



XLD75-SI

Dual Mode CC/CV LED Drivers



Model Selection Key



Basic Class 2 75 Watt LED Driver

Coming in a smart and slim form factor, the basic model is ideal for space restrained applications. Efficient, reliable and easy to install, the XLD 75-SI (75 Watt power rating) is fully potted and can work in extremely wide temperature environments (-40°C to 60°C).

This unit features universal input 90-305 V_{AC} and its user-friendly output voltage/current adjust pots allow you to easily tune the unit to drive your system at the appropriate power levels enabling flexibility and compatibility with a wide variety of indoor/outdoor LED lighting systems.

Features

- Universal AC Input
- Constant Current and Constant Voltage dual mode operation for flexibility and optimal performance
- User-adjustable Output Voltage and Current
- Up to 92% Efficiency
- Active Power Factor Correction, PF>0.9
- Heavy duty design for harsh environments
- Built-in protection: SCP, OTP, OVP, OCP
- UL Class I and II, cUL, CE, FCC Title 47 CFR 15 Class B
- IP 65
- 3 Years Warranty

Model Number	Input Voltage Range (V _{AC})*	Channel(s) Output	CC mode				CV Mode				Max Output Power (per Channel) (W)	Total Output Power (W)		
			Rated Current (per Channel) (A)	Compliance (LED) Voltage (V _{DC})		Current Pot Adjustable Range (All Channels) (A)		Preset Vout (V _{DC})	Load Range (per Channel) (A)				Voltage Pot Adjustable Range (V _{DC})	
				min	max	min	max		min	max			min	max
XLD75-112V-SI	90-305	1	5.0	6.0	12.0	0.50	5.25	12	0	5.25	8.4	12.6	60	60
XLD75-115V-SI	90-305	1	5.0	7.5	15.0	0.50	5.25	15	0	5.25	10.5	15.8	75	75
XLD75-124V-SI	90-305	1	3.1	12.0	24.0	0.31	3.30	24	0	3.30	16.8	25.2	75	75
XLD75-136V-SI	90-305	1	2.1	18.0	36.0	0.21	2.18	36	0	2.18	25.2	37.8	75	75
XLD75-148V-SI	90-305	1	1.6	24.0	48.0	0.16	1.65	48	0	1.65	33.6	50.4	75	75

SI: Waterproof standard aluminum housing

* = PSE Approval: 100-120 VAC Only.

* UL marking: for products manufactured in Vietnam only, effective October 2020.

Input Specification

Voltage Range	Frequency Range	Max Inrush Current	Power Factor	THD
90-305 V _{AC} (NOM: 120/240/277 V _{AC})	47-63 Hz	50A@230 V _{AC} input, 25°C, cold start-up	0.9 min @100-277 V _{AC} Full load	<25% @ full load

Output Specification

Max Power	75 W	Transient Response	8 mS, full load to Half load, 120 V _{AC} Input
Line Regulation	+/- 1% Max	Short Circuit Protection	Hiccup-Mode, Auto-Recovery upon removal of short circuit condition.
Efficiency	>80% @ Full Load, 230 VAC input	Constant Voltage (CV) Mode Load Regulation	+/- 5% Max (Voltage Setting Adjustable via on-board pot: +5%/-30%)
Noise/Ripple	1.5% of Rated Output Voltage*	Constant-Current (CC) Mode Regulation	+/- 5% Max (Current Setting Adjustable via on-board pot: +5%/-90%)
Over Current Protection	125% Max	Over Voltage Protection	132% Max
Hold-up Time	2 mS @ full load, 120V _{AC} input	Start-up Time	2 sec. Typical@ start-up to full load, 120V _{AC} input
		Over temperature Protection	105°C Max, Hiccup-Mode, Auto-Recovery

* All noise measurements made at the output terminals, connected to a 20MHz low pass filter.

Environmental Specifications

MTBF	Cooling	Operating Temp	Storage Temp	Relative Humidity
55,000 hours (Full load @ 25°C Ambient, Based on MIL-217F)	Convection	-40°C to 60°C (Full load)	-40°C to 85°C	5% - 95 %

Compliance / Safety

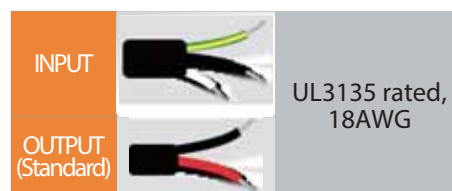
EMI/RFI:	CISPR-22 Class B FCC part 15 Class B EN 55015
Safety Standards:	UL 1012/1585, UL8750, UL Class 2 Damp Location UL 48, cUL, CE, UL #: E342485 EN 61347-2-13, PSE
Weatherability:	EN60529 IP 65

Mechanical

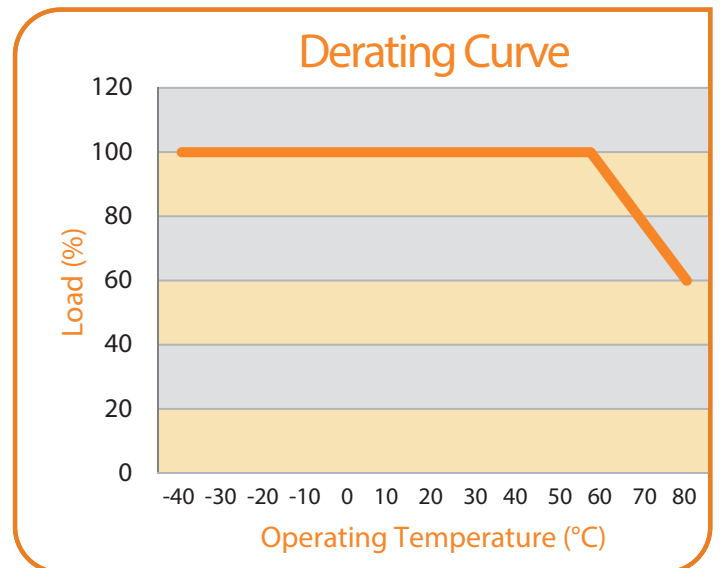
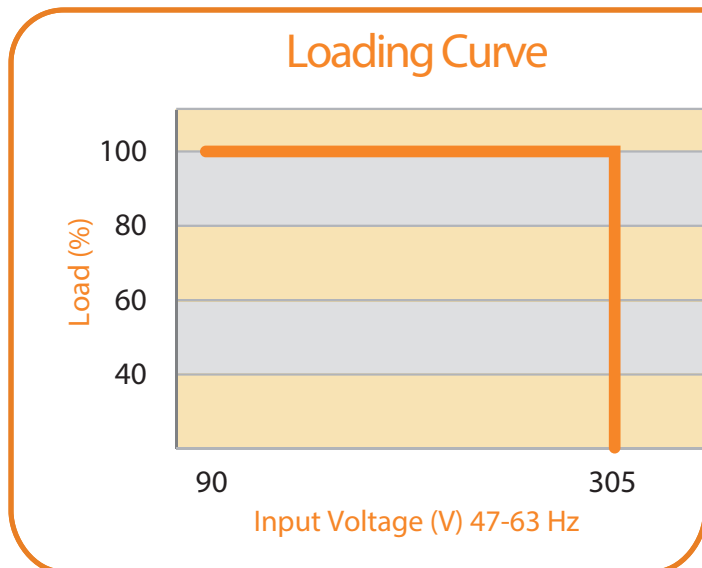
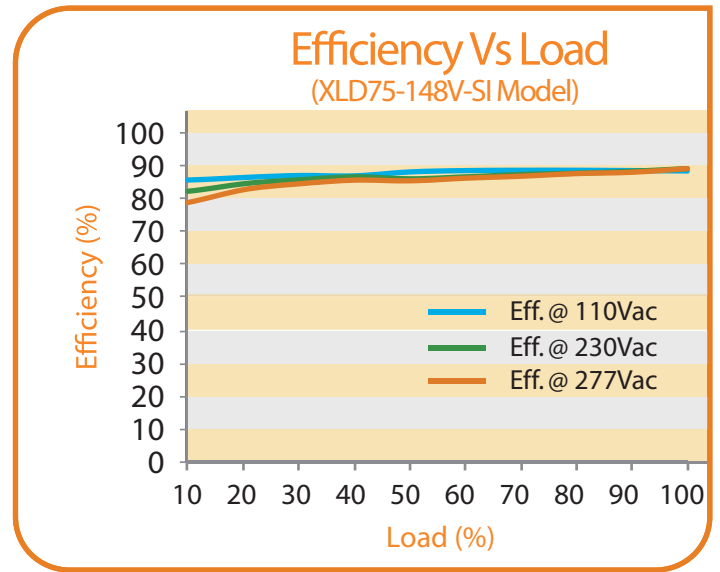
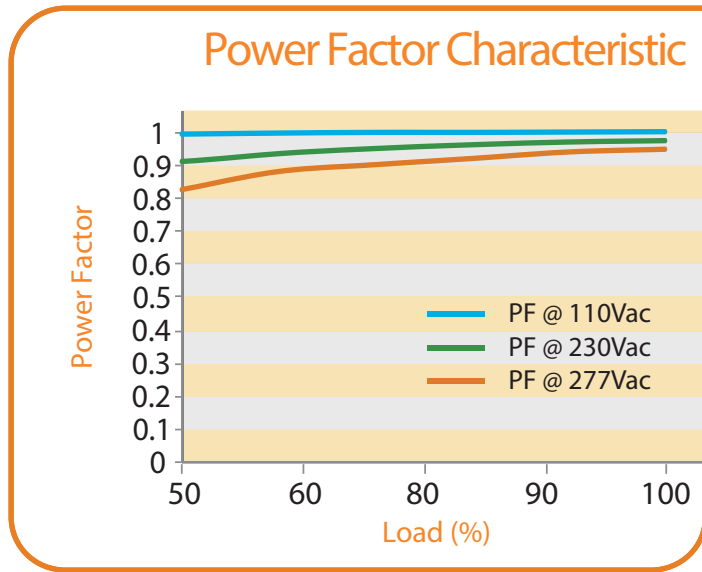
Material:	
NEMA 3 Design with aluminum extruded enclosure, with IP65 Waterproof, fully potted PCB.	

Remote Dimming Options

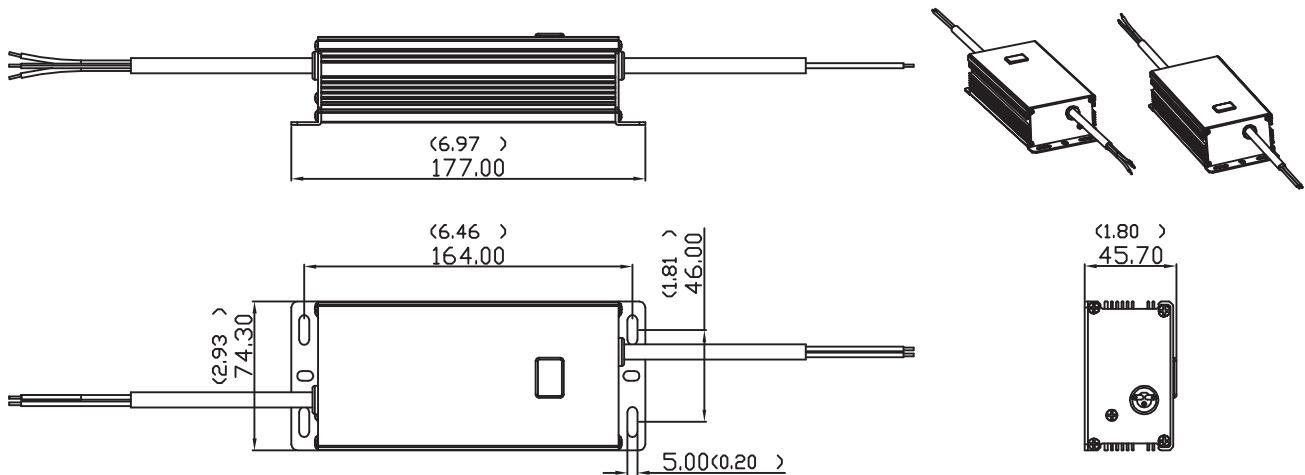
Dimming Types	Dimming Control
1. PWM-1kHz, 1-100%	• 1-10V DC
2. Constant Current, 10-100%	• Potentiometer
3. Output Voltage, 75-100%	• Serial Comm. (2-wire)
4. Compatible with SLD/XLD DIM	• Wireless Remote



Performance Curves



Mechanical Diagrams



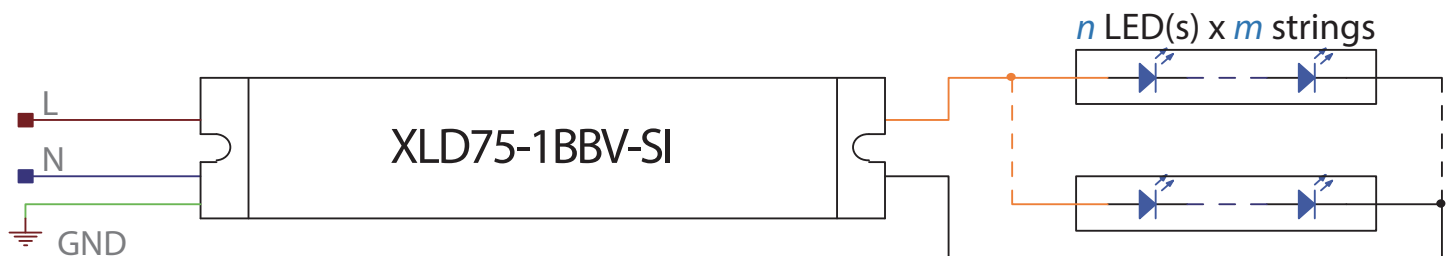
Packing Information

Carton size: L259xW218xH156(MM)

Weight: 0.88kg/pcs;

Total Weight: 6pcs/carton; G.W.6.30KG; N.W.5.28KG

Configuration Arrays



Model	CC mode LED Voltage Range (V)	Recommended n LED(s) per String *	Current POT Adjust Range (A)	LED Current per String
XLD75-112V-SI	6 - 12	2 - 4	0.5 - 5.25	$= \frac{I_{out}}{m \text{ Strings}}$
XLD75-115V-SI	7.5 - 15	2 - 5	0.5 - 5.25	
XLD75-124V-SI	12 - 24	4 - 9	0.31 - 3.29	
XLD75-136V-SI	18 - 36	7 - 14	0.21 - 2.18	
XLD75-148V-SI	24 - 48	9 - 18	0.16 - 1.64	

* LED Vf range: 2.7-3.6V

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