



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 w/100LFM air	Convection*	Minimum Load	Ripple & Noise**	Total Regulation	OVP Threshold***
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
-----------	---



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

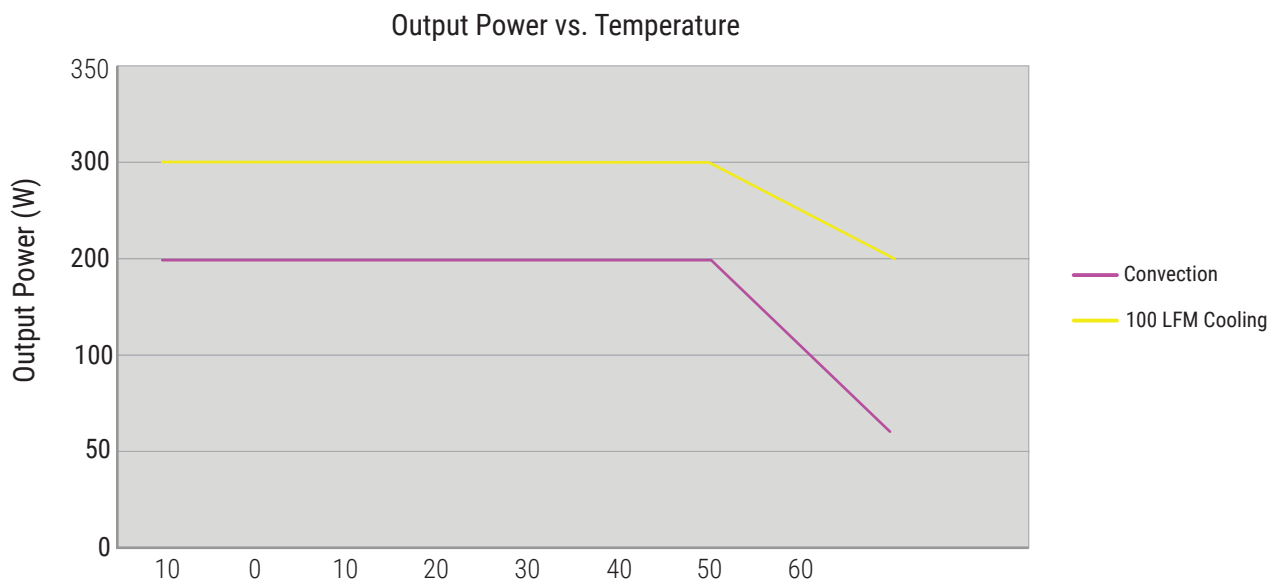
Operating Temperature	-10°C to +70°C Start up at -40°C, Full load
Temperature Derating	Derate output power linearly above 50°C to 50% at 70°C
Storage Temperature	-40°C to +85°C
Altitude	Operating: -500 to 15,000 ft (5000m) Non-operating: -500 to 40,000 ft
Relative Humidity	5% to 95%, Non-condensing
Vibration	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
------	-----------------------------

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

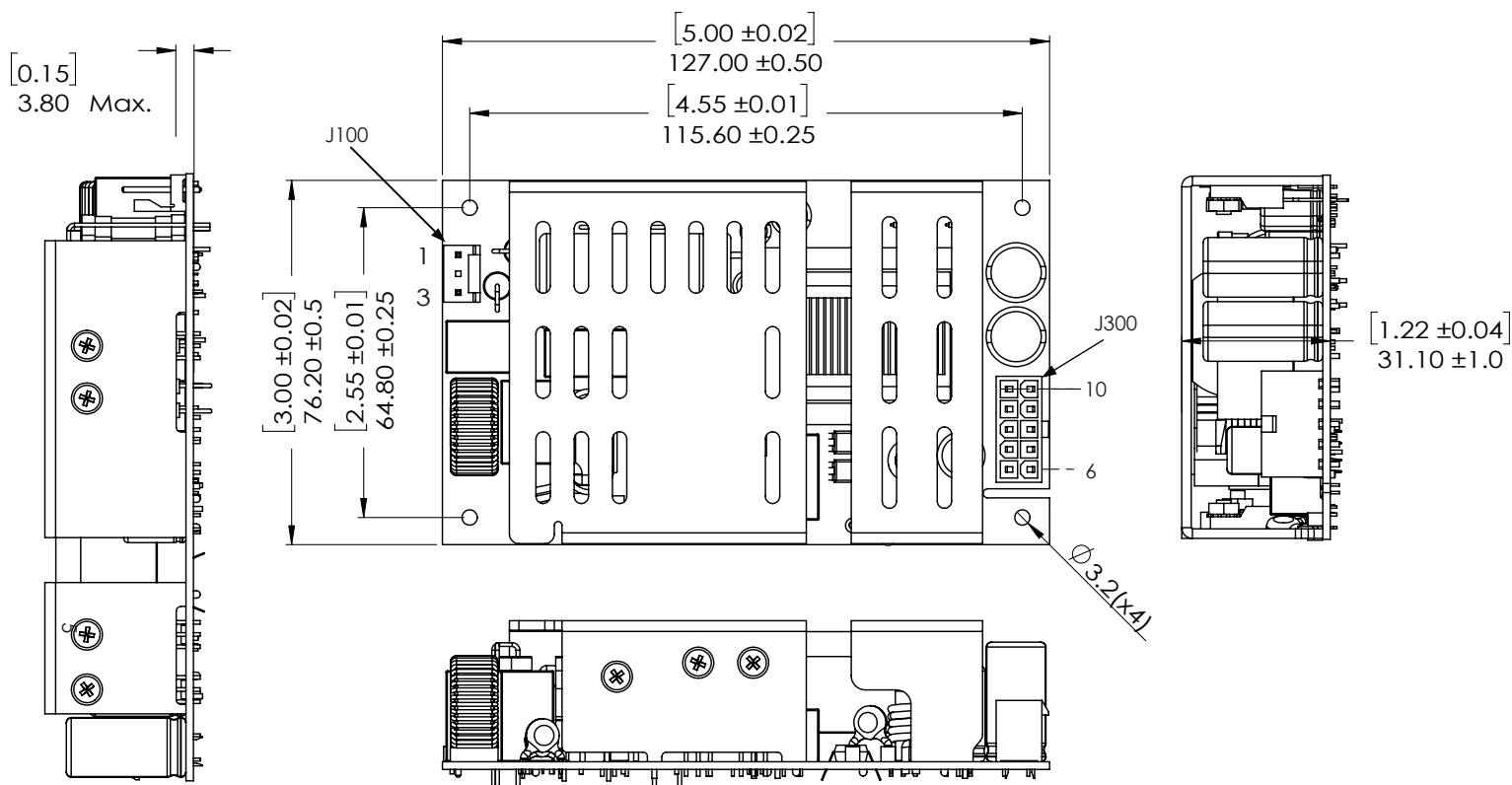
Type	Connector PNr.:	Pinout	Function	Mating Connector Part Number
Input (Class II)	TE# 640445-3 (1 pin removed)	J100-1	AC Neutral	TE/AMP# 640250-3 Pins: 640252-1
		J100-3	AC Line	
Ground (Class I) ²³	AMP 1217125-1	J101	Functional Ground (FG)	MOLEX# 19002-0001
Output	MOLEX# 87427 (2x5)	J300-1	Vout Return	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:

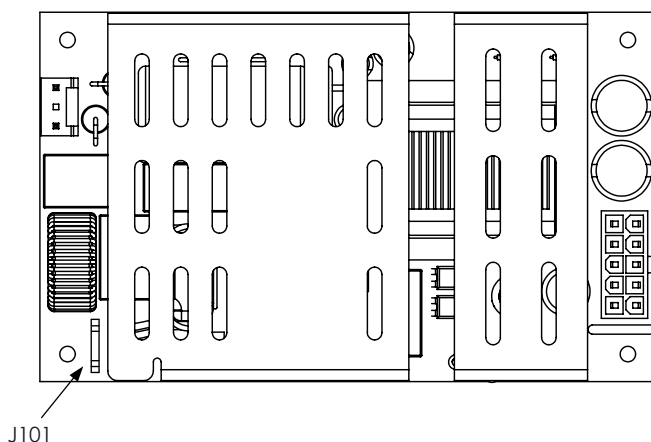
1. Contact SLPE representative for other compatible connector options.
2. For Class I: the power supply should be mounted on a conducted plate for better EMI performance.
3. FG is safety ground connection, Class I only.
4. This power supply requires mounting on standoffs 0.20" (5mm) minimum in height.



MECHANICAL DRAWING



Class I versions include the functional ground J101 connector



Notes :

1. All dimensions in inches (mm), tolerance is ± 0.000 .
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.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

SL Power:

[SLB300S12C](#) [SLB300S12K](#) [SLB300S18C](#) [SLB300S18K](#) [SLB300S24C](#) [SLB300S24K](#) [SLB300S36C](#) [SLB300S36K](#)
[SLB300S48C](#) [SLB300S48K](#)