

ILPA100VU SERIES



100W Water-Proof Constant Voltage LED Driver

- Wide Input Voltage 90 to 305VAC, 47 to 63Hz
- Constant Output Voltage Available From 12VDC Thru 105VDC
- Over Voltage, Over Current, Short Circuit, Lighting, and Over Temperature Protection
- High Efficiency (up to 93%)
- Active Power Factor Correction (PFC) (99% typical)
- IP67 Waterproof Rating, Metal Housing
- Comply with UL8750 & EN61347 Safety Regulation (Pending)

3 Year Warranty

Approvals:     

Single Output

Part Number	Output Voltage	Max. Output Current	Efficiency (220VAC, Full Load)	Over Voltage Protection Min / Typ / Max	Max. Output Power
ILPA100VU-S012ST	12 VDC	8.33 A	91%	14V / 15V / 16V	100W
ILPA100VU-S024ST	24 VDC	4.05A	93%	27V / 30V / 34V	100W
ILPA100VU-S036ST	36 VDC	2.75 A	93%	40V / 47V / 50V	100W
ILPA100VU-S042ST	42 VDC	2.25 A	93%	47V / 52V / 57V	100W
ILPA100VU-S048ST	48 VDC	1.95 A	92%	54V / 59V / 63V	100W
ILPA100VU-S054ST	54 VDC	1.75 A	93%	60V / 68V / 75V	100W
ILPA100VU-S081ST	81 VDC	1.23 A	93%	91V / 95V / 100V	100W
ILPA100VU-S105ST	105 VDC	0.95 A	93%	120V / 125V / 140V	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 264VAC	0		100	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			1.20	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	99			%
Power Factor Correction	Vin=220VAC	96			%
Efficiency	Io=Full Load, Vin=230VAC			93	%
No-Load Power Consumption	No Load, Vin=230VAC			1.5	W
Line Regulation	Io=Full Load			1	%
Load Regulation	Vin=230VAC			2	%
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		110	135	180	% 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		-35		70	°C
Storage Temperature		-40		85	°C
Relative Humidity		5		95	%
Operation temperature at 25°C, calculated per MIL-HDBK-217F		0.439M			Hours
Life Time at 25°C ambient temperature		0.193M			Hours
No output power derating from -35°C to 60°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
Waterproof	IP67 Rating

Mechanical

Parameter	Specification
Dimension, Net Weight	184x67.5x37mm (7.24x2.66x1.46 inches), 950g approx.
Input Electric Wire	650mm, Black(ACL), White(ACN), Green(GND)
Output Electric Wire	220mm, Red(V+), Black(V-)

