

Product Description

LF-GDE120YV012 is a 120W constant voltage 0-10V/PWM/Rx dimmable LED driver featuring high efficiency, low THD and flicker-free effect. Its rated input voltage ranges from 220 to 240Vac; output voltage: 12V; rated output current: 10A. It is suitable for indoor LED strip, etc.



Features

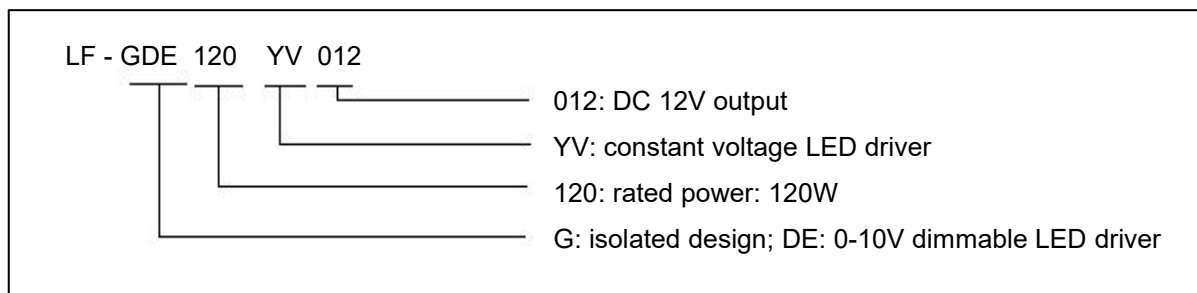
- 0-10V/PWM/Rx dimmable
- IP rating: IP20
- Suitable for Class II light fixtures
- Built-in active PFC function
- Standby power consumption <0.5W
- Dimming depth<0.5%
- Flicker free
- High efficiency (typical value ≥93%)
- All-round protections: over temperature, over voltage, over load and short circuit
- 5-year warranty (please refer to the warranty condition)



Applications

- LED strip
- Luminous character
- Light box

Product Naming



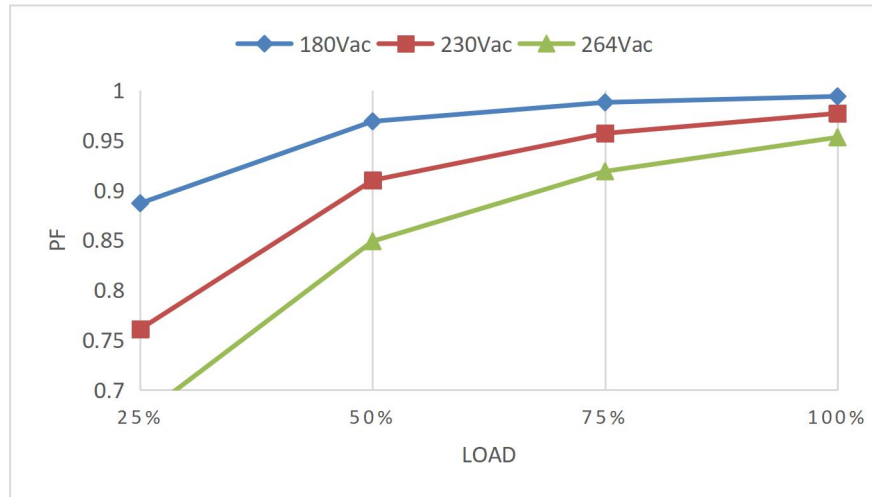
Electrical Characteristics

Model		LF-GDE120YV012				
Output	Output Voltage	12Vdc				
	Output Current	0-10A				
	Output Power	120W max. @220-240Vac				
	Flicker Index	IEC-Pst ≤1, CIE SVM ≤0.9, Modulation Depth≤1% Complies with flicker-free standard (IEEE Std1789-2015)				
	Ripple Voltage	200mV max.				
	Voltage Tolerance	±2%				
	Temperature Drift	±5%				
	Start-up Time	<1S@230Vac				
Input	Input Voltage	200-240Vac (voltage limit: 198-264Vac)				
	DC Input Voltage	282-340Vdc (voltage limit: 255-373Vdc)				
	Input Frequency	47Hz-63Hz				
	Input Current	1A max.				
	PF	≥0.95@230Vac (full load)				
	THD	≤10%@230Vac (full load)				
	Efficiency	≥93%@230Vac (full load)				
	Inrush Current	≤74A&220uS@230Vac				
	Loading Quantities of Circuit Breaker	Model	B10	C10	B16	C16
		Quantity(PCS)	5	6	8	10
	Leakage Current	≤0.7mA				
	Standby Power Consumption	≤1W@230Vac				
Protection Characteristics	Over Voltage	<18V				
	Over Temperature	The output will be shut off when LED driver is in over-temperature state (auto-recovery)				
	Short Circuit	Hiccup mode (auto-recovery)				
Environment Descriptions	Operating Temperature	-20℃ - +50℃				
	Operating Humidity	20-90%RH (no condensation)				
	Storage Temperature/ Humidity	-40℃ - +80℃ (six months under class I environment); 10-90%RH (no condensation)				
	Atmospheric Pressure	86kPa~106kPa				

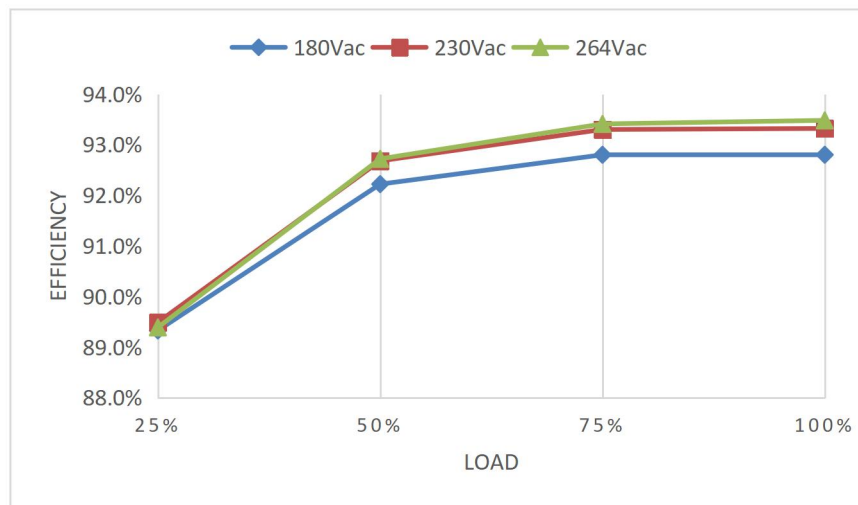
Safety & EMC	Certifications	TUV-ENEC, CE, CB, RCM, SAA, CCC
	Withstanding Voltage	I/P-O/P: 3.75kV 5mA 60S
	Insulation Resistance	I/P-O/P: >100MΩ@500Vdc
	Safety Standards	ENEC: EN61347-1: 2015, EN 61347-2-13: 2014/A1: 2017, EN 62384: 2016/A1: 2009 CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015 CB: IEC 61347-1: 2015, IE61347-2-3: 2014, IEC61347-2-13: 2014/AMD1: 2016 RCM: AS61347.2-13: 2018 CCC: GB19510.1-2009, GB19510.14-2009 SAA: AS 61347.2-13: 2018
	EMI	CE-EMC/RCM: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2
	EMS	CE-EMC/RCM: EN61000-4-2, 3, 4, 5, 6, 11 CCC: GB/T17626.2, 3, 4, 5, 6, 11
Others	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years (Tc≤84℃)
Remarks	<p>1. It is recommended that customer should install overvoltage and undervoltage protection devices and surge protection devices in the power supply circuits of the light fixtures to ensure safety before connecting to electricity.</p> <p>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.</p> <p>3. As an accessory, the LED driver is not the only factor determining the EMC performance of the LED light fixture. The structure and the wiring of the light fixture are also relevant. Thus it's strongly recommended the LED light fixture manufacturer should re-confirm the EMC of the whole LED light fixture.</p> <p>4. Unless otherwise stated, the parameters: PF, THD and efficiency are test results under the conditions of ambient temperature of 25±5℃, humidity of 50%, input voltage of 230Vac and full load.</p>	

Characteristic Curves

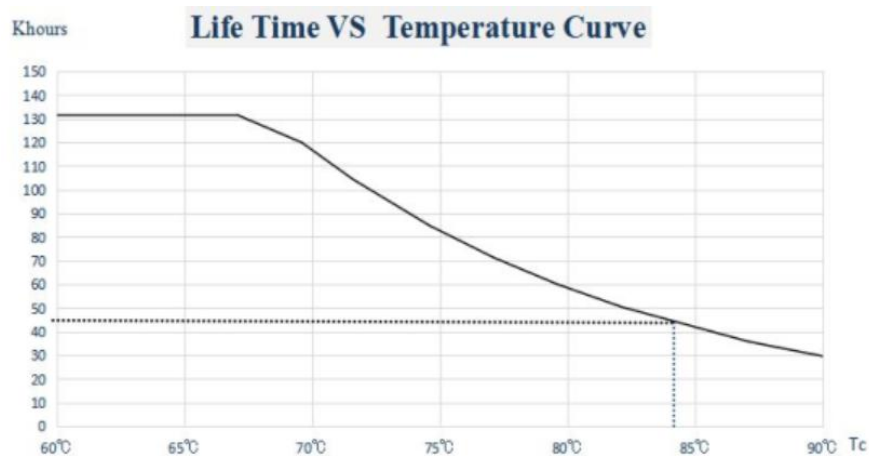
■ PF Curve



■ Efficiency Curve



■ Lifetime Curve



Dimming Operation Instructions

■ Terminal Definitions

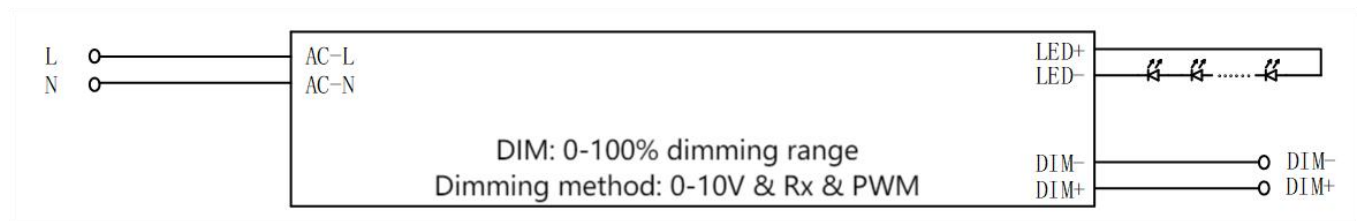
INPUT

AC-L	AC live wire input
AC-N	AC neutral wire input

OUTPUT

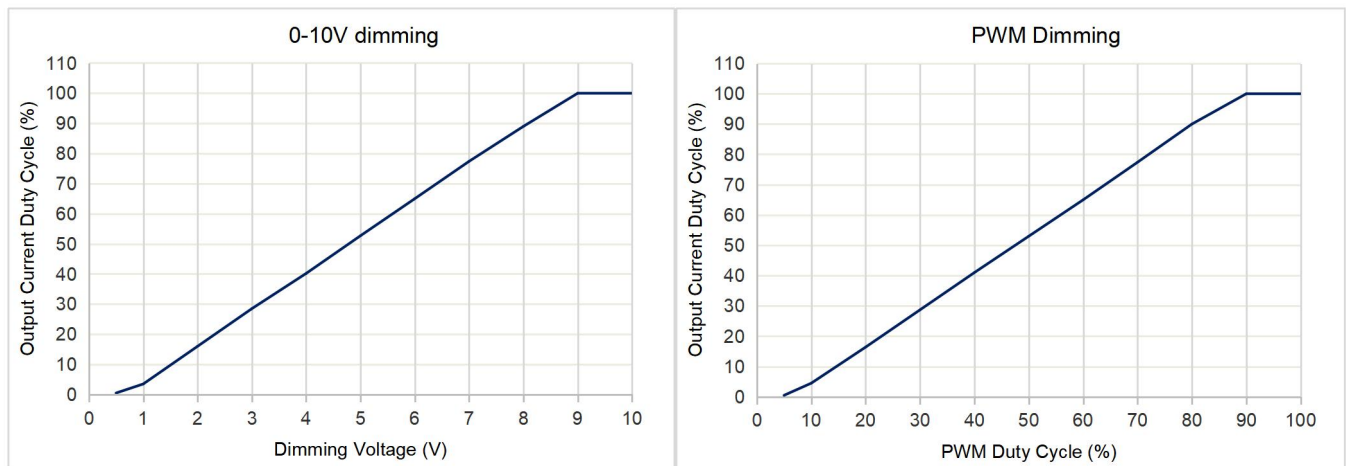
LED+	Positive electrode output of LED driver
LED-	Negative electrode output of LED driver
DIM-	Negative electrode of dimming wire
DIM+	Positive electrode of dimming wire

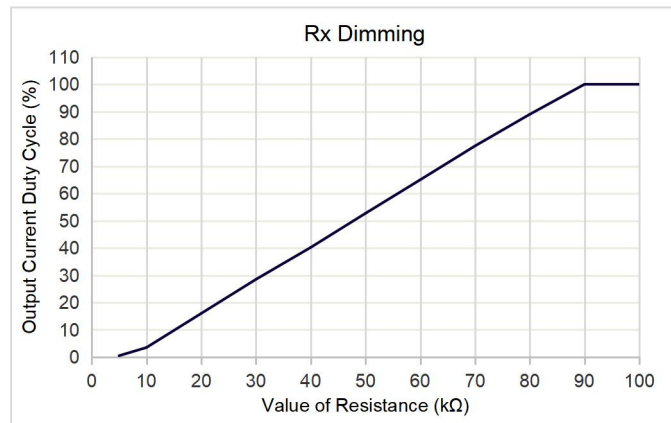
■ Dimming Wiring Diagram












■ 0-10V & Rx Dimming Operation Instructions

- Connect 0-10V, PWM and Rx signals to DIM terminal.
- In 0-10V dimming mode, when the input voltage $\leq 0.3V$, the light turns off; when it's $\geq 0.5V$, the light turns on.
- PWM compatible signal range: 500-3000(Hz); amplitude: 10(V)
- Rx range: 0-100K Ω
- DIM+/- (without signal connected): 100% rated current output
- Minimum dimming depth is about 0.5% (output duty cycle)

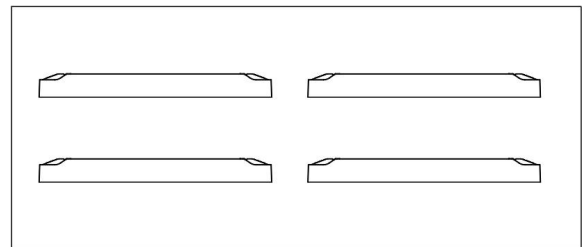
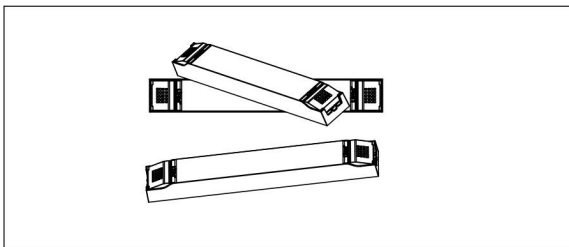




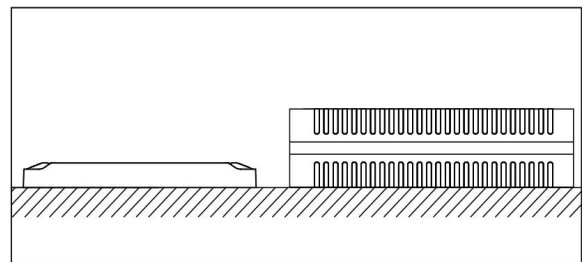
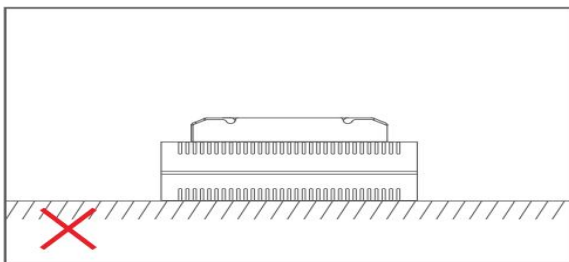
Label

INPUT AC-L AC-N 0.75-1.5 □	Lifud® LED Driver Model: LF-GDE120YV012 Input: 220-240V ~ 50/60Hz Max.1.0A Output Voltage:12V == Prated:max.120W I rated: 0-10A PF:>0.95 ta:50°C tc:90°C For Australia and New Zealand,the marking label with  Control Mode:0-10V&Resistance&PWM	      SELV CE Dimming Range:0%-100% For LED modules only	Preparation for input and output  17.5mm Dimmable  0.1%-100% www.lifud.com Made in China	OUTPUT LED+ LED- 0.75-2.5 □ DIM- DIM+ 0.75-1.5 □
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Install Notes

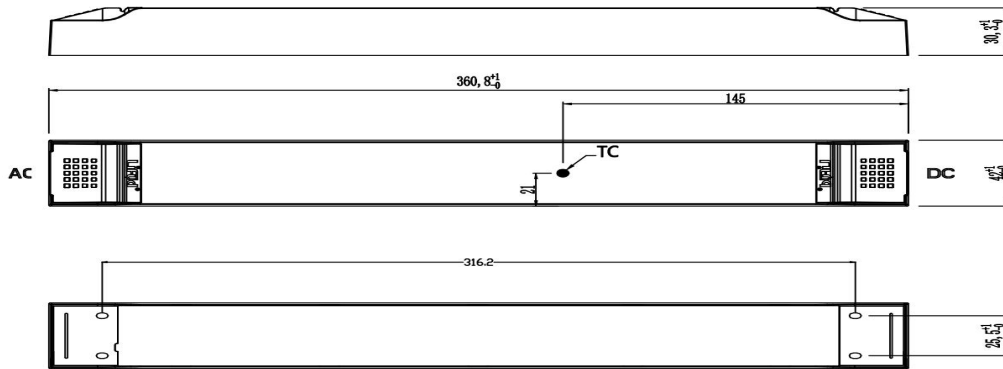


Do NOT stack drivers. Keep at least a certain distance between drivers when using them to avoid affecting the heat dissipation and lifetime of the drivers.



Direct contact between the load and the driver is prohibited when using the driver. Keep a certain distance between the driver and the load to avoid affecting the heat dissipation and lifetime of the drivers.

Structure & Dimensions (unit: mm)



Packaging Specifications

Model	LF-GDE120YV012
Carton	385*285*210mm (L*W*H)
Quantity	6 pcs/layer; 5 layers/ctn; 30 pcs /ctn
Weight	0.36 kg/pc; 11.8 kg/ctn

Transportation & Storage

■ Transportation

- Suitable transportation means: vehicles, boats and aircraft.
- During transportation, there should be awnings for rain protection and sun protection. Civilized loading and unloading are required. There should be no severe vibration or impact.

■ Storage

- Storage in accordance with the provisions of the Class I environment. For products which have been stored for more than six months, they mustn't be used until they pass the re-inspection.

Attention

- Please use this product according to its specifications otherwise there may be malfunction.
- Use light fixtures that have not been certified or are not compatible with the LED drivers may cause fire or other hazards.
- Man-made damage, any use beyond the specification and non-original-factory modification are not covered by warranty.

Remark: The final interpretation right of the contents of this data sheet belongs to Lifud Technology Co., Ltd.