Product Description

LiFud <u>莱福德</u>

LF-GSD030YK series is a 30W constant current LED driver with DALI dimming function. The input voltage range is 220-240VAC. Its output current can be adjusted from 400mA to 750mA via the DIP switch, in steps of 50mA.

Features

- IP20
- Suitable for Class II light fixtures
- Built-in active power factor correction function
- Standby power consumption: <0.5W
- Adjustable CCT range: 2700-6500K
- DALI dimming function (DT8).
- The logarithmic dimming curve or the linear dimming curve can be selected via the software
- 5-year warranty (Please refer to the warranty condition.)

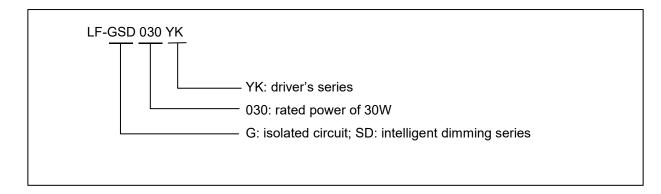
Applications

- Indoor office lighting
- Decorative lighting
- Commercial lighting
- Residential lighting
- Horticultural lighting





Product Naming



Electrical Characteristics

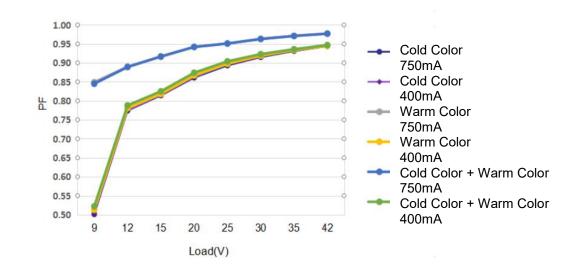
Model		LF-GSD030YK					
	Output Voltage	9-42V			9-40V		
Output	Output Current	The output current can be adjusted via the DIP switch. Please refer to the DIP switch table. 400mA 450mA 500mA 550mA 600mA 650mA 700mA 750mA					
	Flicker Index	IEC-Pst≤1, CIE SVM≤0.9, Modulation Depth≤1% (Meet with flicker free standard: IEEE Std 1789-2015)					
	Ripple Current	≤5% (rated current)					
	Current Tolerance	±5%					
	Temperature Drift	±10%					
	Start-up Time	<1.5S @230Vac					
	Input Voltage	220-240Vac (limit: 198-264Vac)					
	DC Input Voltage	180-280Vdc					
	Input Frequency	47Hz-63Hz					
	Input Current	0.25A Max					
	Power Factor	≥0.92 ≥0.94					
	THD	≤15%/230Vac (full load)					
Input	Efficiency	≥85% ≥87%					
	Inrush Current	≤60A & 120uS @230Vac					
	Load Quantity Carried by the Circuit Breaker	Circuit Breaker M	odel	B10	C10	B16	C16
		Quantity (pcs)	24	24	39	39
	Surge Protection	L-N: 1KV					
	Leakage Current	≤0.7mA					
	Standby Power Consumption	≤0.5W (when DALI signal is off)					
Protection	Open Circuit Protection	<59V					
Characteristics							
Environment Descriptions	Operating Temperature	-20℃~+45℃					
	Operating Humidity	20-90%RH (no condensation)					
	Storage Temperature/ Humidity	-30℃~+ 80℃ (six months under class I environment); 10-90%RH (no condensation)					
	Atmospheric Pressure	86KPa~106KPa					

LIFUO 新福德 LF-GSD030YK DALI-2 Tunable White Flicker Free LED Driver

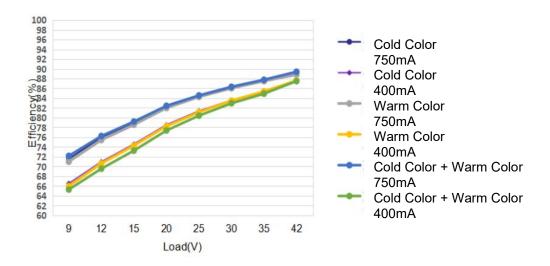
	Certifications	CE, CCC	
Safety and Electromagnetic Compatibility	Withstanding Voltage	I/P-O/P (LED): 3.75kVAC, 0/P (LED) - O/P (DIM): 500VAC, I/P-O/P (DIM): 500VAC	
	Insulation Resistance	I/P-O/P: >100MΩ @500Vdc	
	Safety Standards	CCC: GB19510.1-2009, GB19510.14-2009; CE-LVD: EN 61347-2-13: 2014/A1: 2017, EN 61347-1: 2015, EN 62493: 2015;	
	EMI CE-EMC: EN55015, EN61000-3-2, EN61000-3-3 CCC: GB/T17743, GB17625.1, GB17625.2		
	EMS	CE-EMC: EN61000-4-2, 3, 4, 5 (lightning strike 1KV), 6, 11 CCC: GB/T17626.2, 3, 4, 5 (lightning strike 1KV), 6, 11	
	IP Rating	IP20	
	RoHS	RoHS 2.0 (EU) 2015/863	
Others	Warranty Condition	5 yrs (TC≤84°C)	
	DALI Standard	IEC 62386-101 102 207 209: DALI-2 DT8	
	 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. 		
Remarks	2. 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.		
	3. The test conditions of the circuit breaker configuration quantity are the same as that of the inrush current test.		
	4. Unless otherwise stated, the parameters above are test results under the conditions of ambient temperature of 25℃, humidity of 50%, DALI signal input, 100% load, maximum output current, CCT of 3830K and input voltage of 230Vac.		

Product Characteristic Curve

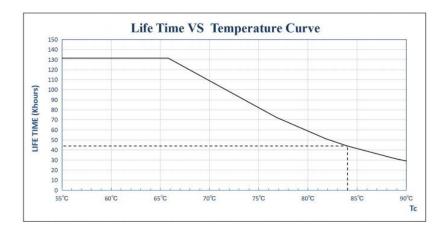
PF Curve



Efficiency Curve



Lifetime Curve



Instructions of Dimming Operation

Terminals

INPUT

DA1	DA1 dimming signal input	
DA2	DA2 dimming signal input	
NC	Vacant	
AC-L	AC live wire input	
AC-N	AC neutral wire input	

LED+	Positive electrode output of warm white light	
WW-	Negative electrode output of warm white light	
CW-	Negative electrode output of cold white light	

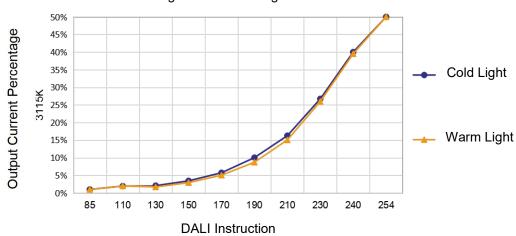
DIP Switch Table

I rated (CC)	1	2	3
750mA	OFF	OFF	OFF
700mA	OFF	OFF	ON
650mA	OFF	ON	OFF
600mA	OFF	ON	ON
550mA	ON	OFF	OFF
500mA	ON	OFF	ON
450mA	ON	ON	OFF
400mA	ON	ON	ON

OUTPUT

DALI dimming operations

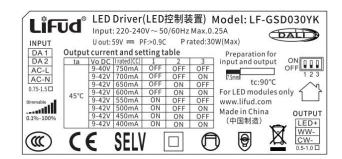
- Factory default is 100% luminance with 50% luminance of each of the warm light output and cold light output.
- Connect the DALI signal to the DA1 and DA2 terminals.
- DALI protocol includes 16 groups and 64 IP addresses.
- The minimum dimming depth of the DALI dimming is 0.1% (lout).



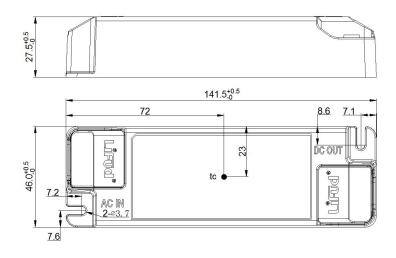
DALI Logarithmic Dimming Curve



Label



Dimensions (unit: mm)



Packaging Specification

Model	LF-GSD030YK
Packaging Dimension	385×285×210mm (L×W×H)
Quantity	10 pcs/layer; 7 layers/ctn; 70 pcs/ctn
Weight	130 g/pc; 10.10 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.