

T-Grid Driver

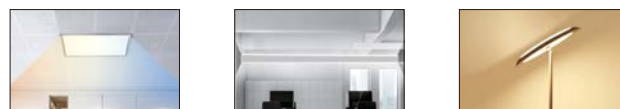
TGL Driver is an isolated constant current driver with three independent outputs, each delivers 10W or 20W. Adopting 0-10V signals controls three currents, with full voltage input. The metal casing has a good heat dissipation, which greatly improves the reliability of the product and extends its lifetime. Overvoltage protection, short circuit protection, and over temperature protection ensure the stability of this product.

Product Features:

- Isolated constant current driver
- Three independent outputs
- All-Round Protection: SCP, OVP, OTP
- Deeply dim down to 1% , No flicker



CE RoHS



*Suitable for panel lights, linear lights, floor lamps and other slim LED lights with narrow spaces.

Electrical Performance

Model No.	TGL30W-Driver(D10%) / TGL60W-Driver(D10%)	
Input performance	Input Voltage	120-277Vac
	Input Frequency	50/60Hz
	Efficiency	84.7% / 86.7% @ 120Vac Full Load
		85% / 87.7% @ 230Vac Full Load
		85% / 87.6% @ 277Vac Full Load
	Power Factor	≥ 0.9 @ 120Vac/60Hz (30-100 %)
		≥ 0.9 @ 230Vac/50Hz (100 %)
		≥ 0.9 @ 277Vac/60Hz (100 %)
	THD@Full Load	<10 % @ 120Vac (30-100 %)
		<20 % @ 230Vac (100 %)
		<20 % @ 277Vac (100 %)
Output performance	Input Current	0.61A @ 120Vac Full Load
		0.32A @ 230Vac Full Load
		0.26A @ 277Vac Full Load
	Standby Power	<1W
	Inrush Current	120V 20A peak, 500us duration (10% Ipeak)
		230V 25A peak, 600us duration (10% Ipeak)
		277V 35A peak, 800us duration (10% Ipeak)
	Leakage Current	<0.5mA @ 277V
Functionality	Voltage /Current /Wattage	30-40Vdc/520mA*3/60W
	Ripple Current	<5%
	Channel	3 Channel
	Current Accuracy	±5%
	Open Circuit Voltage	<50V
	Start Up Time	<0.5S @ 277V <1S @ 120V
Protection	Dimming Function	0-10V 0.5V off / 0.7V on
	Dimming Current	<1mA @ 10V <2mA @ 0.7V
	Dimming Range	1%-100%
Protection	Over Temperature	Automatic recovery
	Overloaded	Automatic recovery
	Short Circuit Protection	Automatic recovery

Size and Weight

Length	240 mm
Width	43mm
Height	31 mm
Locating Hole Distance	228mm
Weight	430g / 460g

Environment

Safety Compliance	UL8750
EMC	Comply with FCC part15
Operating Temperature	-20°C to 50°C
Storage Temperature/Humidity	-20°C to 85°C , 20-90%RH
Storage Temperature/Humidity	TC=90°C
Lifetime	50000hours @ TC:85°C
Surge Rating	L-N 1KV , L/N-FG 2KV
IP Grade	IP20
Material	Iron Casing

Supplementary explanation

LED driver is a component of whole lamp in conjunction with the use of terminal equipment, EMC performance due to the impact of LED lighting and wiring, terminal equipment manufacturers need to re-confirm the entire device EMC

Model List:

Model No.	Output Power	Input Voltage	Output Voltage	Output Current	Power Factor	Power Accuracy	CCT	Efficiency
TGL30W-Driver(D10%)	30W	100-277Vac	30-42Vdc	260mA*3	0.9	/	/	85.0%
TGL60W-Driver(D10%)	60W	100-277Vac	30-42Vdc	520mA*3	0.9	/	/	87.6%

T-Grid Drvier

Basic Electrical Parameter:

30V/260mA											
Input Voltage (V)	PI(W)	Power Factor	THD(%)	Output Voltage (V1)	Output Current (mA1)	Output Voltage (V2)	Output Current (mA2)	Output Voltage (V3)	Output Current (mA3)	Efficiency	Open Circuit Voltage (V)
100V	29.1	0.997	4.0	30.2	260	30.5	257	30.3	262	80.7	45.6
120V	28.8	0.995	4.2	30.1	260	30.1	258	30.1	262	80.9	45.6
180V	28.5	0.981	6.0	30.1	260	29.8	257	29.7	262	81.4	45.6
230V	28.4	0.954	11.6	30.1	260	29.7	258	29.6	262	81.3	45.6
277V	28.4	0.919	14.2	29.9	260	29.6	258	29.5	262	80.9	45.6

36V/260mA											
Input Voltage (V)	PI(W)	Power Factor	THD(%)	Output Voltage (V1)	Output Current (mA1)	Output Voltage (V2)	Output Current (mA2)	Output Voltage (V3)	Output Current (mA3)	Efficiency	Open Circuit Voltage (V)
100V	34.2	0.997	4.8	36.1	260	36.5	257	36.6	262	82.7	45.5
120V	34.1	0.996	3.8	36.1	260	36.5	257	36.6	262	82.9	45.5
180V	33.9	0.985	6.6	36.1	260	36.5	258	36.4	262	83.4	45.5
230V	33.9	0.968	7.5	36.0	260	36.5	258	36.2	262	83.4	45.5
277V	33.9	0.939	13.8	36.0	260	36.5	258	36.1	262	83.5	45.5

40V/260mA											
Input Voltage (V)	PI(W)	Power Factor	THD(%)	Output Voltage (V1)	Output Current (mA1)	Output Voltage (V2)	Output Current (mA2)	Output Voltage (V3)	Output Current (mA3)	Efficiency	Open Circuit Voltage (V)
100V	37.6	0.999	3.4	40.4	262	40.1	260	40.6	262	84.0	45.5
120V	37.4	0.996	4.1	40.4	262	40.1	260	40.6	262	84.7	45.5
180V	37.2	0.988	5.6	40.4	262	40.0	260	40.6	262	85.0	45.5
230V	37.1	0.966	9.6	40.4	262	40.0	261	40.6	262	85.0	45.5
277V	37.1	0.940	13.3	40.4	262	40.0	261	40.6	262	85.0	45.5

Starting voltage (V) 0.7 on	Shut-off voltage (V) 0.5 off	Dimming min. current (mA) 3
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30V/520mA											
Input Voltage (V)	PI(W)	Power Factor	THD(%)	Output Voltage (V1)	Output Current (mA1)	Output Voltage (V2)	Output Current (mA2)	Output Voltage (V3)	Output Current (mA3)	Efficiency	Open Circuit Voltage (V)
100V	56.3	0.995	6.8	30.3	519	30.5	515	30.4	522	83.8	42.4
120V	55.5	0.994	4.6	30.1	519	30.3	515	30.2	523	84.6	42.4
180V	54.7	0.982	6.3	30.1	519	30.2	515	30.0	523	85.7	42.4
230V	54.4	0.961	8.1	30.0	519	30.0	515	29.9	523	85.8	42.4
277V	54.3	0.933	11.4	29.9	519	29.9	515	29.8	523	85.6	42.4

36V/520mA											
Input Voltage (V)	PI(W)	Power Factor	THD(%)	Output Voltage (V1)	Output Current (mA1)	Output Voltage (V2)	Output Current (mA2)	Output Voltage (V3)	Output Current (mA3)	Efficiency	Open Circuit Voltage (V)
100V	67.4	0.994	8.4	36.8	519	36.7	515	36.2	523	84.4	42.4
120V	66.8	0.994	7.6	36.8	519	36.7	516	36.6	523	85.4	42.4
180V	65.8	0.986	4.2	36.8	519	36.7	516	36.3	524	86.6	42.4
230V	65.5	0.971	6.8	36.8	519	36.7	515	36.2	524	86.9	42.4
277V	65.6	0.949	10.0	36.8	519	36.7	515	36.2	523	85.2	42.4

40V/520mA											
Input Voltage (V)	PI(W)	Power Factor	THD(%)	Output Voltage (V1)	Output Current (mA1)	Output Voltage (V2)	Output Current (mA2)	Output Voltage (V3)	Output Current (mA3)	Efficiency	Open Circuit Voltage (V)
100V	74.1	0.999	8.5	40.5	524	40.4	515	40.5	522	85.2	42.4
120V	72.8	0.999	7.8	40.2	524	40.6	518	40.5	522	86.7	42.4
180V	72.0	0.980	5.9	40.1	524	40.5	518	40.4	523	87.5	42.4
230V	71.7	0.971	10.6	40.1	524	40.1	518	40.4	523	87.7	42.4
277V	71.8	0.951	14.9	40.1	524	40.4	518	40.4	523	87.6	42.4

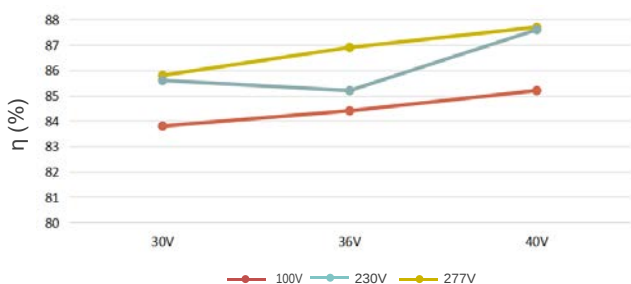
Starting voltage (V) 0.7 on	Shut-off voltage (V) 0.5 off	Dimming min. current (mA) 7
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T-Grid Driver

Typical Curve:

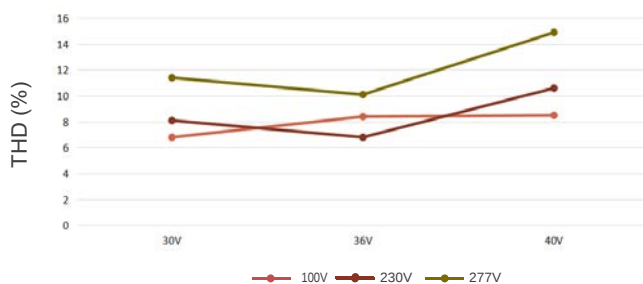
Test conditions: The following test curves are based on 3 groups of channels outputting 260mA current simultaneously.

THD vs. Output Voltage



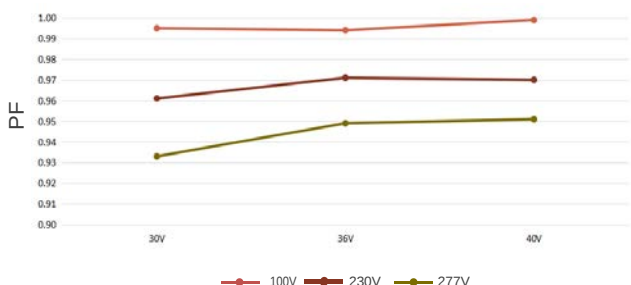
Input Voltage (Vac)

THD vs. Load



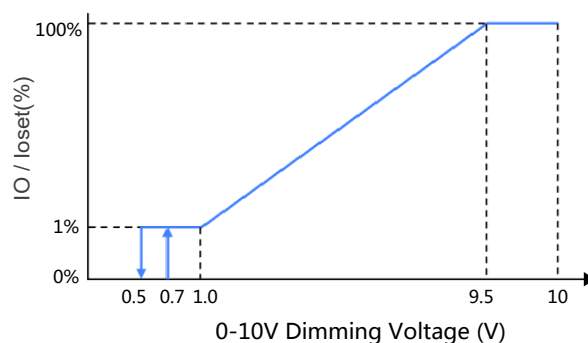
Input Voltage (Vac)

PF vs. Load



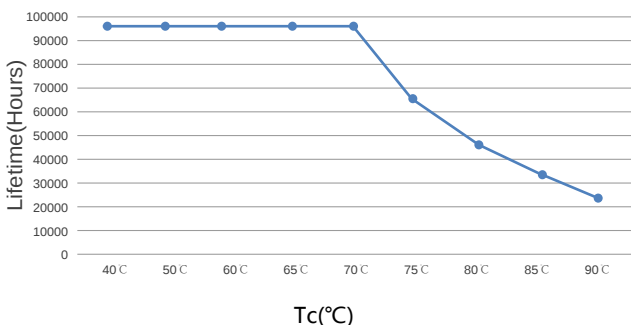
Input Voltage (Vac)

Output current vs. Dimming Voltage



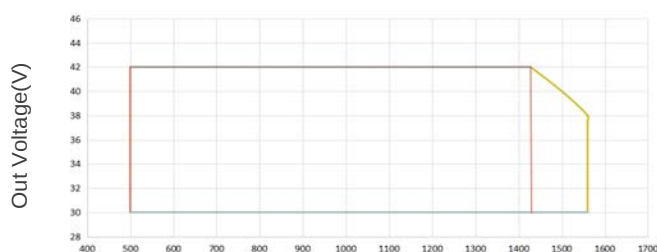
0-10V Dimming Voltage (V)

Lifetime vs. Tc.



Tc(°C)

Output Voltage vs. Output Current



Out Current(mA)

Note: Within the output voltage range, the maximum output power does not exceed 30W.

Labeling:

208mm

37mm

INPUT

- ⊕
- AC-N
- AC-L

22-16AWG

18-9mm

Smart Driver for LED Luminaires

TGL60W-Driver(D10%)

Input Voltage: 100-277VAC 50/60Hz

Input Current: 0.7A Max

Power Factor: ≥0.9

Output Voltage: 30-42VDC

Output Current: LED1 520mA ±5%

LED2 520mA ±5%

LED3 520mA ±5%

DIMMING: 0-10V

MADE IN CHINA

RoHS

UL

Flicker Free

Maximum Output Power: 60Watts

Suitable for Dry and Damp Locations

Control Mode: Tunable White / 0-10V/PWM

Dimming

OUTPUT

V1 -	○
V1 +	○
V2 -	○
V2 +	○
V3 -	○
V3 +	○
10V +	○
GND	○

Warning! Please wiring correctly otherwise will damage the power supply!

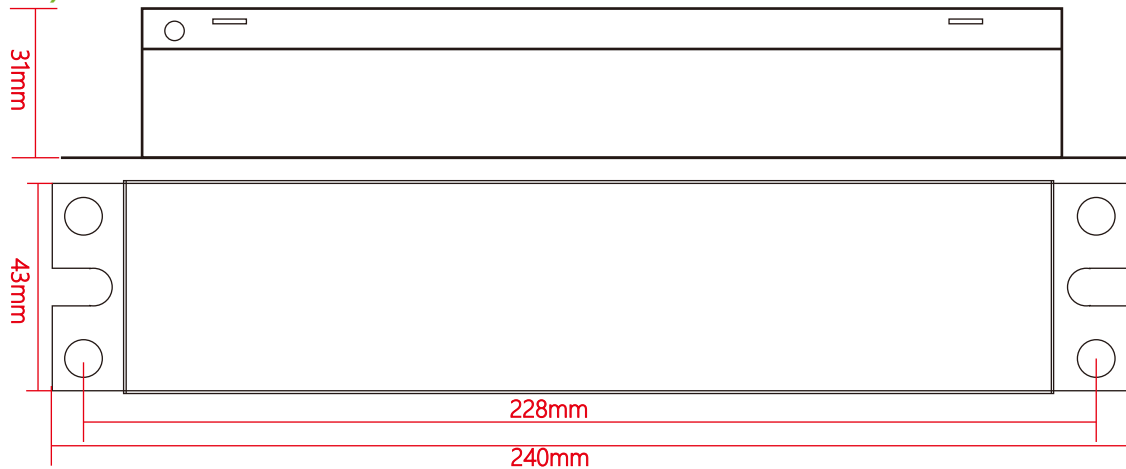
22-16AWG

18-9mm

Date: 2024.03

T-Grid Driever

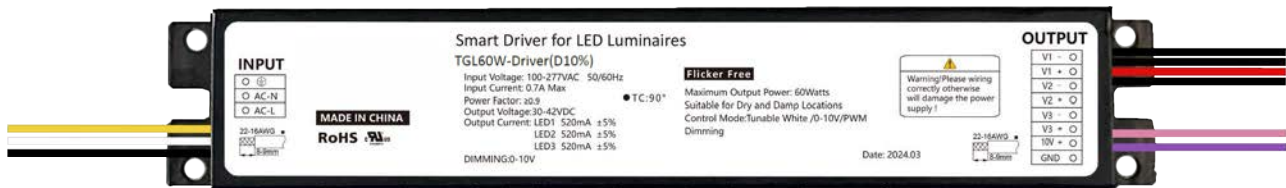
Dimension(mm):



Grounding:

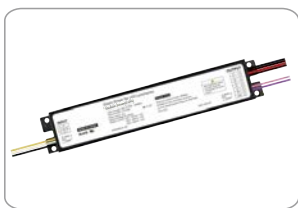
Complied Grounging Conductor: 18# 105°C 600V

Complied Grounging Conductor:
Black/Red 20# 105°C 300V
Pink/Purple 22# 80°C 300V

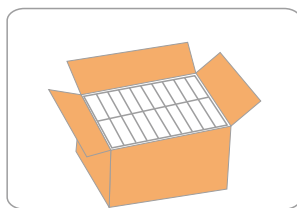


The output can be connected to three independent groups of lamp beads, V1+/V2+/V3+ are the common positive electrode, V1-/V2-/V3- There are three independent negative poles, DIM is connected to the 0-10V positive pole, and GND is connected to the 0-10V negative pole.

Packaging:



LED DRIVER



PCS* LAYER= PCS/ CARTON

Packing Dimension		
Length	Width	Height
350MM	320MM	240MM
50PCS 1CTN/WEIGHT≈24KG		

Precautions:

1. Two power supply outputs cannot be connected in parallel, otherwise the power supply will be damaged.
2. Programming requires factory operation.
3. This product is not waterproof and needs to be protected from sunlight and rain. If installed outdoors, please use a waterproof box.
4. Good heat dissipation conditions extend product life. Please install the product in a well-ventilated environment.
5. This product should be debugged and installed by professionals with professional qualifications. Please do not repair it yourself.

※The contents of this manual are subject to update without prior notice. If the function of the product you are using is inconsistent with the instruction manual, please refer to the function of the product. If you have any questions, please contact us.