



KTLD-30-UV-P1050-55-VDIM-XX-LT1

CONSTANT CURRENT PROGRAMMABLE LED DRIVER

DESCRIPTION

LED Driver | 30W | 120-277V Input | 105-1050mA Programmable Output Current

Class P 10 YEAR LIMITED WARRANTY

TOTAL POWER: 30W	OUTPUT CURRENT: 105-1050mA
INPUT VOLTAGE: 120-277Vac $\pm 10\%$	DIMMING: 0-10V
INPUT FREQUENCY: 50/60 Hz	WARRANTY: 10 year limited



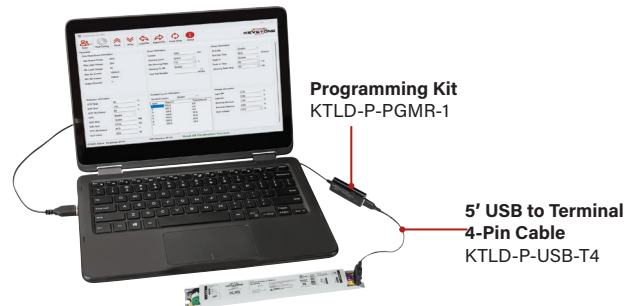
PRODUCT FEATURES

- Linear Form Factor, Metal Casing
- 0-10V Dimming, Compliant with ANSI C137.1
- True 1% Dimming over full Output Current Range
- Programmable Output in 1mA Increments
- Flicker Free, T24: JA8 & IEE1789 Compliant
- Programmable Settings via Keystone Programming Kit
- For Indoor Applications
- Class A Sound Rating
- Optional 12-24V Programmable Aux Power

PROGRAMMING FEATURES

WHAT'S NEEDED? The Programmable LED Driver, the Programming Kit, the Connection Cable, and a computer.

- Output Current Set Range: 105-1050 mA
- Minimum Output Current: 1.0 mA
- Minimum Dimming Level (1-10%, 0.5% Increments)
- Dimming Curve (Linear, Log, Square)
- Dim to Off (Enable/Disable)
- Luminous Decay Compensation (Enable/Disable)
- End of Life Feedback (Enable/Disable)
- Thermal Foldback Temperature Selection



ELECTRICAL SPECIFICATIONS

Input Voltage Range	120-277Vac $\pm 10\%$
Frequency	50/60 Hz
Power Factor	>0.95 at 35-100% Load (Vin @ 120Vac), >0.90 at 30-100% Load (Vin @ 277Vac)
Inrush Current	12.2 A _{peak} , i ² t = 0.028 A ² s @ 120V, 31.2 A _{peak} , i ² t = 0.175 A ² s @ 277V
Max. Input Current	<0.35A (Vin @ 120Vac), <0.15A (Vin @ 277 Vac)
THD	<20% at 35-100% Load, Vin @ 120-277Vac
Load Regulation	$\pm 5\%$
Line Regulation	$\pm 3\%$
Output Tolerance	$\pm 5\%$ at Full Load Condition
Turn-On Delay Time	< 0.5 seconds, 300-1050 mA, Cold Start
Overshoot	< 10% at Full Load Condition
No Load Power Consumption	< 1.5W
Ripple and Noise (pk-pk)	< 10%
Withstand Voltage	Input to output, 2,800Vdc, 2mA
Leakage Current	<0.75mA, Vin @ 277VAC, 60Hz
Protection	• 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.
Surge Rating	2.5kV, ANSI/IEEE C62.41
Dimming Sink Current	200uA



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PRODUCT SPECIFICATIONS

Max. Output Power	Output Current	Output Voltage	OCV	Typical Efficiency at 120V	Typical Efficiency at 277V	Remote Mounting Distance (#18 AWG)	Class 2	
							US	Canada
30W	105-1050mA	8-55V	60V	86%	86%	35 ft.	✓	✓

OPTIONAL AUX POWER SPECIFICATIONS

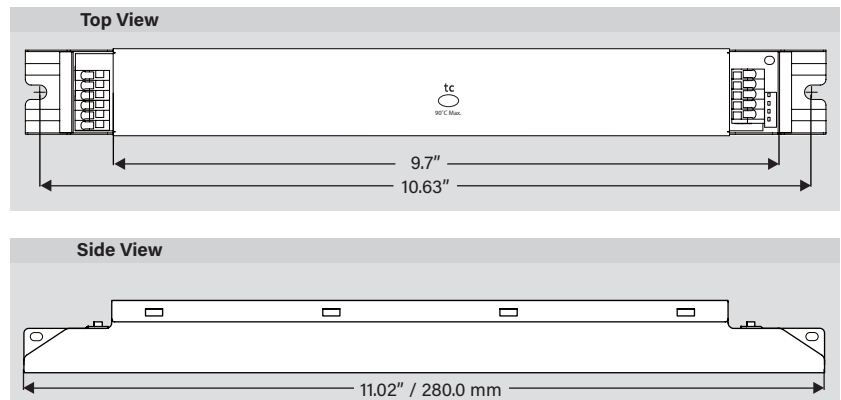
Max. Output Power	Voltage Range
1W	12-24V Programmable

WIRING SPECIFICATIONS

INPUT	Terminal Block
OUTPUT	Terminal Block
DIMMING	Terminal Block

PHYSICAL SPECIFICATIONS

	LENGTH	11.02"
	WIDTH	1.18"
	HEIGHT	0.83"
	MOUNTING	10.63"
	CASE STYLE	LT1
	CASE MATERIAL	Metal



Wiring Diagram

KTLD-30-UV-P1050-55-VDIM-LT1 (without AUX)

Black: Line	Red: LED (+) LED load, positive
Black: Line	Blue: LED (-) LED load, negative
White: Neutral	Purple: DIM (+) Dimming, positive
White: Neutral	Pink: DIM (-) Dimming, negative
Green: Ground	Yellow: NC No Connection
Green: Ground	

KTLD-30-UV-P1050-55-VDIM-CR-LT1 (with AUX)

Black: Line	Red: LED (+) LED load, positive
Black: Line	Blue: LED (-) LED load, negative
White: Neutral	Purple: DIM (+) Dimming, positive
White: Neutral	Pink: DIM (-) / AUX (-) Dimming & AUX, negative
Green: Ground	Yellow: AUX (+) AUX, positive
Green: Ground	

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature	-30°C/-22°F to +50°C/122°F
Storage Temperature	-40°C/-40°F to 85°C/185°F
Humidity	5% to 95% RH
MTBF	> 200,000 Hours, Full Load at 25 C / 77 F Ambient Temperature
Life Rating	>50,000 Hours, Full Load at 80 C / 176 F Case Temperature
Maximum Case Temperature	90°C/194°F
Maximum Case Temperature (tc) for 5-Year Warranty	80°C/176°F

SAFETY AND EMC COMPLIANCE

UL/cUL	UL 8750 Class P CAN/CSA-C22.2 No. 250.13
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

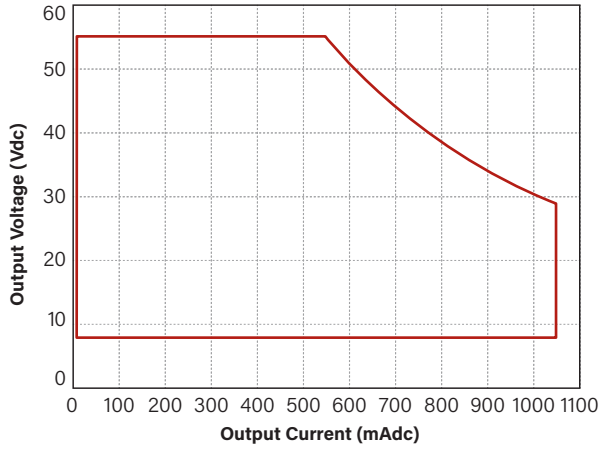


SMART CURRENT
FLEX

KTLD-30-UV-P1050-55-VDIM-XX-LT1

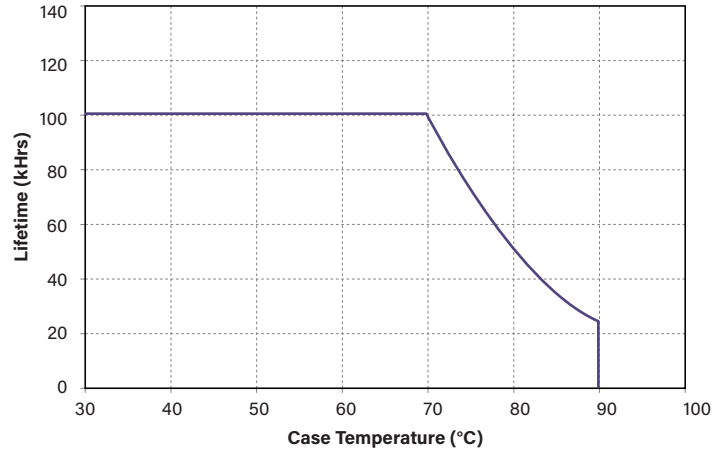
CONSTANT CURRENT PROGRAMMABLE LED DRIVER

LED DRIVER OUTPUT WINDOW

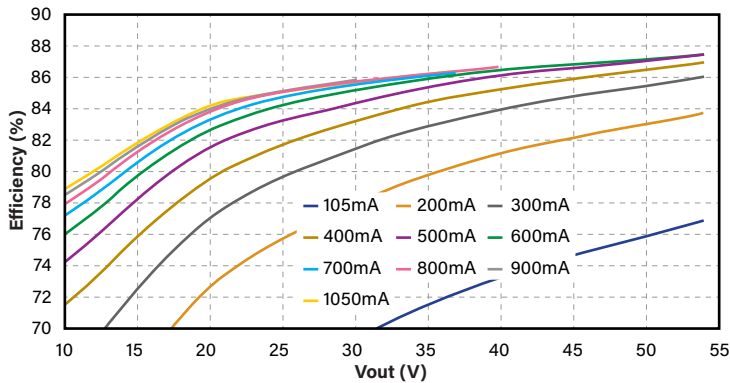


Note: Driver is in Constant Power mode from 545mA to 1050mA.

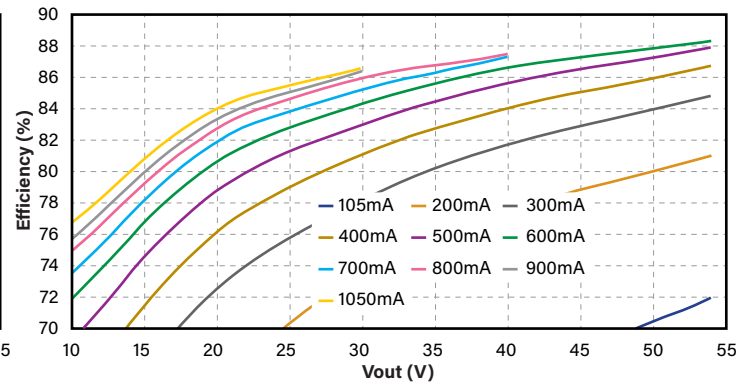
LIFETIME VS CASE TEMPERATURE



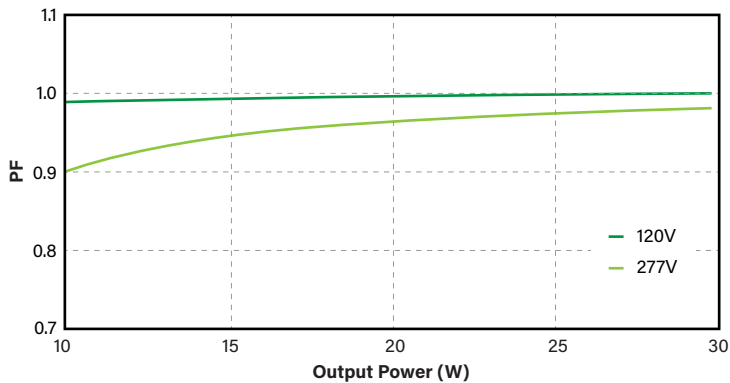
EFFICIENCY (120V)



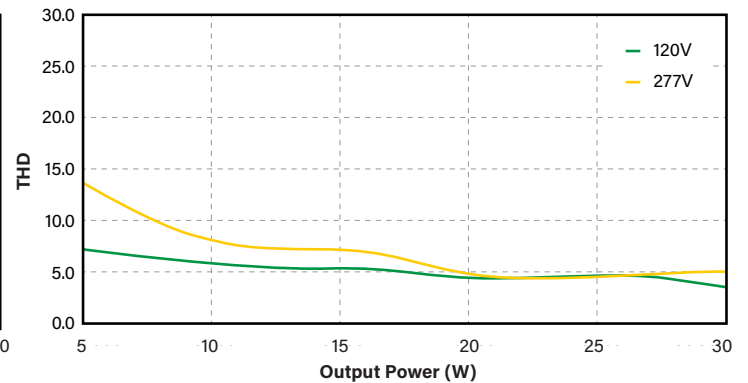
EFFICIENCY (277V)



POWER FACTOR vs OUTPUT POWER



THD vs OUTPUT POWER





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ORDERING INFORMATION

Order Code	Packaging Style	Pack Quantity	Item Status	UPC	EASY CODE
KTLD-30-UV-P1050-55-VDIM-LT1	Carton Pack	63	Quick Ship	843654108797	SPX-98
KTLD-30-UV-P1050-55-VDIM-CR-LT1	Carton Pack	63	Quick Ship	843654159041	VXT-42

CATALOG NUMBER BREAKDOWN

KTLD-30-UV-P1050-55-VDIM-XX-LT1

1 2 3 4 5 6 7 8 9

1 Keystone Technologies LED Driver

2 Max. Output Wattage

3 120-277V Input

4 Programmable

5 Max. Output Current

6 Max. Output Voltage

7 0-10V Dimming

8 Aux Power

9 Case Style

8 Aux

	No Aux
CR	Aux