



KTLD-20-UV-SC730-56-VDIM-AF4 /USB

CONSTANT POWER PROGRAMMABLE LED DRIVER

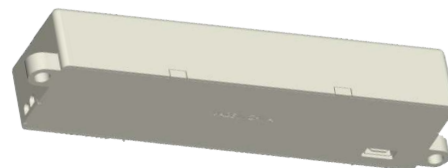
DESCRIPTION

LED Driver | 20W | 120–277V Input | 200–730mA Programmable Output Current



10 YEAR
LIMITED WARRANTY

TOTAL POWER: 20W	OUTPUT CURRENT: 200–730mA
INPUT VOLTAGE: 120–277Vac ±10%	DIMMING: 0–10V
INPUT FREQUENCY: 60 Hz	WARRANTY: 10 Year Limited



PRODUCT FEATURES

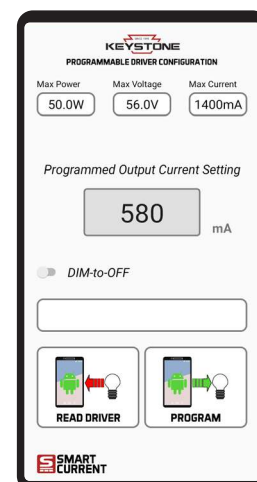
- Built in USB-C Port for easy programming
- Meets FCC Part 15 (Class B) consumer limits
- Short circuit overload and open load protection
- Dimmable with 0–10V dimmer (down to 1% at max. output current)
- THD: < 20%
- –40°C/–40°F to 50°C/122°F operating temperature
- 90°C/194°F maximum case temperature
- Input frequency: 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 (0.8V, 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 ±10%
Frequency	60 Hz
Power Factor	>0.9 under 120Vac 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	0.23A @120V
THD	<20% under 120Vac input with 80~100% load condition (for all output currents)
Load Regulation	± 2%
Line Regulation	± 1%
Output Tolerance	± 5% at full load condition
Turn-On Delay Time	<0.75 seconds at full load condition
Overshoot	<10% at full load condition
No Load Power Consumption	<1W
Ripple and Noise (pk-pk)	<3%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	Maximum 0.5mA at 120Vac, 60Hz input
Protection	<ul style="list-style-type: none"> • Over Voltage Protection: Hiccup mode. Protection will trigger when load voltage exceeds specified output voltage and will auto recover after the fault mode is removed. • Over Current Protection: Hiccup mode. Protection will trigger when load current exceeds 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 overheats and auto-recovery when cooled down.



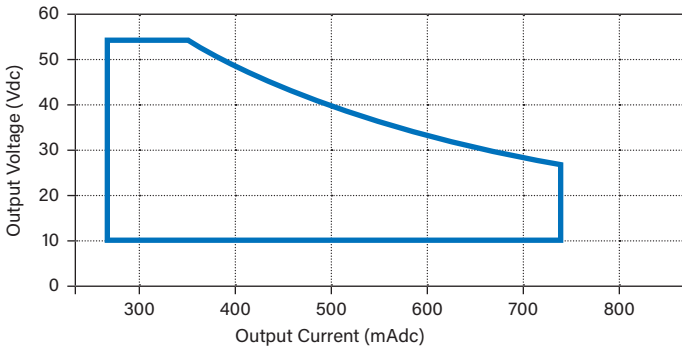
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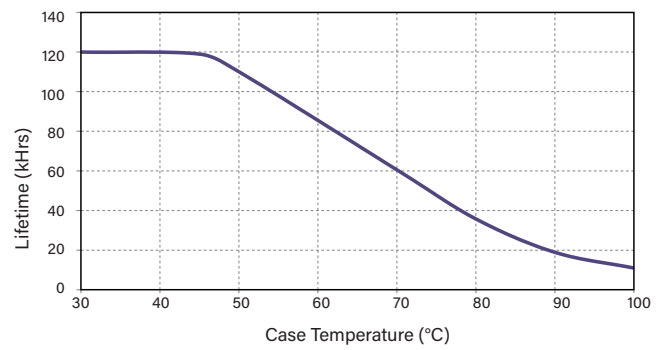
PRODUCT SPECIFICATIONS

Max. Output Power	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Typical Efficiency at 240V	Typical Efficiency at 277V	Remote Mounting Distance (#22 AWG)	Class 2	
								US	Canada
20W	200-730mA	10-56V	60V	86%	87%	87%	20 ft.	✓	

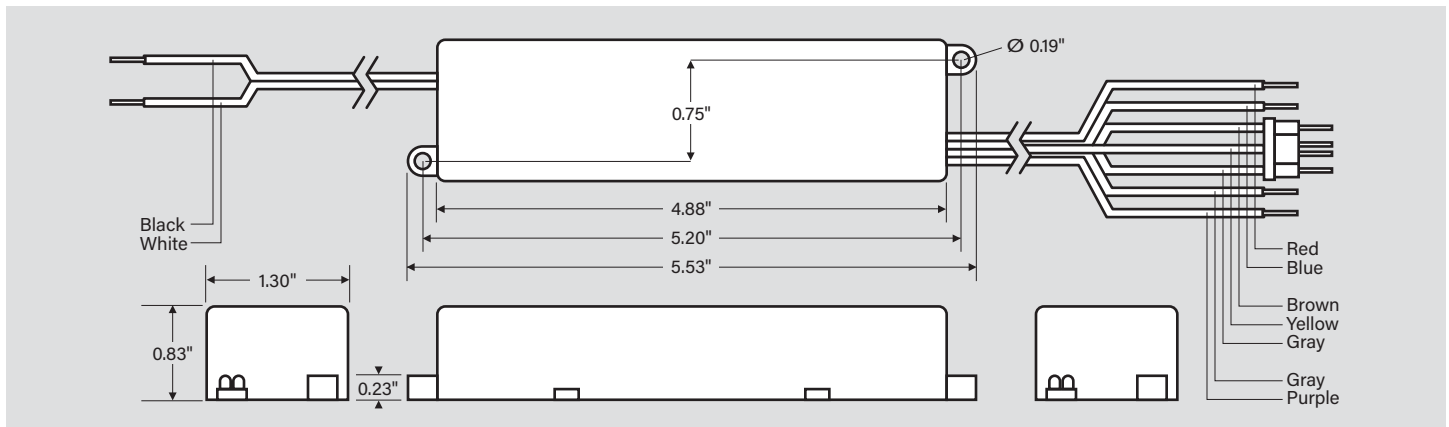
OUTPUT VOLTAGE VS. OUTPUT CURRENT



LIFETIME VS CASE TEMPERATURE



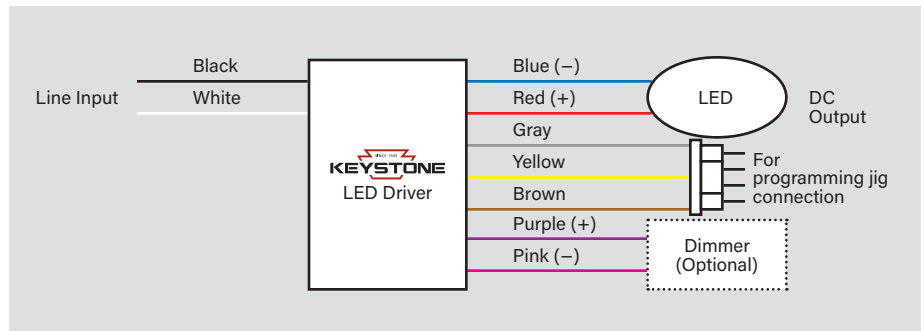
PHYSICAL SPECIFICATIONS



WIRING SPECIFICATIONS

Input	Black	12.00", UL 1569 #18AWG
	White	12.00", UL 1569 #18AWG
Output	Blue	12.00", UL 1316/1430 #22AWG
	Red	12.00", UL 1316/1430 #22AWG
Programming	Gray	12.00", UL 1316/1430 #22AWG
	Yellow	12.00", UL 1316/1430 #22AWG
	Brown	12.00", UL 1316/1430 #22AWG
Dimming	Purple	12.00", UL 1316/1430 #22AWG
	Gray	12.00", UL 1316/1430 #22AWG

WIRING DIAGRAM





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ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-40°C/-40°F to 50°C/122°F
Storage Temperature	-40°C/-40°F to 85°C/185°F
Humidity	5% to 95%
MTBF	358,000 hrs at 40C ambient
Life Rating	85,000 hrs @ 120Vac, 100% Load
Maximum Case Temperature	90°C/194°F
Maximum Case Temperature (tc) for 5-Year Warranty	75°C/167°F

SAFETY AND EMC COMPLIANCE

UL/cUL	UL 8750, 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

ORDERING INFORMATION

ORDER CODE	PACK QUANTITY	UPC	EASY CODE
KTLD-20-UV-SC730-56-VDIM-AF4 /USB	40	843654140810	TER-37

CATALOG NUMBER BREAKDOWN

KTLD-20-UV-SC730-56-VDIM-AF4 /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