



- Constant current mode power supply
- Universal AC input
- Epoxy encapsulated with IP67 level
- Protections: Over current / Over voltage
- Fully isolated plastic case
- Cooling by free air convection
- Small and compact size
- UL1310 Class 2 power unit, pass LPS
- Suitable for LED lighting and moving sign applications

LPS IP67  (for 48V only)  US (except for 48V) 

Model Number	Output Volts	Output Amps	Over Voltage Protection	DC Voltage Range
SINGLE OUTPUT				
LPC20-350	48 Volts(DC)	350 mAmps	50.4~60 Volts(DC)	3~48Volts(DC)
LPC20-700	30 Volts(DC)	700 mAmps	31.5~40.5 Volts(DC)	3~30Volts(DC)



20W Single Output LED Lighting Power Supply

LPC20 series

INPUT SPECIFICATIONS

Input Voltage Range (Note 3)	90-264VAC
Frequency Range	47-63 Hz
Input Current	0.55 Amps max @ 115VAC 0.35 Amps max @ 230VAC
Inrush Current (Cold Start)	35 Amps @ 115VAC max 70 Amps @ 230VAC max
Leakage Current	0.25 mAmps @ 240VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	±1.0%
Load Regulation	±2.0%
Setup, Rise Time @ FL	500mS, 250mS/230VAC 500mS, 250mS/115VAC
Hold Up Time @ FL	50mS @ 230VAC typ 24mS @ 115VAC typ
Ripple/Noise (Note 1)	200 mVpk-pk max
Over Current Protection	5% rated output current Constant current limiting type
Over Voltage Protection	See Selection Chart Shut off o/p voltage, clamping by zener diode
Voltage Tolerance (Note 2)	±5.0%

GENERAL SPECIFICATIONS

Safety	UL1310 Class 2, CAN/CSA C22.2 No. 223-M91 (except for 48Volts) IP67 approved, design refer to TUV EN60950-1, EN61347-2-13
Efficiency	83% typ.
Isolation	3000VAC I/P-O/P
Insulation Resistance	I/P-O/P > 100MΩ / 500VDC /25°C/70% RH

EMS	Compliance to EN61000-4-2,3,4,6,8,11; ENV50204, EN55024, light industry level criteria A
EMI	Compliance to EN55022B (CISPR22B)
Harmonic Current	Compliance to EN61000-3-2,-3

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-30°C to +70°C (See Derate Curve)
Relative Humidity	20~90% RH non cond
Storage Temperature	-40°C to +80°C, 10~95% RH
MTBF	786.5KHrs min, MIL-HDBK-217F (25°C)
Temp. Coefficient	±0.03%/°C
Vibration	10~500Hz, 2G 10 min./1cycle, period for 60min. each along X, Y, Z axes

PHYSICAL SPECIFICATIONS

Size	
Millimeters	118 x 35 x 26
Inches	4.65" x 1.38" x 1.02"
Weight	7.76 oz (220g)

NOTES

1. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
2. Tolerance : includes set up tolerance, line regulation and load regulation.
3. Derating may be needed under low input voltage. Please check the derating curve for more details.

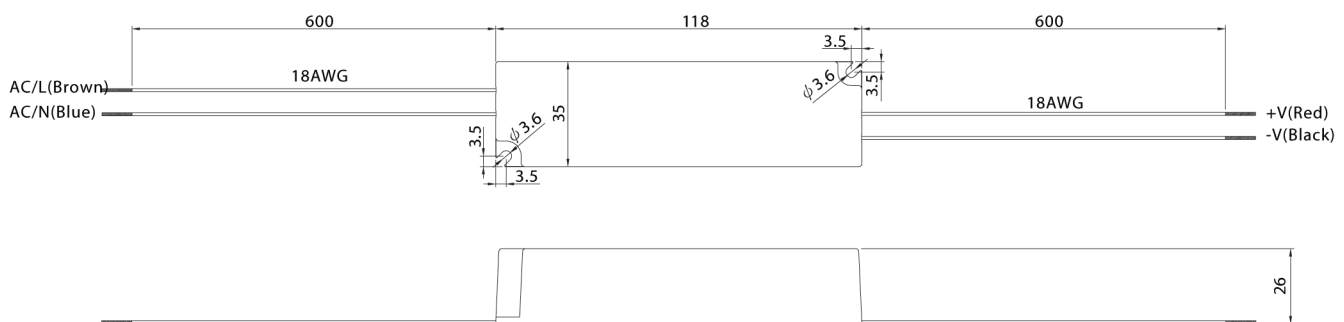
All specifications are typical at nominal input, full load, and 25°C unless otherwise noted

Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

MECHANICAL DIMENSION

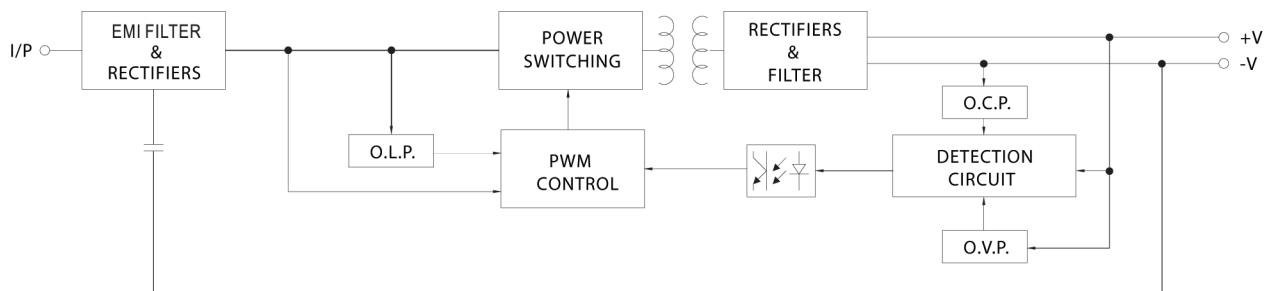
■ Mechanical Specification

Unit:mm

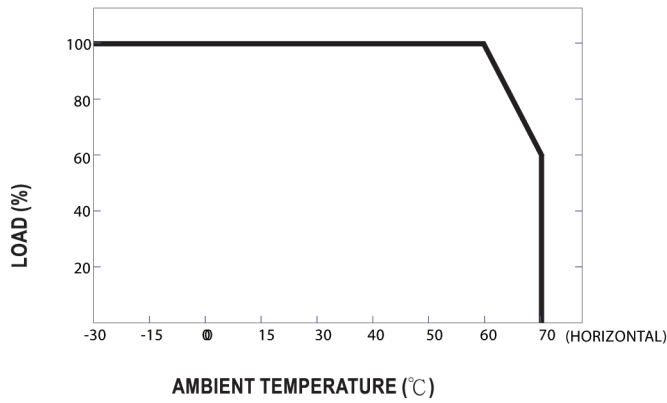


■ Block Diagram

fosc: 60KHz



■ Derating Curve



■ Static Characteristics

