

# 100Watts Single Output LED Driver



### Features:

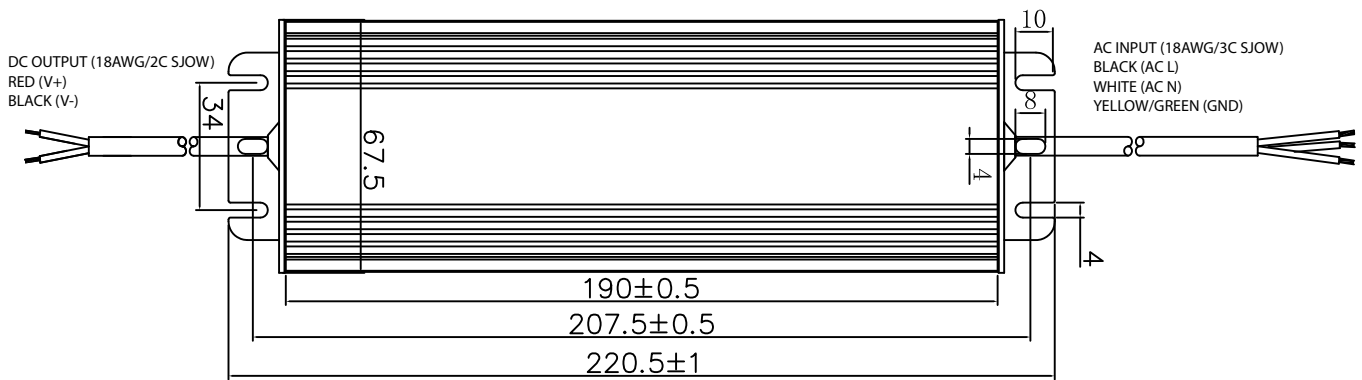
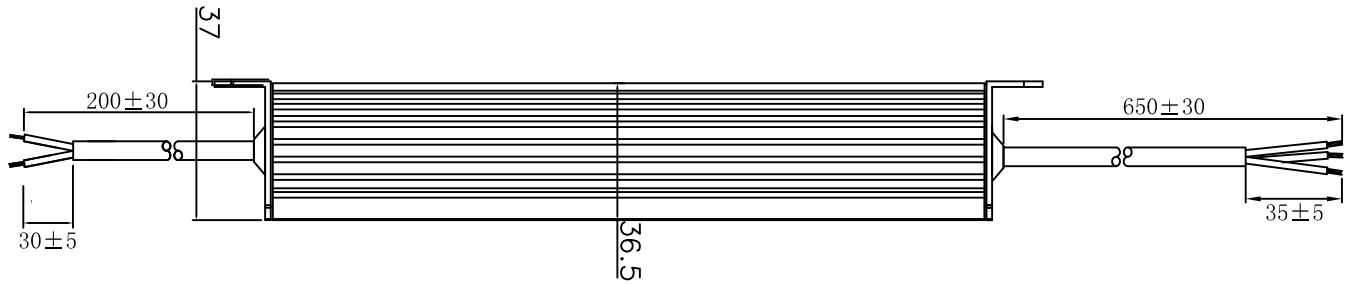
- Constant Current Design
- Universal AC input/ Full Range
- Built-in Active PFC function, PF 0.99 Typical
- High Efficiency (Up to 92%)
- Output Protections: OVP/SCP/OTP
- Lightning Protection
- Waterproof (IP67)
- 5 Year Warranty



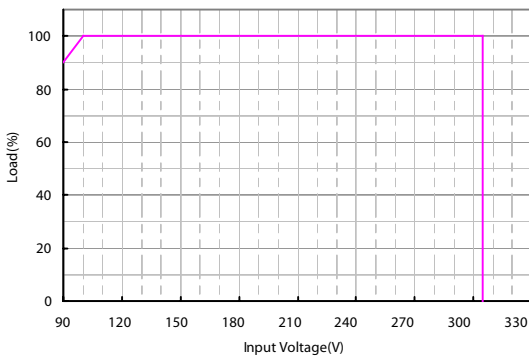
Model	PLC-100S035	PLC-100S045	PLC-100S070	PLC-100S105	PLC-100S140	PLC-100S175	PLC-100S210	PLC-100S245	PLC-100S280	PLC-100S315	PLC-100S357	PLC-100S420
<b>Output Characteristics</b>												
Rated Current	0.35A	0.45A	0.70A	1.05A	1.40A	1.75A	2.10A	2.45A	2.80A	3.15A	3.57A	4.20A
Voltage Range	143~286V	111~222V	71~143V	47~95V	35~71V	28~57V	24~48V	20~41V	18~36V	16~32V	14~28V	12~24V
Ripple and Noise (max) <small>Note 1</small>	±8% Vo											
Voltage Accuracy	±5% Vo											
Line Regulation	±1% Vo											
Load Regulation	±2% Vo											
Rise Time	20mS Max @ Rated Load											
Hold-up Time (Typ.)	10mS Min (110VAC input, full load), 20mS Min (220VAC input, full load)											
<b>Input Characteristics</b>												
Voltage Range	90VAC~305VAC											
Frequency Range	47Hz-63Hz											
Power Factor (Typical)	110VAC	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99	>0.99
	220VAC	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95	>0.95
Efficiency (Typical)		92%	92%	91%	91%	91%	91%	91%	91%	91%	90.5%	90.5%
AC Current (max)	1.0A @ 100-277VAC Input Full Load											
Inrush Current (max)	65A @ 230VAC, 25°C											
Leakage Current	0.75mA max @ 277VAC											
<b>Protection</b>												
Over Temperature (OTP)	110°C (Temperature of internal components); shut down, auto recover after the temperature decreases											
Over Voltage (OVP) <small>Note 2</small>	1.30Vo	1.30Vo	1.30Vo	1.30Vo	1.30Vo	1.30Vo	1.10Vo	1.10Vo	1.30Vo	1.30Vo	1.30Vo	1.30Vo
Short Circuit (SCP)	Long-term mode, auto recovery											
<b>Environmental Characteristics</b>												
Operating Temperature	-35°C~70°C											
Operating Relative Humidity	10% RH to 100% RH											
Storage Temperature	-40°C~85°C, 5% to 100% RH non-condensing											
Vibration	10 to 300Hz sweep at constant acceleration of 1.0G(Breadth: 3.5mm) for 1 Hour for each of the perpendicular axes X, Y, Z											
Waterproof Rating	IP67											
Safety Standards	UL8750, Compliance to UL1012 UL935, IEC61347											
Withstand Voltage	L/N-GND: 4kV, L-N: 2kV											
Isolation Resistance	I/P-O/P: >100M Ohms / 500VDC / 25°C / 70% RH											
EMC Emission	Compliance to EN55022(CISPR22) Class B, EN61000-3-2 Class A, EN61000-3-3											
EMC Immunity	Compliance to EN61000-3-2, 3 EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547											
<b>Characteristics</b>												
Life Time	More than 50,000Hrs (25°C, 80% Load)											
MTBF (MIL-HDBK-217F)	More than 475,000Hrs (25°C, 80% Load)											
Dimension (LxWxH)	220.5x67.5x37mm											
Note	1. Ripple & Noise: Measured by 20 MHz bandwidth oscilloscope and the output paralleled with a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor. 2. Latch Mode: The power supply shall return to normal operation only after the power is turned on again											

# MECHANICAL SPECIFICATIONS

UNIT: mm



Derating Curve



Ambient Temperature vs. Load

