KTLD-100-UV-SC3000-56-VDIM-U4 /USB
CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver **|** 100W **|** 120–277V Input **|** 1500–3000mA Programmable Output Current

|			
TOTAL POWER: 100W		**OUTPUT CURRENT:** 1500–3000mA	
INPUT VOLTAGE: 120–277Vac ±10%		**DIMMING:** 0–10V	
INPUT FREQUENCY: 50/60 Hz		**WARRANTY:** 5 Years	

PRODUCT FEATURES

- Built in USB-C Port for easy programing
- 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%

- -40ºC/–40ºF to 50ºC/122ºF operating temperature
- 90ºC/194ºF maximum case temperature
- Input frequency: 50/60 Hz
- Programmable output current via USB-C cable and an Android device (plus Keystone app) or PC (plus Keystone software)

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 (75ºC/167ºF, 80ºC/176ºF, 85ºC/185ºF, or 90ºC/194ºF)

WHAT'S NEEDED?
A Smart Current Programmable LED Driver, USB-C Cable, and a computer or phone
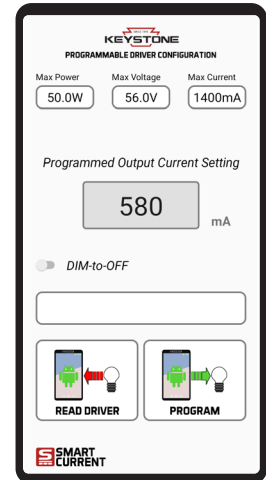
REQUIRED ACCESSORIES

Order Code	Description
KTLD-SC-USBC	USB-C to USB-C Cable

ELECTRICAL SPECIFICATIONS

Input Voltage Range	120–277Vac ±10%
Frequency	50/60 Hz
Power Factor	>0.9 under 120~277Vac Input with 80~100% load condition (for all output currents)
Inrush Current	TBD
Max. Input Current	TBD
THD	<20% under 120~277Vac 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	<2W
Ripple and Noise (pk–pk)	<3%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	Maximum 0.5mA at 277Vac, 60Hz input
Protection	• **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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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	TBD
Life Rating	85,000 hours at 120Vac input, 100% load and 60°C/140°F case temperature
Maximum Case Temperature	90°C/194°F

SAFETY AND EMC COMPLIANCE

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UL/cUL	UL 8750 pending
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

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	Class 2 Canada
100W	1500–3000mA	10–56V	60V	TBD	TBD	TBD	12 ft.	✓	

PHYSICAL SPECIFICATIONS
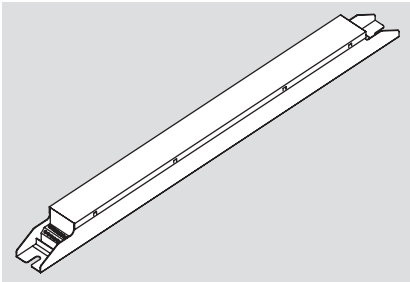
LENGTH	16.89"
WIDTH	1.18"
HEIGHT	1.00"
MOUNTING	16.02"
CASE STYLE	U4
CASE MATERIAL	Metal

TOP VIEW

16.89"　0.53"　16.02"

FRONT VIEW

16.89"

SIDE VIEW

1.18"　1"
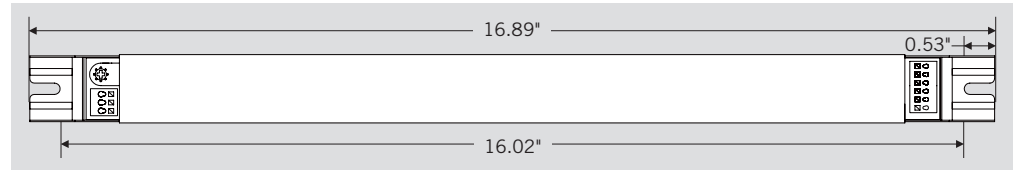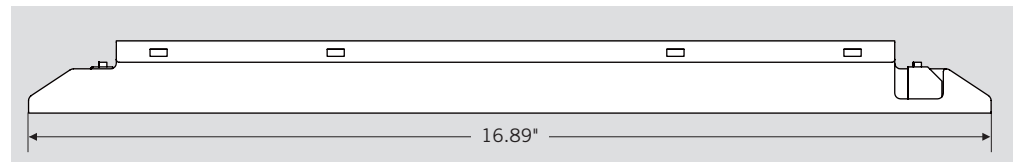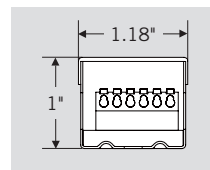
WIRING SPECIFICATIONS

|	
INPUT	Terminal Block
OUTPUT	Terminal Block
DIMMING	Terminal Block

Ground
Neutral
Live
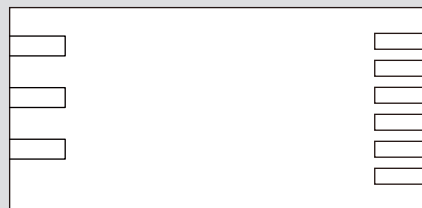
V0 (–): LED load, negative (–)
V0 (+): LED load, positive (+)
BTIN: For bluetooth module connection
Aux 12Vdc (+): Auxiliary 12Vdc output, positive (+)
RTN: Dimming and auxiliary output, negative (–)
Dimming (+): Dimming, positive (+)

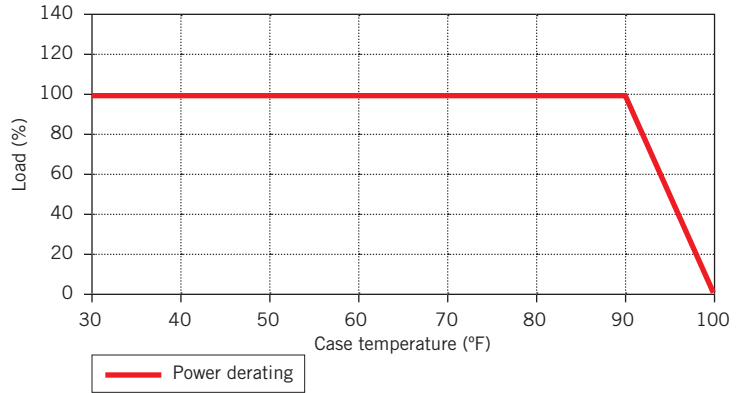# KTLD-100-UV-SC3000-56-VDIM-U4 /USB
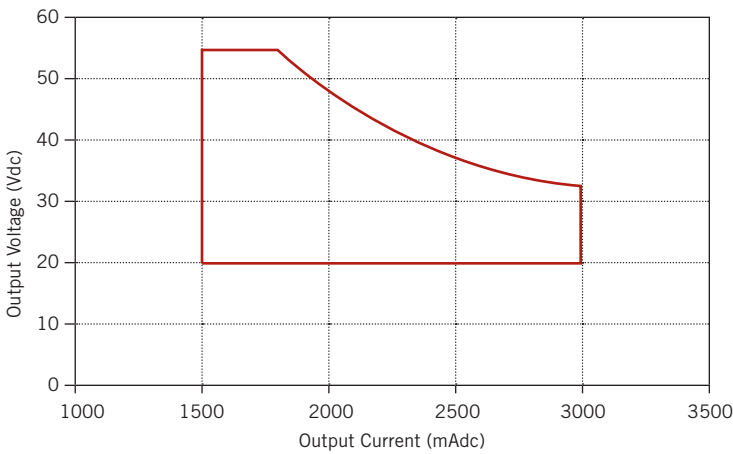## CONSTANT CURRENT PROGRAMMABLE LED DRIVER

LIFETIME VS CASE TEMPERATURE
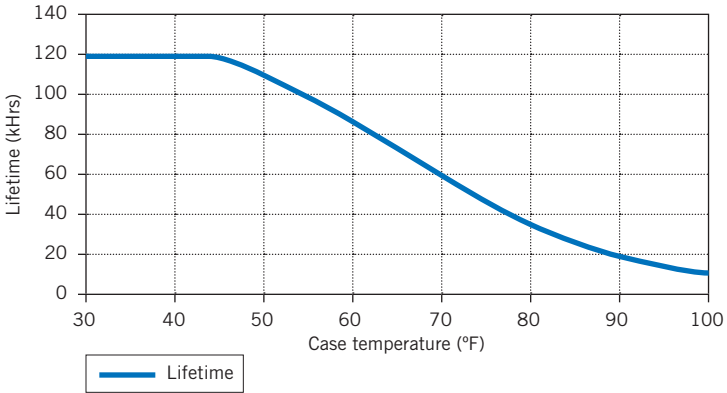
POWER DERATING VS CASE TEMPERATURE

LED DRIVER OUTPUT WINDOW

ORDERING INFORMATION

ORDER CODE	PACKAGING STYLE	PACK QUANTITY	ITEM STATUS
KTLD-100-UV-SC3000-56-VDIM-U4 /USB	Carton Pack	TBD	Quick Ship

CATALOG NUMBER BREAKDOWN

KTLD-100-UV-SC3000-56-VDIM-U4 /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

Keystone Technologies • Philadelphia, PA • Phone (800) 464-2680 • **www.keystonetech.com**

Specifications subject to change. Last revised on 03.05.21