

- NEW • AUTO-RANGING INPUT**
- SMALL SIZE**
- LOW COST**

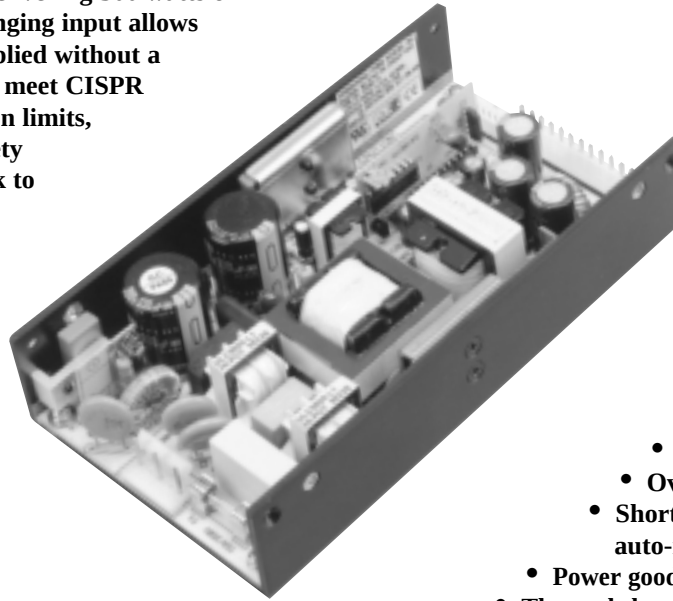
300 WATT

**SWITCHING
POWER SUPPLY**



DESCRIPTION

The UL300 Series of compact power supplies have single and multiple output models capable of delivering 300 watts of continuous output power. An auto-ranging input allows for worldwide line voltages to be applied without a jumper or selector strap. All models meet CISPR 22 Class A and FCC Class B emission limits, comply with UL, CSA and TUV safety requirements and have the CE Mark to satisfy international requirements.



FEATURES

- Auto-ranging input
- Remote On/Off
- Overvoltage protection
- Short circuit protection with auto-recovery
- Power good signal/LED on power supply
- Thermal shutdown
- 100% burn-in at full rated load

OUTPUT VOLTAGE/CURRENT RATINGS CHART

Models	Output #1				Output #2				Output #3				Output #4			
	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.	Vnom	Imin	Imax	Tol.
UL300-10	5V	0.5A	60A	2%	N/A				N/A				N/A			
UL300-10-1	3.3V	0.5A	60A	2%	N/A				N/A				N/A			
UL300-12	12V	0.5A	25A	2%	N/A				N/A				N/A			
UL300-13	15V	0.5A	20A	2%	N/A				N/A				N/A			
UL300-14	24V	0.5A	12.5A	2%	N/A				N/A				N/A			
UL300-18	48V	0.5A	6.25A	2%	N/A				N/A				N/A			
UL300-23	+5V	0.5A	30A	5%	+12V	0A	12.5A	5%	N/A				N/A			
UL300-24	+5V	0.5A	30A	5%	+15V	0A	10A	5%	N/A				N/A			
UL300-25	+5V	0.5A	30A	5%	+24V	0A	6.3A	5%	N/A				N/A			
UL300-31	+5V	0.5A	30A	5%	+12V	0A	10.5A	5%	N/A				F 12V	0A	2A	5%
UL300-32	+5V	0.5A	30A	5%	+15V	0A	8A	5%	N/A				F 15V	0A	2A	5%
UL300-40	+5V	0.5A	30A	5%	+12V	0A	10A	5%	-5V	0A	2A	5%	F 12V	0A	2A	5%
UL300-45	+5V	0.5A	30A	5%	+24V	0A	4.3A	5%	-12V	0A	2A	5%	F 12V	0A	2A	5%
UL300-46	+5V	0.5A	30A	5%	+15V	0A	7.4A	5%	-5V	0A	2A	5%	F 15V	0A	2A	5%

- NOTES:** (1) Output #4 is floating. It can be connected externally for positive or negative output.
- (2) Total output power for UL300-12,13,14,18 is 200W convection cooled, 300W with 30cfm forced air cooling.
- (3) Total output power for all other UL300 models is 150W convection cooled, 300W with 30cfm forced air cooling.

GENERAL SPECIFICATIONS

All specifications are typical at nominal line, full load, and 25°C.

Efficiency:	70% min. at 230VAC
Hold-up time:	20msec min. at 125 VAC/80% load
Line regulation:	1% maximum at full load
Inrush current:	35 amps @115 VAC or 70 amps @230 VAC at 25°C cold start
Withstand voltage:	3000 VAC from input to output 1500 VAC from input to ground
Operating temperature:	0°C to +60°C*
Storage temperature:	-25°C to +85°C
Relative humidity:	5% to 90% non-condensing
MTBF:	100,000 hours
EMI requirements:	In compliance with CISPR 22 (EN 55022) Class A and FCC Class B
Safety requirements:	Approved to: a) UL1950 b) CSA C22.2 No. 234 c) IEC 950 (EN60950)
Switching frequency:	42kHz

INPUT SPECIFICATIONS

Input voltage:	90-132VAC, 170 to 264 VAC (auto-ranging)
Input frequency:	47 to 63 Hz
Input current:	6.3A at 115 VAC 3.15A at 230 VAC
Leakage current:	3.5mA at 230 VAC

OUTPUT SPECIFICATIONS

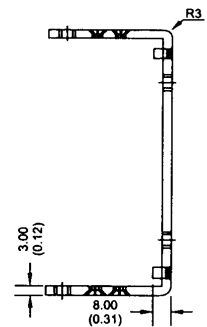
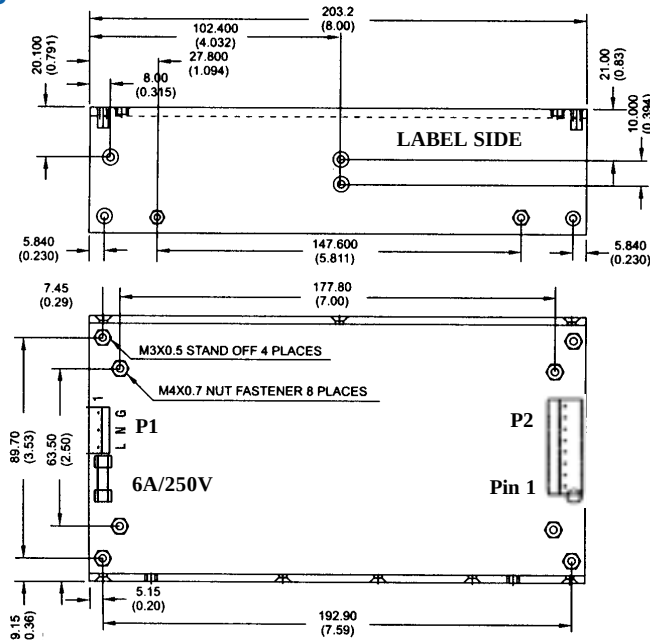
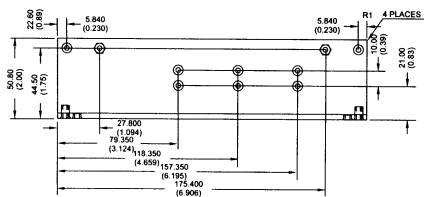
Output voltage:	See Rating Chart
Output current:	See Rating Chart
Ripple and noise:	1% p-p or 100mV maximum
Overvoltage protection:	Set at 110-135% of maximum output voltage (on output #1 only)
Overcurrent protection:	All outputs protected under short circuit conditions
Temperature coefficient:	±0.1%/°C maximum
Transient response:	Maximum excursion of 5% recovering to 1% of final value in less than 500us after a 50% load change.

* Derate linearly from 100% load at 40°C to 50% load at 60°C

MECHANICAL SPECIFICATIONS

NOTES:

- Dimensions shown in (inches) mm
- Tolerance 0.02mm maximum
- Input connector P1 mates with Molex housing 09-91-0500 and Molex 2478/2578/8818 series crimp terminal.
- Output connector P2 mates with Molex housing 09-91-1400 and Molex 2478/2578/8818 series crimp terminal.
- Weight: 1000 grams approx.



PIN CHART

PIN	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Single O/P Models	Output #1	Output #1	Output #1	Output #1	Output #1	Output #1	Return	Return	Return	Return	Return	Return	Return	Return
Multiple O/P Models	Output #3	Output #1	Output #1	Output #1	Output #1	Common Return	Common Return	Common Return	Common Return	Common Return	Output #2	Output #2	Output #4	Output #4 Return