

50Watts Single Output LED Driver



Features:

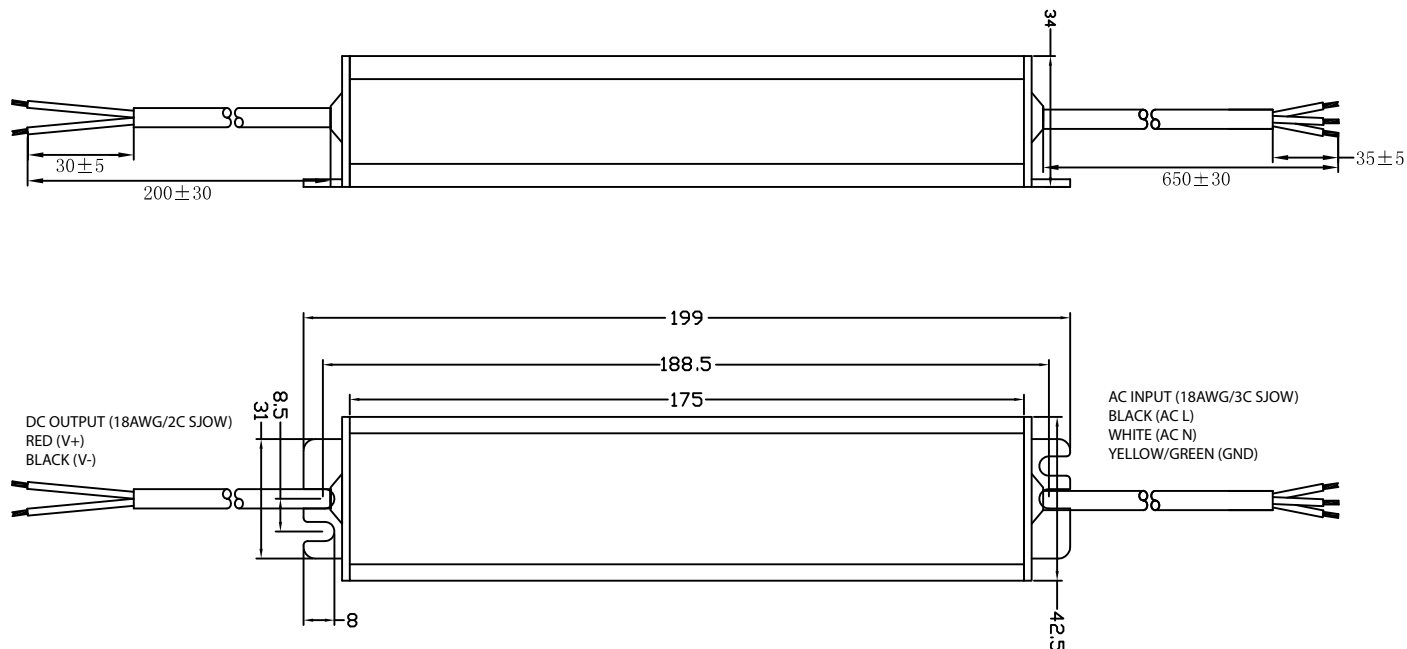
- Constant Voltage Design
- Universal AC input/ Full Range
- Built-in Active PFC function, PF 0.95 Typical
- High Efficiency (Up to 87%)
- Output Protections: OLP/OVP/SCP/OTP
- Lightning Protection
- Class 2 Power Unit (See Note)
- Waterproof (IP67)
- 5 Year Warranty



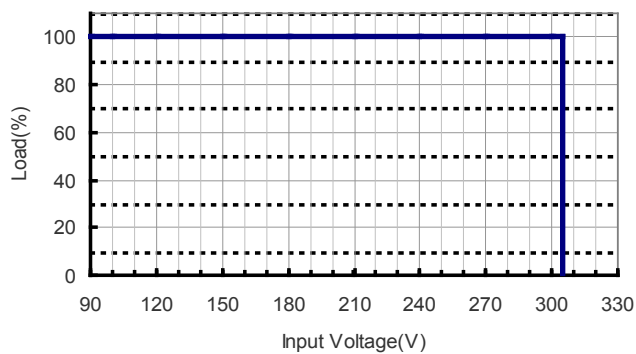
Model		PLV-050S012	PLV-050S018	PLV-050S024	PLV-050S036	PLV-050S048
Output Characteristics						
DC Output		12V	18V	24V	36V	48V
Rated Current See Note		4.17A (3)	2.78A (3)	2.08A (3)	1.39A (3)	1.04A (2)
Current Range		0~4.17A	0~2.78A	0~2.08A	0~1.39A	0~1.04A
Ripple and Noise (max) Note 1		±10% Vo				
Voltage Accuracy		±5% Vo				
Line Regulation		±1% Vo				
Load Regulation		±3% Vo				
Rise Time		20mS Max @ Rated Load				
Hold-up Time (Typ.)		8.5mS Min (110VAC input, full load), 10mS Min (220VAC input, full load)				
Input Characteristics						
Voltage Range		90VAC~305VAC				
Frequency Range		47Hz-63Hz				
Power Factor (Typical)	110VAC	>0.95	>0.95	>0.95	>0.95	>0.95
	220VAC	>0.92	>0.92	>0.92	>0.92	>0.92
Efficiency (Typical)		82%	84%	84%	86%	87%
AC Current (max)		0.8A @ 100-277VAC Input Full Load				
Inrush Current (max)		65A @ 230VAC, 25°C				
Leakage Current		0.50mA max @ 277VAC				
Protection						
Over Temperature (OTP)		110°C (Temperature of internal components); shut down, auto recover after the temperature decreases				
Over Voltage (OVP) Note 2		1.2~1.4Vo				
Short Circuit (SCP)		Long-term mode, auto recovery				
Environmental Characteristics						
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				
Characteristics						
Life Time		More than 50,000Hrs (25°C, 80% Load)				
MTBF (MIL-HDBK-217F)		More than 550,000Hrs (25°C, 80% Load)				
Dimension (LxWxH)		199x42.5x34mm				
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 (1) Non-Class 2 output (USR & CNR) (2) Class 2 output (USR); Non-Class 2 output (CNR) (3) Class 2 output (USR & CNR)				

MECHANICAL SPECIFICATIONS

UNIT: mm



Derating Curve



Ambient Temperature vs. Load

