

ILPA50JW SERIES

50W Water-Proof Constant Current LED Driver



- Wide Input Voltage 90 to 264VAC, 47 to 63Hz
- Constant Output Current Available From 0.35A To 3.0A
- Over Voltage, Short Circuit, Lighting, and Over Temperature Protection
- High Efficiency (up to 88%)
- Active Power Factor Correction (PFC) (87% typical)
- IP67 Waterproof Rating, Metal Housing
- Comply with UL8750 & EN61347 Safety Regulation

2 Year Warranty

Approvals:   IP67 

Single Output

Part Number	Output Current Range (Min. / Typ. / Max.)	Output Voltage Range (Min. / Max.)	Efficiency (220VAC, Full Load)	Over Voltage Protection (Min/Typ/Max)	Max. Output Power
ILPA50JW-S300SS	2850 / 3000 / 3150 mA	7 / 12 VDC	84%	14 / 16 / 18 VDC	50W
ILPA50JW-S277SS	2635 / 2770 / 2905 mA	9 / 18 VDC	85%	22 / 24 / 27 VDC	50W
ILPA50JW-S210SS	1995 / 2100 / 2205 mA	13 / 24 VDC	86%	29 / 32 / 36 VDC	50W
ILPA50JW-S140SS	1330 / 1400 / 1470 mA	18 / 36 VDC	87%	43 / 48 / 54 VDC	50W
ILPA50JW-S119SS	1130 / 1100 / 1250 mA	21 / 45.5 VDC	87%	50 / 57 / 63 VDC	50W
ILPA50JW-S105SS	997 / 1050 / 1102 mA	24 / 48 VDC	88%	58 / 65 / 72 VDC	50W
ILPA50JW-S070SS	665 / 700 / 735 mA	36 / 72 VDC	88%	86 / 97 / 108 VDC	50W
ILPA50JW-S045SS	428 / 450 / 472 mA	56 / 111 VDC	88%	133 / 150 / 167 VDC	50W
ILPA50JW-S035SS	333 / 350 / 367 mA	71 / 142 VDC	88%	170 / 192 / 213 VDC	50W

Item S300SS, -S277SS, -S210SS use Class 2 output (USR & CNR). Item -S119SS uses Class2 output (USR), Non-Class 2 output (CNR).
Item -S140SS, -S105SS, -S070SS, -S045SS, -S035SS use Non-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			0.70	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	%
Efficiency	Io=Full Load, Vin=220VAC		84	88	%
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 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
MTBF: Operation temperature at 25°C, calculated per MIL-HDBK-217F		0.3M			Hours
Life Time at 25°C ambient temperature		0.08M			Hours

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, 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
Waterproof	IP67 Rating

Mechanical

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

