





ILPA40JUD SERIES



40W Dimmable Water-Proof Constant Current LED Driver

- Wide Input Voltage 90 to 305VAC, 47 to 63Hz
- Constant Output Current Available From 350mA To 3330mA
- Over Voltage, Short Circuit, Over Load Protection
- High Efficiency (up to 88%)
- Active Power Factor Correction (PFC) (92% typical)
- IP66 Waterproof Rating
- Comply with UL8750 & EN61347 Safety Regulation (Pending)

2 Year Warranty

Approvals: (Pending)    IP66 

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
ILPA40JUD-S333DS	3164 / 3330 / 3497 mA	4 / 12 VDC	84%	13 / 15 / 17 VDC	35W
ILPA40JUD-S222DS	2109 / 2220 / 2331 mA	6 / 18 VDC	85%	22 / 24 / 26 VDC	36W
ILPA40JUD-S166DS	1577 / 1660 / 1743 mA	8 / 24 VDC	86%	30 / 32 / 34 VDC	38W
ILPA40JUD-S140DS	1330 / 1400 / 1470 mA	10 / 29 VDC	87%	36 / 38 / 40 VDC	36W
ILPA40JUD-S128DS	1216 / 1280 / 1344 mA	11 / 31 VDC	87%	41 / 43 / 45 VDC	38W
ILPA40JUD-S105DS	998 / 1050 / 1103 mA	12 / 36 VDC	87%	46 / 48 / 50 VDC	38W
ILPA40JUD-S070DS	665 / 700 / 735 mA	18 / 54 VDC	87%	68 / 70 / 72 VDC	38W
ILPA40JUD-S045DS	428 / 450 / 473 mA	30 / 89 VDC	88%	114 / 116 / 118 VDC	40W
ILPA40JUD-S035DS	333 / 350 / 368 mA	38 / 114 VDC	88%	146 / 148 / 150 VDC	40W

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		40	W
Input Current (Low Line)	Io=Full load, Vin=115VAC			0.48	A
Input Current (High Line)	Io=Full load, Vin=230VAC			0.23	A
High Line Inrush Current	Io=Full load, 25°C, Cool start, Vin=230VAC			20	A
Power Factor Correction	Vin=110VAC			99	%
Efficiency	Io=Full Load, Vin=220VAC			88	%
No Load Power Dissipation				3	W
Line Regulation	Io=Full Load			2	%
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 Load Protection	Hiccup mode. The power supply shall be self-recovery when the fault condition is removed.		1.25		Po
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		1.7	2	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

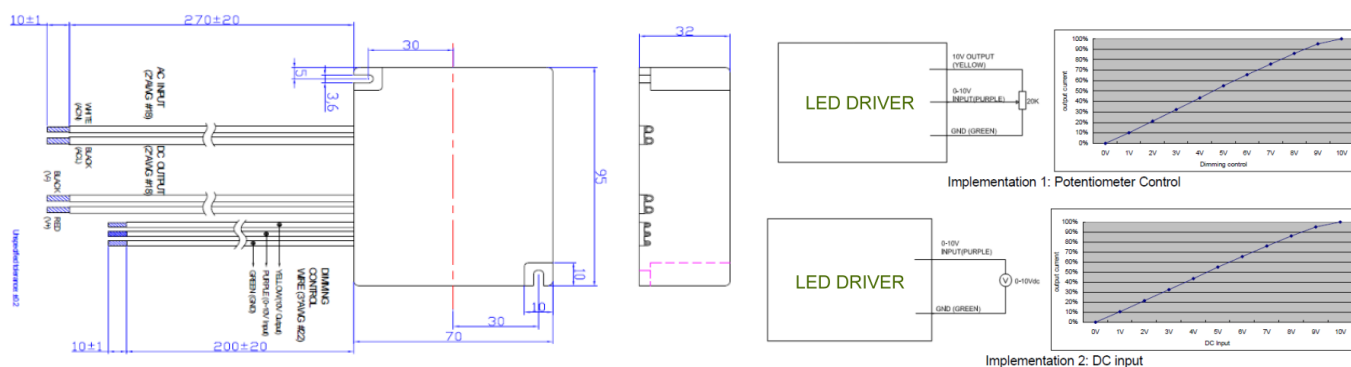
Parameter	Test Conditions	Min.	Typ.	Max.	Unit
Operating Temperature	Humidity: 10% RH to 100% RH	-20		70	°C
Storage Temperature	Humidity: 5% RH to 100% RH	-40		85	°C
MTBF: Operation temperature at 25°C, calculated per MIL-HDBK-217F		0.487M			Hours
Life Time at 25°C ambient temperature		0.077M			Hours

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	(Pending) 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	IP66 Rating

Mechanical

Parameter	Specification
Dimension,	78x80x25mm (3.07x3.15x0.98 inches)
Net Weight	200g approx.



Dimming Control

Parameter	Min.	Typ.	Max.	Unit
10V Output Voltage	9.8	10V	10.2	VDC
10V Output Source Current	-10	-	2	mA
Absolute Max. Voltage on the 1~10V Input Pin	-2	-	15	VDC
Source Current on 0-10V Input Pin	0	-	1	mA

The dimmer control may be operated from either a potentiometer or from an input signal of 0 ~ 10 Vdc. Two recommended implementations are provided above

Notes:

- For the driver to operate properly, the load voltage must be maintained above the minimum voltage threshold (approx. 33% of the max. output voltage for any given model).
- If the output voltage is maintained above 50% of the maximum output voltage, the dimmer control may be operated over the entire 0-10V range with output current varying from 100% down to practically 0%.
- If the output voltage is maintained between 33-50% of the maximum output voltage, the dimmer control may be operated over 5-10V range with output current