



KTLD-40-UV-SC1400-56-VDIM-W1 /USB

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver | 40W | 120-277V Input | 470-1400mA Programmable Output Current



10 YEAR LIMITED WARRANTY

TOTAL POWER: 40W	OUTPUT CURRENT: 470-1400mA
INPUT VOLTAGE: 120-277Vac $\pm 10\%$	DIMMING: 0-10V
INPUT FREQUENCY: 50/60 Hz	WARRANTY: 10 Year Limited



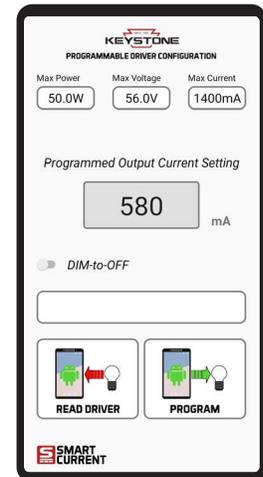
PRODUCT FEATURES

- Built in USB-C Port for easy programming
- Meets FCC Part 15 (Class B) Consumer Limits
- Short Circuit Overload and Open Load Protection
- Dimmable with 0-10V Dimmer (Down to 1% at Max. Output Current)
- Auxiliary Power: 12Vdc; 200mA Max.
- THD: < 20%
- -20°C/-4°F to 50°C/122°F Operating Temperature
- 90°C/194°F Maximum Case Temperature
- Input Frequency: 50/60 Hz
- Programmable output current via USB-C cable and an Android device (plus Keystone app)
- Class A Sound Rating

PROGRAMMING FEATURES

- Drive Current (10mA Increments)
- Minimum Dimming Level (1%,3%, 5%,7%, or 10%)
- Dimming Curve (Linear, Log, Inverse Log, or Square-law)
- Minimum Dimming Voltage (1V, 1.5V, or 2V)
- Maximum Dimming Voltage (7V, 8V, or 9V)
- Dim-to-off Voltage (.8V, 1V, 1.2V, or N/A)
- Thermal Foldback Temperature (75°C/167°F, 80°C/176°F, 85°C/185°F, or 90°C/194°F)

WHAT'S NEEDED?
A Smart Current Programmable LED Driver, USB-C Cable, and an Android device.



REQUIRED ACCESSORIES

Order Code	Description
KTLD-SC-USBC	USB-C to USB-C Cable (included with driver)

ELECTRICAL SPECIFICATIONS

Input Voltage Range	120-277Vac $\pm 10\%$
Frequency	50/60 Hz
Power Factor	>0.9 under 120~277Vac Input with 80~100% Load Condition (For All Output Currents)
Inrush Current	24A _{peak} @ 277Vac ; i ² t = 0.01728 A ² s
Max. Input Current	0.46A @120V, 0.24A @240V and 0.21A @277V
THD	< 20% under 120~277Vac input with 80~100% load condition (For All Output Currents)
Load Regulation	$\pm 2\%$
Line Regulation	$\pm 1\%$
Output Tolerance	$\pm 5\%$ at Full Load Condition
Turn-On Delay Time	< 2 Seconds at Full Load Condition
Overshoot	< 10% at Full Load Condition
No Load Power Consumption	< 1.5W
Ripple and Noise (pk-pk)	< 3%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	Maximum 0.5mA at 277Vac, 60Hz input
Protection	<ul style="list-style-type: none"> • Over Voltage Protection: Hiccup mode. Protection will trigger when load voltage exceed specified output voltage and will auto recover after the fault mode is removed. • Over Current Protection: Hiccup mode. Protection will trigger when load current exceed specified output current and will auto recover after the fault mode is removed. • Short Circuit Protection: Hiccup mode. Protection will trigger when short circuit and will auto recover after the fault mode is removed. • Over Temperature Protection: Protection will trigger when driver overheat and auto-recovery when cooled down.



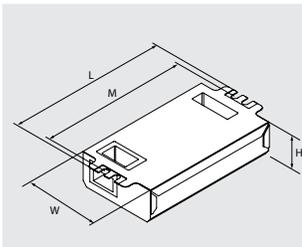
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PRODUCT SPECIFICATIONS

Max. Output Power	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Typical Efficiency at 240V	Typical Efficiency at 277V	Remote Mounting Distance (#18 AWG)	Class 2	
								US	Canada
40W	470-1400mA	10-56V	60V	87%	87%	88%	26 ft.	✓	

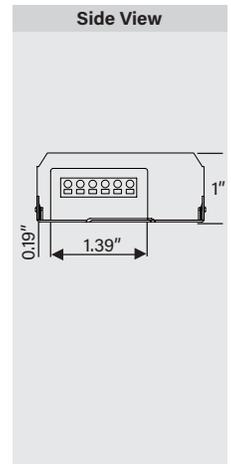
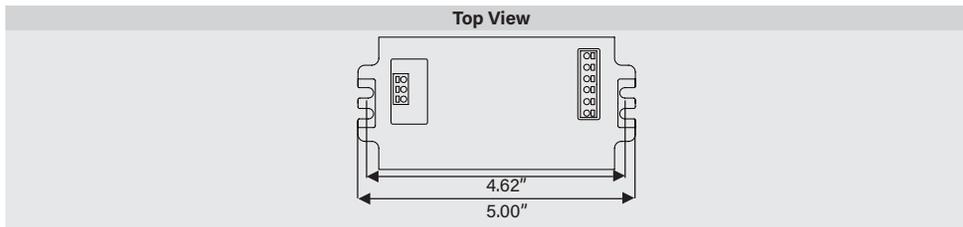
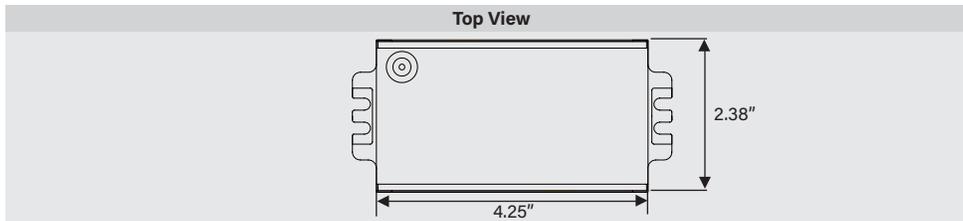
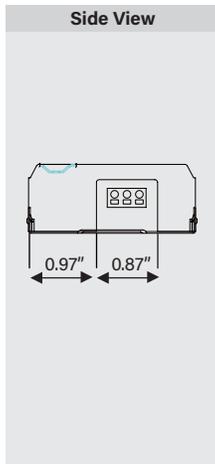
PHYSICAL SPECIFICATIONS



LENGTH	5.00"
WIDTH	2.38"
HEIGHT	1.00"
MOUNTING	4.62"
CASE STYLE	W1
CASE MATERIAL	Metal

WIRING SPECIFICATIONS

INPUT	Terminal Block
OUTPUT	Terminal Block
DIMMING	Terminal Block



Wiring

Ground			VO (-): LED load, negative (-)BTIN
Neutral			VO (+): LED load, positive (+)
Live			PRG/BTIN: For programming and bluetooth accessories
			Aux 12Vdc (+): Auxiliary 12Vdc output, positive (+) accessories
			RTN: Dimming and auxiliary output, negative (-) accessories
			Dimming (+): Dimming, positive (+)

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-20°C/-4°F to 50°C/122°F
Storage Temperature	-40°C/-40°F to 85°C/185°F
Humidity	5% to 95%
MTBF	397,500 hours at 40°C ambient (~70°C Case temp)
Life Rating	85,000 hours at 120Vac input, 100% load and 60°C case temperature
Maximum Case Temperature	90°C
Maximum Case Temperature (tc) for 5-Year Warranty	75°C/167°F



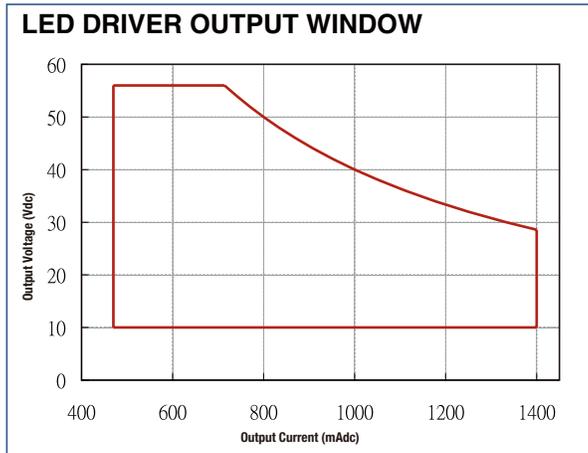
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SAFETY AND EMC COMPLIANCE

UL/cUL	UL 8750 Pending, UL1310 Class 2
CE	EN61347-1, EN61347-2-13
FCC, 47CFR Part 15	ANSI C63.4:2009 Class B (Consumer Limit)
EN61000-3-2	Harmonic Current Emissions Class C

LED DRIVER OUTPUT WINDOW



Note: Driver is in Constant Power mode from 700mA to 1400mA.

ORDERING INFORMATION

Order Code	Packaging Style	Pack Quantity	Item Status
KTLD-40-UV-SC1400-56-VDIM-W1 /USB	Carton Pack	50	Quick Ship

CATALOG NUMBER BREAKDOWN

KTLD-40-UV-SC1400-56-VDIM-W1 /USB

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9

- 1** Keystone Technologies LED Driver
- 2** Max. Output Wattage
- 3** 120-277V Input
- 4** Smart Current
- 5** Max. Output Current
- 6** Max. Output Voltage
- 7** 0-10V Dimming
- 8** Case Style
- 9** USB Port