

Product description



Isolated LED driver designed for class II light fixtures.

Category: 0-10V/PWM/Rx dimming, plastic casing

Product properties: active PFC, high PF, high efficiency, low THD

Application: commercial lighting, residential lighting and decorative lighting.

Warranty: 5 years (please refer to the warranty condition).

Certificate:



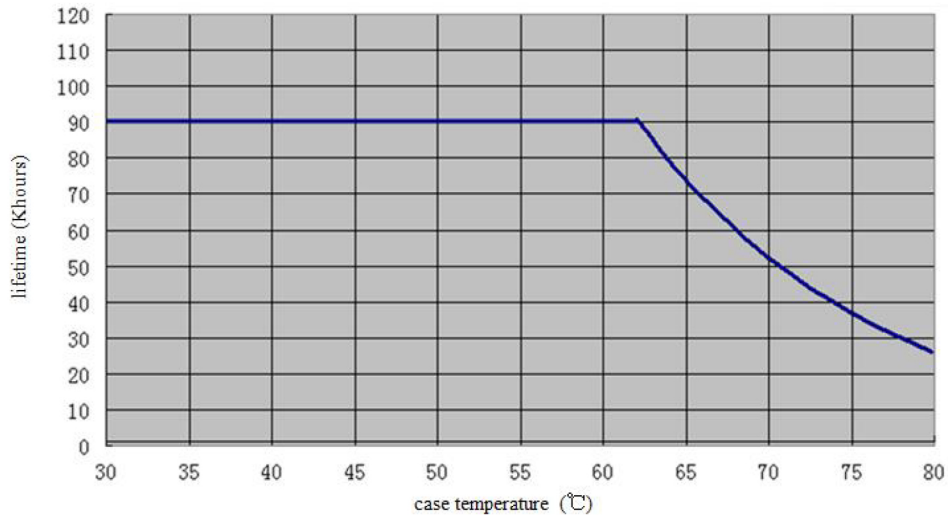
Technical data

Output	Output voltage	27-42 VDC
	Output current	1000mA
	Ripple current	< 400mA
	Ripple voltage	< 4.2V
	Current tolerance	±5%
	Time to light	100Vac<1S 230Vac <0.5S 277ac <0.5S
	Temperature drift	±10%
	Output Line regulation	±5%
Input	Input Line regulation	±5%
	Rated input voltage	100-240 Vac, 277 Vac (Max input voltage: 90-305Vac)
	Frequency	47Hz-63Hz
	Input current	0.6A Max
	Power factor	≥0.98/100Vac
		≥0.95/230Vac
		≥0.90/277Vac
	THD	≤20%
	Efficiency	≥84%/100Vac
		≥86%/230Vac
≥85%/277Vac		
In-rush current	I<60A/300uS@230Vac	
Typical stand-by power consumption	Pin<1W	
Protective Features	No-load	Max. output voltage (no-load voltage) 55V
	Short-circuit	Hiccup mode (auto-recovery)

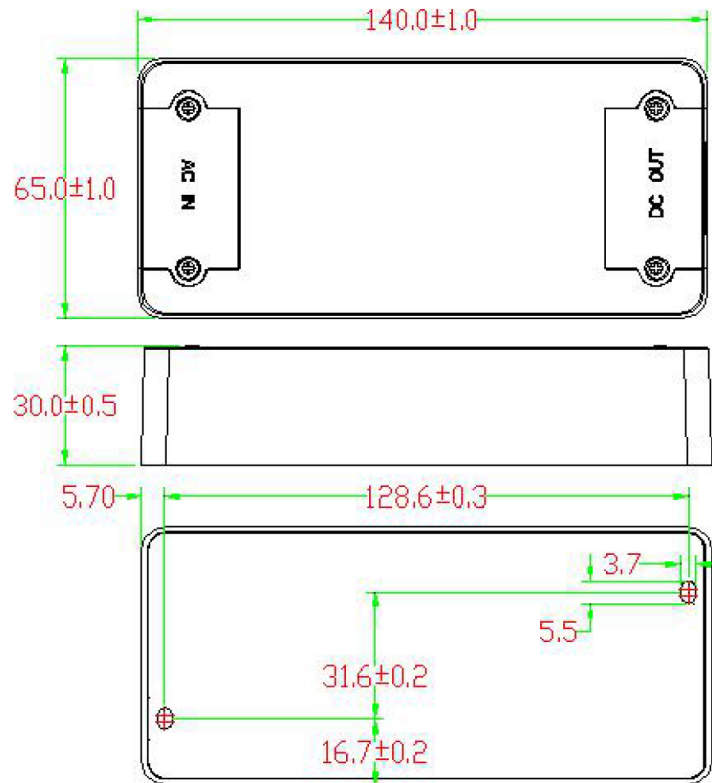
Environment Condition	Working temperature	-30℃ - +50℃
	Working humidity	20-90%RH (no condensation)
	Storage temperature/humidity	-40℃ ~ +80℃ (6 months under the class I environment); 10-90%RH (no condensation)
	Atmospheric pressure	86-106KPa
Safety & Norms	Certificate	ENEC, CE, CB, RCM
	Hi-pot test	I/P-O/P: 4KVac, <5mA, 60S
	Insulation resistance	I/P-O/P: 500VAC, >100MΩ
	Surge rating	Comply with IEC61000-4-5(L/N: 1KV)
	EMI	Comply with EN55015, EN61000-3-2.
	EMS	Comply with EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547.
Others	Packing (weight)	Net weight: 185g±5%/pc; 30pcs/carton; 6.5KG±5%/carton. Carton size: 39 x 29 x 21 cm (L xWxH).
	IP rating	IP20
	Warranty condition	5 years (Max. case temperature must not exceed 70℃).
Test Equipment	AC power source: CHROMA6530, digital power meter: CHROMA66202, Oscilloscope: Tektronix DPO3014, DC electronic load: M9712B, LED board, constant temperature and humidity chamber, lightning surge generator: Everfine EMS61000-5B, rapid group pulse generator: Everfine EMS61000-4A, spectrum analyzer: KH3935, hi-pot tester: TH9201B, stroboscope (flicker index tester) 60N-01, etc.	
Test Condition	Unless otherwise stated, the electrical parameters above, including the power factor, THD and efficiency, are tested under the ambient temperature 25℃ and humidity 50%, input 230Vac and 90% load.	
Additional Remark	<ol style="list-style-type: none"> 1. It is recommended that customer should install protection devices for surge, for overvoltage and for undervoltage to ensure safety before connecting to electricity. 2. The PC cover, casing, end caps and other parts of the LED driver inside the LED light fixture must conform to UL94-V0 flammability standard or above. 3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED luminaire. The structure and the wiring of the light fixture are also relevant. Thus it's strongly recommended the LED light fixture manufacturer re-confirms the EMC of the whole LED light fixture. 	

Lifetime Curve

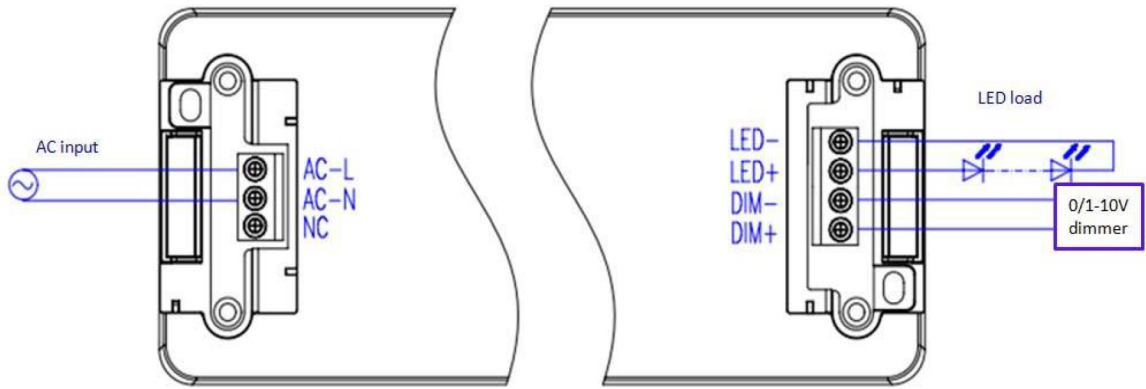
The curve below illustrates the driver's lifetime data when its maximum casing temperature in an airtight space reaches 40°C, 50°C, 60°C, 70°C and 80°C.



Dimension (unit: mm)



Wiring Diagram



Dimming

1) 0-10V dimming, dimming range 10%~100% (the LED lights might flicker when the voltage signal is with the 0-1V range).

voltage signal	0	1	2	3	4	5	6	7	8	9	10	OPEN
output current percentage	3%	5%	10%	25%	40%	50%	60%	70%	80%	90%	100%	95%-105%

2) PWM dimming, dimming range 10~100%, the voltage amplitude is 10V and the frequency of PWM signal is 500Hz~5KHz.

PWM signal	0	1	2	3	4	5	6	7	8	9	10	OPEN
output current percentage	3%	5%	10%	25%	40%	50%	60%	70%	80%	90%	100%	95%-105%

3) Resistance dimming

Rx signal	0K	7.5K	8K	9K	10K	20K	30K	40K	50K	60K	70K	80K	90K	100K	OPEN
Current		49MA	63MA	77MA	94MA	236MA	348MA	438MA	548MA	685MA	769MA	896MA	900MA	900MA	901MA

Remark: the output current percentages above are typical values.