200W, 120VAC/60Hz
Turn On Time	Less than 3sec @ 115VAC, Full Load
Switching Frequency	PFC: Fixed, 65kHz Main Converter: Variable 35-200kHz, 65-70kHz at full load
Output Power	300W continuous, with 100 lfm airflow, 200W convection cooled - See chart for specific voltage model ratings
Output Voltage	See chart
Ripple and Noise	0.5%rms, 1% pk-pk, see chart
Transient Response	500µS typical, Return to 0.5% of nominal, 50% load step Di/Dt: <0.2A/µS. Max voltage deviation = 3%
Voltage Adjustability	Fixed Output
Minimum Load	Not required
Total Regulation	+/- 3% combined line, load and initial setting

ISOLATION SPECIFICATIONS

Isolation	Input-Output: 2xMOPP, 4,000Vac Class I versions: Input-Ground: 1xMOPP, 1500Vac Output-Ground: 1xMOPP, 1500Vac
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PROTECTION

Overtemperature Protection	Sensing transformer temperature, 165°C at full load, latching type, requires input power recycling to reset
Overload Protection	120 to 150% of rating, Hiccup mode
Short Circuit Protection	Hiccup mode, Auto recovery
Overvoltage Protection	OVP latch, see models chart for trip range

SAFETY

Safety Standards	EN/CSA/IEC/UL62368-1, 60601-1-1, 3rd Ed.
Shock	Operating: Half-sine, 20gpk, 10ms, 3 axes, 6 shocks total Non-operating: Half-sine, 40 gpk, 10ms, 3 axes, 6 shocks total

ENVIRONMENT

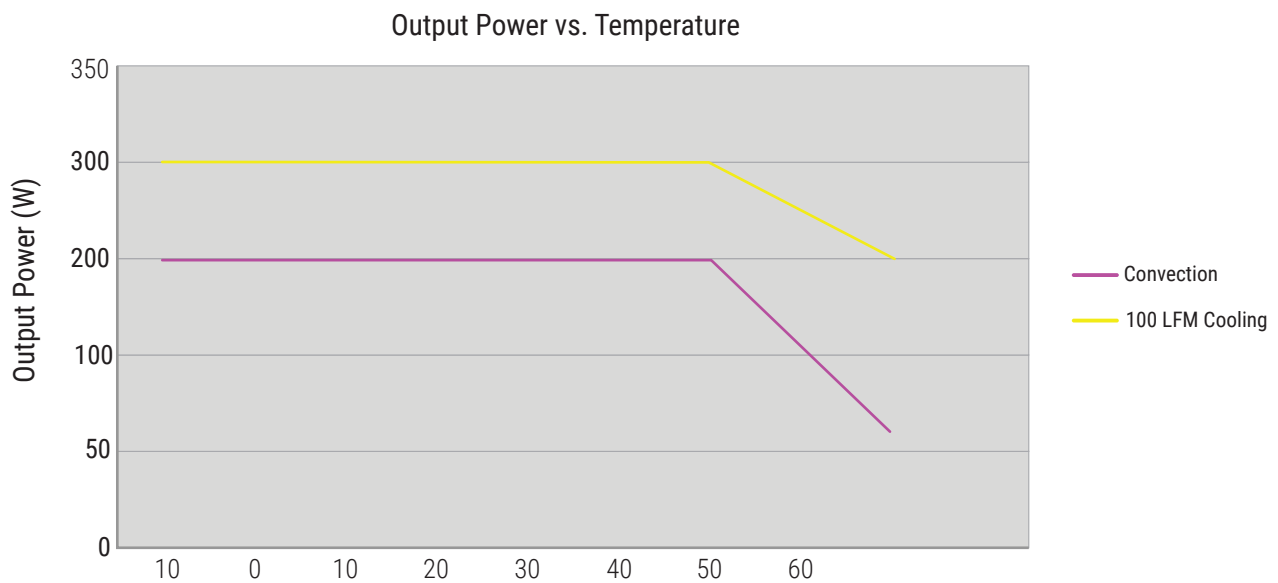
Operating Temperature	-10°C to +70°C Start up at -40°C, Full load
Temperature Derating	Derate output power linearly above 50°C to 50% at 70°C
Storage Temperature	-40°C to +85°C
Altitude	Operating: -500 to 15,000 ft (5000m) Non-operating: -500 to 40,000 ft
Relative Humidity	5% to 95%, Non-condensing
Vibration	Operating: 0.003g ² /Hz, 1.5grms overall, 3axes, 10 min/axis Non-operating: 0.026g ² /Hz, 5.0grms overall, 3 axes, 1 hr/axis
Dimensions	W: 3.0" x L: 5.0" x H: 1.4"
Weight	325g

RELIABILITY

MTBF	250,000 hours, 25°C, 110VAC
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DERATING CURVE

200W convection cooled and 300W continuous with 100 LFM airflow, derate output power to 50% at 70°C.





EMI/EMC COMPLIANCE

Conducted Emissions	EN55011/22/32 Class B, FCC Part 15, Subpart B, Class B
Radiated Emissions	EN55011/22/32 Class A, FCC Part 15, Subpart B, Class A w/6db margin
Static Discharge Immunity	Static Discharge Immunity EN55024/IEC61000-4-2, Level 4: +/-8kV contact, +/-15kV air, Crit. A; IEC60601-1-2, 4th Ed. Table 4
Radiated RF Immunity	EN55022/EN61000-4-3, 10V/m, 80MHz-2.7GHz, 80% AM at 1kHz; IEC60601-1-2, 4th Edition, Table 4
EFT/Burst Immunity	EN55024/IEC61000-4-4, Level 4, +/- 4kV, 100Khz rep rate, 40A, Criteria A; IEC60601-1-2, 4th Edition, Table 5
Line Surge Immunity	EN55024/IEC61000-4-5, Level 4, +/-2kV DM, +/-4kV CM, Criteria A; Surpasses IEC60601-1-2, 4th Ed. requirements.
Conducted RF Immunity	EN55022/IEC61000-4-6, 3V/m – Level 4, 0.15 to 80Mhz; and 12V/m) in ISM and amateur radio bands between 0.15Mhz and 80Mhz, 80% AM at 1KHz; IEC60601-1-2, 4th Edition, Table 5.
Power Frequency Magnetic Field Immunity	EN55024/IEC1000-4-8, Level 4: 30A/m, 50/60 Hz; IEC60601-1-2, 4th Edition, Table 4
Voltage Dip Immunity	EN55024/IEC/EN61000-4-11: 100% dip for 10 mS, at 0, 45, 90, 135, 180, 225, 270 and 315 degrees; 100% dip for 20mS, 0 deg., Crit. A; 100% dip for 5000mS (250/300 cycles), Crit. B; 60% dip for 100mS, Criteria B; 30% dip for 500mS, Crit. A; IEC60601-1-2, 4th Edition, Table 5
Line Harmonic Emissions	EN61000-3-2, Class [A]
Flicker Test	IEN61000-3-3

CONNECTOR OPTIONS

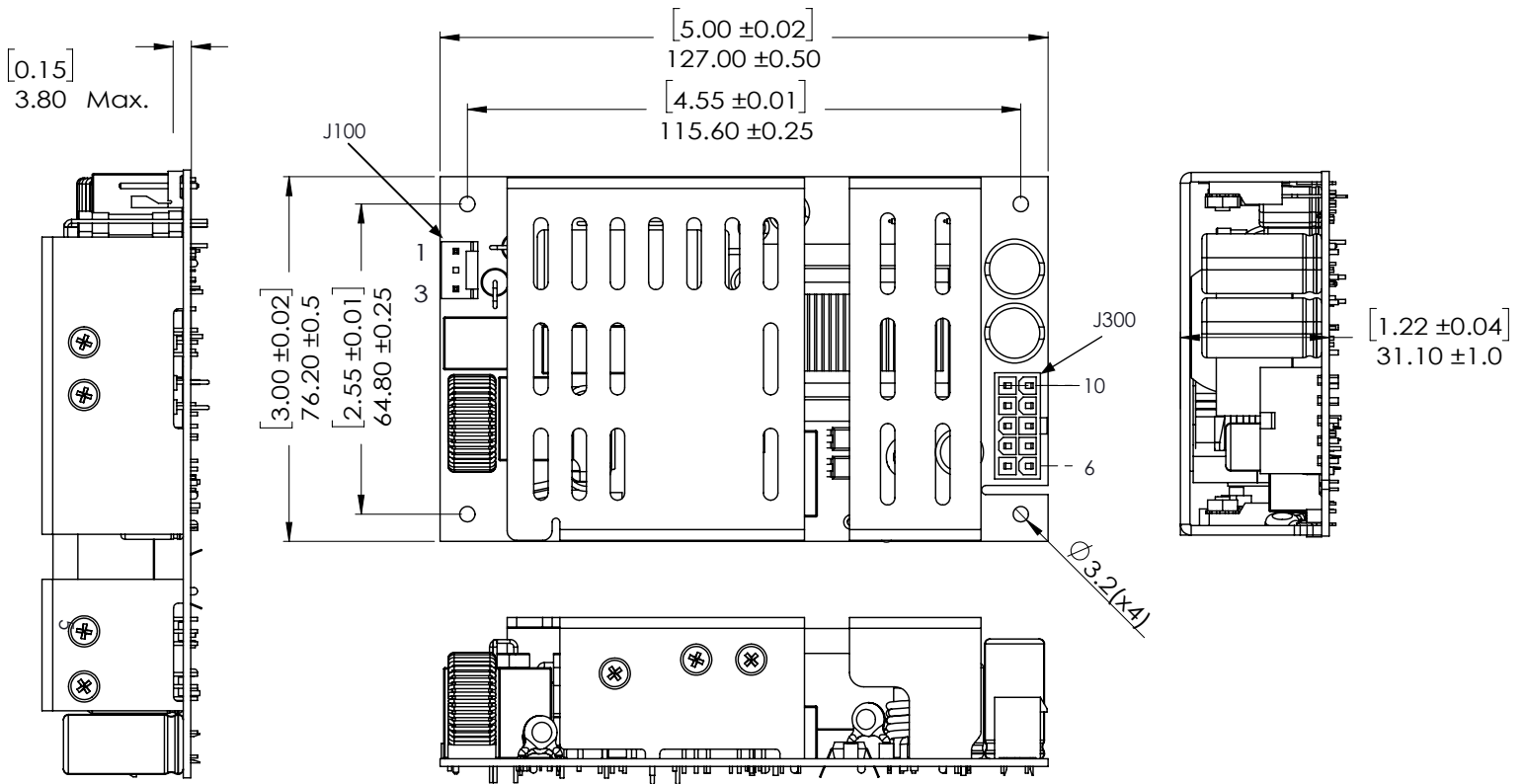
Type	Connector PNr.:	Pinout	Function	Mating Connector Part Number
Input (Class II)	TE# 640445-3 (1 pin removed)	J100-1	AC Neutral	TE/AMP# 640250-3 Pins: 640252-1
		J100-3	AC Line	
Ground (Class I) ²³	AMP 1217125-1	J101	Functional Ground (FG)	MOLEX# 19002-0001
Output	MOLEX# 87427 (2x5)	J300-1	Vout Return	MOLEX# 39-01-2105 Or CviLux# CP-01110030 Pins: CP-01100106-HC
		J300-2	Vout Return	
		J300-3	Vout Return	
		J300-4	Vout+	
		J300-5	Vout+	
		J300-6	Vout Return	
		J300-7	Vout Return	
		J300-8	Vout+	
		J300-9	Vout+	
J300-10	Vout+			

Notes:

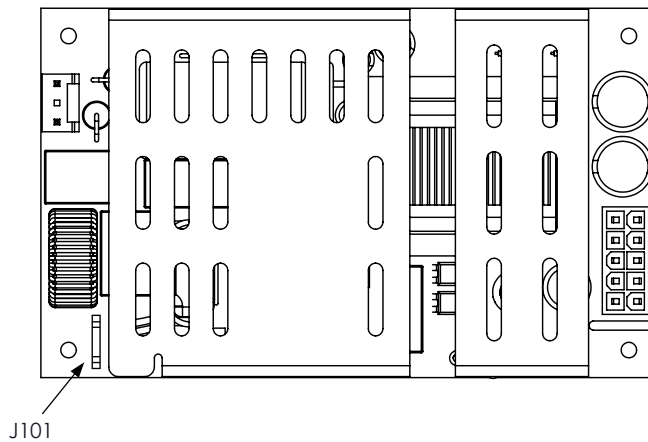
- Contact SLPE representative for other compatible connector options.
- For Class I: the power supply should be mounted on a conducted plate for better EMI performance.
- FG is safety ground connection, Class I only.
- This power supply requires mounting on standoffs 0.20" (5mm) minimum in height.



MECHANICAL DRAWING



Class I versions include the functional ground J101 connector



Notes :

1. All dimensions in inches (mm), tolerance is $\pm 0.000^{\circ}$.
2. Mounting holes should be grounded for EMI purposes.
3. FG is safety ground connection.
4. The power supply requires mounting on metal standoffs 0.20" (5mm) in height, min.