

ILPA50VW SERIES



50W Water-Proof Constant Voltage LED Driver

- Wide Input Voltage 90 to 264VAC, 47 to 63Hz
- Constant Output Voltage Available for 12VDC and 24VDC
- Over Voltage, Short Circuit, and Over Temperature Protection
- High Efficiency (up to 86%)
- Active Power Factor Correction (PFC) (87% typical)
- IP67 Waterproof Rating, Metal Housing
- Comply with UL8750 & EN61347 Safety Regulation (Pending)

2 Year Warranty

Approvals:   IP67 

Single Output

Part Number	Output Voltage	Max. Output Current	Efficiency (220VAC, Full Load)	Over Voltage Protection Min / Typ / Max	Max. Output Power
ILPA50VW-050S012SS	12 VDC	3.00 A	84%	14V / 16V / 18V	36W
ILPA50VW-050S024SS	24 VDC	2.10 A	86%	29V / 33V / 36V	50W

Item -050S012SS, -050S024SS use Class 2 output (USR & CNR).

Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		264	VAC
Input Frequency		47		63	Hz
Output Power Range	Vin=90 to 264VAC	0		50	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			0.7	A
Input Current (High Line)	Io=Full load, Vin=230VAC			0.35	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC			65	A
Power Factor Correction	Vin=110VAC	86		87	%
Power Factor Correction	Vin=220VAC	84		85	%
Efficiency	Io=Full Load, Vin=230VAC			86	%
No-Load Power Consumption	No Load, Vin=230VAC			1	W
Line Regulation	Io=Full Load			1	%
Load Regulation	Vin=230VAC			3	%
Over Voltage Protection	Latch mode. The power unit shall return to normal operation only after the power is turn-on again. (Please refer to output table.)				
Over Current Protection		120	130	170	% Io
Over Temperature Protection			110		°C
Short Circuit Protection	No damage shall occur when any output operating in a short circuit condition. The power supply shall be self-recovery when the fault condition is removed.				
Output Overshoot / Undershoot	When power on or off			10	%
Start Up Time	Io=Full Load, Vin=100VAC			3	S
Ripple & Noise (Peak to Peak)	Measured by 20 MHz bandwidth oscilloscope and the output paralleled a 0.1 uF ceramic capacitor and a 10 uF electrolytic capacitor.			2	% Vo

Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Humidity: 10% RH to 100% RH	-35		60	°C
Storage Temperature	Humidity: 5% RH to 100% RH	-40		85	°C
Operation temperature at 25°C, calculated per MIL-HDBK-217F		0.3M			Hours
Life Time at 25°C ambient temperature		0.08M			Hours

No output power derating from -35°C to 70°C

Approvals and Compliance

Parameter	Standards
EMI	EN55015
EMS	EN61000-3-2, EN61000-3-3, EN61000-4-2, EN61000-4.3, , EN61000-4-4, , EN61000-4-5, EN61000-4-6, EN61000-4-8, EN61000-4-1-1, EN61547
Safety UL/c-UL, T-mark, CE	UL8750 Compliant to UL1310 Class 2, UL1012, UL935, CSA-C22.2 No. 0, CSA-C22.2 No. 107.1, CSA-C22.2 No.250.0, EN61347-1,EN61347-2-13
Environmental Compliance	RoHS
Waterproof	IP67 Rating

Mechanical

Parameter	Specification
Dimension	162x34.5x42.5mm (6.38x1.36x1.67 inches)
Net Weight	460g approx.

