

ILPA100JU SERIES



100W Water-Proof Constant Current LED Driver

- Wide Input Voltage 90 to 305VAC, 47 to 63Hz
- Constant Output Current Available From 350mA To 4200mA
- Over Voltage, Short Circuit, Lighting, and Over Temperature Protection
- High Efficiency (up to 92%)
- Active Power Factor Correction (PFC) (99% 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 (Min. / Max.)	Efficiency (220VAC, Full Load)	Over Voltage Protection (Min. / Typ. / Max.)	Max. Output Power
ILPA100JU-S420ST	3990 / 4200 / 4410 mA	14 / 24 VDC	90.5%	28 / 31 / 34 VDC	100W
ILPA100JU-S357ST	3391 / 3570 / 3748 mA	17 / 28 VDC	90.5%	33 / 36 / 40 VDC	100W
ILPA100JU-S315ST	2992 / 3150 / 3307 mA	19 / 32 VDC	90.5%	38 / 42 / 45 VDC	100W
ILPA100JU-S280ST	2660 / 2800 / 2940 mA	22 / 36 VDC	90.5%	43 / 47 / 51 VDC	100W
ILPA100JU-S245ST	2327 / 2450 / 2572 mA	25 / 41 VDC	91%	49 / 53 / 58 VDC	100W
ILPA100JU-S210ST	1995 / 2100 / 2205 mA	29 / 48 VDC	91%	57 / 63 / 67 VDC	100W
ILPA100JU-S175ST	1662 / 1750 / 1837 mA	34 / 57 VDC	91%	68 / 74 / 80 VDC	100W
ILPA100JU-S140ST	1330 / 1400 / 1470 mA	43 / 71 VDC	91%	86 / 94 / 101 VDC	100W
ILPA100JU-S105ST	997 / 1050 / 1102 mA	57 / 95 VDC	91%	114 / 124 / 133 VDC	100W
ILPA100JU-S070ST	665 / 700 / 735 mA	86 / 143 VDC	91%	171 / 186 / 200 VDC	100W
ILPA100JU-S045ST	427 / 450 / 473 mA	132 / 222 VDC	92%	266 / 289 / 311 VDC	100W
ILPA100JU-S035ST	332 / 350 / 368 mA	172 / 286 VDC	92%	343 / 372 / 401 VDC	100W

Electrical Characteristics

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Input Voltage	Operating Voltage	90		305	VAC
Input Frequency		47		63	Hz
Output Power Range	Vin=90 to 305VAC	0		100	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			1.30	A
Input Current (High Line)	Io=Full load, Vin=230VAC			0.60	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC			65	A
Power Factor Correction	Vin=110VAC		96	99	%
Efficiency	Io=Full Load, Vin=220VAC		88	92	%
Line Regulation	Io=Full Load			1	%
Load Regulation	Vin=230VAC			5	%
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		0.6	1	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.			5	% Vo

Conditions

Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Humidity: 10% RH to 100% RH	-35		70	°C
Storage Temperature	Humidity: 5% RH to 100% RH	-40		85	°C
MTBF: Operation temperature at 25°C, calculated per MIL-HDBK-217F		0.478M			Hours
Life Time at 25°C ambient temperature		0.104M			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, EN61000-4-11, EN61547
Safety UL/c-UL, CE	UL8750 Compliant to UL1310 ClaST 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,	194x67.5x37mm (7.64x2.66x1.46 inches)
Net Weight	1000g approx.

