



- High Efficiency (Up to 88%)
- Active Power Factor Correction (typ 0.87)
- Constant Output Current
- Waterproof (IP67)
- All-Round Protection: OVP, SCP, OTP
- Comply with UL1310 & EN61347-1 Regulations



Model Number	Output Voltage Range	Output Amps Range	Efficiency @ 220Vin	Over Voltage Protection
ELP50-1212	7-12Volts(DC)	2.85-3.15 Amps	84%	14~18 Volts(DC)
ELP50-1218	9-18Volts(DC)	2.635-2.905 Amps	85%	22~27 Volts(DC)
ELP50-1224	13-24Volts(DC)	1.995-2.205 Amps	86%	29~36 Volts(DC)
ELP50-1236	18-36Volts(DC)	1.33-1.47 Amps	87%	43~54 Volts(DC)
ELP50-1242	23-45.5Volts(DC)	1.045-1.155 Amps	87%	50~63 Volts(DC)
ELP50-1248	24-48Volts(DC)	0.997-1.102 Amps	88%	58~72 Volts(DC)
ELP50-1272	36-72Volts(DC)	0.665-0.735 Amps	88%	86~108 Volts(DC)
ELP50-12111	56-111Volts(DC)	0.428-0.472 Amps	88%	133~167 Volts(DC)
ELP50-12142	71-142Volts(DC)	0.333-0.367 Amps	88%	170~213 Volts(DC)



50W LED Driver with PFC

ELP50 series

INPUT SPECIFICATIONS

Input Voltage Range	90-264VAC
Frequency Range	47-63 Hz
Input Current	0.7 Amps max @ 100VAC
	0.35 Amps max @ 220VAC

OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Line Regulation	1.0%
Load Regulation	3.0%
Ripple/Noise	2% pk-pk / 20MHz
	0.1uF ceramic capacitor
	10uF eletrolytic capacitor
Turn-on Delay Time	3 S
Output Overshoot / Undershoot	10% When power on or off
Over Voltage Protection	See Selection Chart
	Latch mode. The power supply shall return to normal operation only after the power is turn-on again
Short Circuit Protection	No damage shall occur when any output operating in a short circuit condition. The power supply shall self-recover when the fault condition is removed
Over Temperature Protection	110°C max temperature of components inside the case

GENERAL SPECIFICATIONS

Safety	USA & Canada	UL1310 Class 2, CAN/CSA C22.2 No. 223-M91
	CE Europe	EN61347-1, EN61347-2-13

EMI	EN55015
Efficiency	See Selection Chart
EMS	Compliance to
	EN61000-4-2,3,4,6,8,11;
	EN61000-3-2,3
	EN61547
No load Power Dissipation	≤1.0W

ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-20°C to +60°C 10~100% RH (See Derate Curve)
Storage Temperature	-40°C to +85°C, 5~100% RH
MTBF	300 000Khrs min, MIL-HDBK-217F (25°C) / 110VAC
Life Time	80,000 Hrs @ 25°C

PHYSICAL SPECIFICATIONS

Size		
	Millimeters	158 x 34.5 x 42.5
	Inches	6.22" x 1.36" x 1.67"
Weight		10.58 oz (300g)

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

