

### Features

- Flicker-free
- High efficiency; high PF
- IP20
- Suitable for Class I light fixtures
- 5-year warranty (please refer to the warranty condition)



### Applications

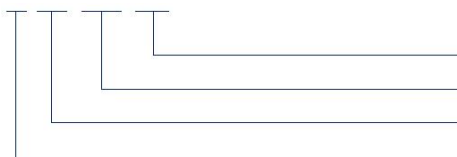
· indoor-office lighting · decorative lighting · commercial lighting

### Descriptions

LF-FMR150YS is a 150W constant current LED driver. Its input voltage ranges from 220 to 240Vac. Its output current is adjustable from 350 to 700mA via DIP switch with every 50mA as a step. It is suitable for Class I light fixtures like tri-proof light and linear light.

### Product Model

LF - F MR 150 YS



- Y: complies with certifications; S: serial number
- 150: output power: 150W
- MR: indoor metal casing tri-proof light
- F: non-isolated design

### ■ Electrical Characteristics

Model		LF-FMR150YS								
Output	Output Voltage	128-350V	128-333V	128-300V	128-273V	128-250V	128-230V	128-214V		
	Output Current	Output current adjustable via DIP switch (optional)								
		350mA	400mA	450mA	500mA	550mA	600mA	650mA	700mA	
	Ripple Current (<120Hz)	±5%								
	Flicker Index	Complies with IEEE Std 1789-2015								
	CIE SVM	≤0.4								
	IEC-Pst	≤1								
	Current Tolerance	±7%				±5%				
	Temperature Drift	±10%								
Start-up Time	<1S									
Input	Input Voltage	198-264Vac (rated voltage: 220-240Vac)								
	DC Input Voltage	180-264Vdc (rated voltage: 220-240Vdc) <sup>①</sup>								
	Input Frequency	0/50/60Hz								
	Input Current	0.85A Max@220-240Vac 0.320-0.720A@220-240Vdc								
	PF	≥0.95								
	THD	≤10%								
	Efficiency	≥95%								
	Inrush Current	≤62A <sup>②</sup>								
	Loading Quantities of Circuit Breaker	Model	B10		C10		B16		C16	
		Quantity (pcs)	3		6		6		10	
Leakage Current	≤0.7mA									
Protection Characteristics	Open Circuit	<400V								
	Short Circuit	Hiccup mode(auto-recovery)								
Environment Descriptions	Operating Temperature	-30°C - +60°C								
	Operating Humidity	20-95%RH (no condensation)								
	Storage Temperature/ Humidity	-30°C - +80°C (6 months in Class I environment); 10-95%RH (no condensation)								
	Atmospheric Pressure	86-106kPa								

**■ Electrical Characteristics**

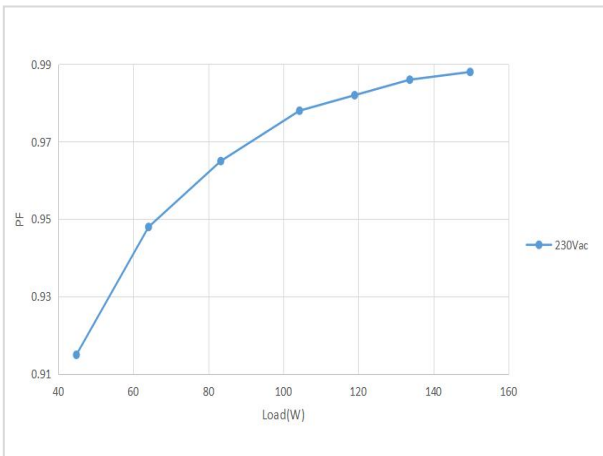
<b>Safety &amp; EMC</b>	Certifications	CB、CCC、CE、EAC、EL、ENEC、RCM、UKCA
	Withstand Voltage	I/P-PG: 1.5kV&5mA&60S
	Insulation Resistance	I/P-PG O/P-PG: >100MΩ@500Vdc
	Safety Standards	CB: IEC61347-1:2015, IEC61347-1:2015/AMD1:2017, IEC61347-2-13:2014, IEC61347-2-13:2014/AMD1:2016 CCC:GB 19510.1-2009, GB 19510.14-2009 CE-LVD: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015/A1:2021 EL:EN IEC 61347-2-13 Annex J ENEC: EN 61347-2-13:2014/A1:2017, EN 61347-1:2015/A1:2021, EN IEC62384 :2020 UKCA-LVD:EN 61347-1:2015/A1:2021, EN 61347-2-13:2014/A1:2017 EN 62493:2015
	EMI	CCC:GB/T17743, GB17625.1, GB17625.2 CE-EMC/RCM:EN55015, EN61000-3-2, EN61000-3-3 EL:EN IEC 61347-2-13 Annex J UKCA-EMC:EN IEC 55015:2019/A11:2020, EN 61547:2009, EN IEC 61000-3-2:2019/A1:2021, EN 61000-3-3:2013/A2:2021
	EMS	CCC:GB/T17626.2,3,4,5(lightning strikeL-N:1KV,L/N-PG:2KV),6,11 CE-EMC/RCM: EN61000-4-2,3,4,5(lightning strikeL-N:1KV,L/N-PG:2KV),6,11
<b>Other Parameters</b>	IP Rating	IP20
	RoHS	RoHS 2.0 (EU) 2015/863
	Warranty	5 years <sup>③</sup>
<b>Test Equipment</b>	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, spectroanalyzer: KH3935, hi-pot tester: EEC SE7440, flicker tester (flicker-free coefficient test): Everfine LFA-3000, etc.	
<b>Test Remark</b>	If there are no special remarks, the above parameters are tested at the ambient temperature of 25°C, humidity of 50%, maximum output power and input voltage of 230Vac/50Hz.	

■ **Electrical Characteristics**

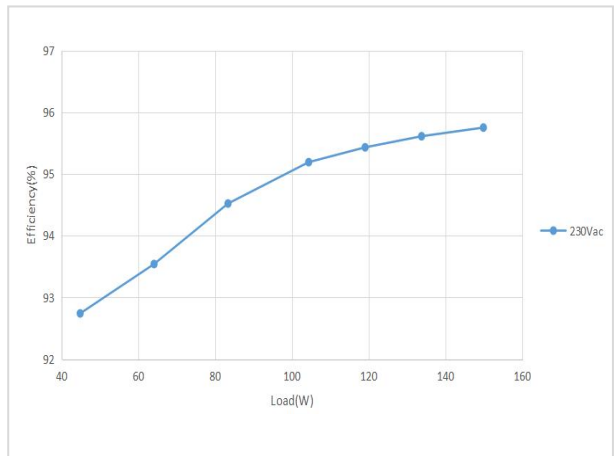
<p><b>Additional Remarks</b></p>	<ol style="list-style-type: none"> <li>1. It is recommended that user install the over voltage protection, under voltage protection and surge protection devices in the power supply circuits of light fixtures to ensure electricity safety.</li> <li>2. The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. Thus, the manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.</li> <li>3. The test conditions of the circuit breaker configuration quantity are the same as those of the inrush current.</li> <li>4. The PC cover, casing and end cap for assembling the LED driver in the light fixture must meet the fire rating of UL94-V0 or above.</li> <li>5. It is well-advised that the withstanding voltage of LEDs and aluminum substrates &gt;3KV.</li> <li>6. It is recommended to install double-pole switch at AC input terminal. If user uses the single-pole switch, make sure to connect it to wire L (live wire), otherwise the afterglow of light fixture would be incurred after the AC is disconnected.</li> <li>7. Because there is parasitic capacitance between LEDs and the PCBA, and the PCBA (the light fixture) is grounding, there will be a slight flicker at the moment of AC power on. It's normal for non-isolated products, if you want to avoid the slight flicker, please replace it with our isolated products.</li> <li>8. The output voltage is 128-350Vdc and the maximum output power is 150W. The voltage and current CANNOT exceed the rated power.</li> <li>9. The light panel, fixed bracket and driver grounding should be secure.</li> </ol> <p>Note:</p> <ol style="list-style-type: none"> <li>① DC input is only for emergency with the maximum using time of 90 mins</li> <li>② @300uS</li> <li>③ 5 years@Tc≤86°C</li> </ol>
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■ **Product Characteristic Curves**

PF Curve

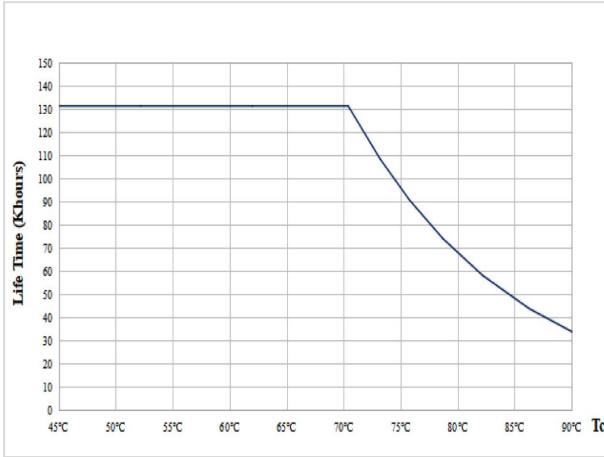


Efficiency Curve

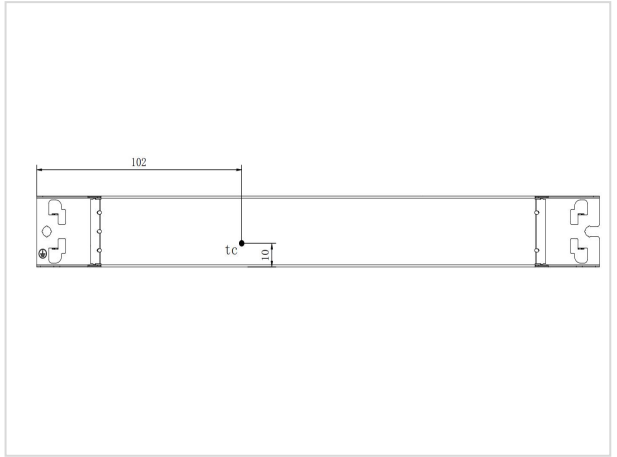


■ **Product Characteristic Curves**

Lifetime Curve



Tc Point Testing Diagram



■ **Product Definitions**

Product Terminal

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

OUTPUT	
LED+	Positive electrode output of LED driver
LED-	Negative electrode output of LED driver

Product DIP Switch

I rated (CC)	1	2	3	4
350mA (128-350Vdc)	ON	ON	-	ON
400mA (128-350Vdc)	-	ON	-	ON
450mA (128-333Vdc)	ON	-	ON	-
500mA (128-300Vdc)	-	-	-	ON
550mA (128-273Vdc)	-	-	ON	-
600mA (128-250Vdc)	-	ON	-	-
650mA (128-230Vdc)	ON	-	-	-
700mA (128-214Vdc)	-	-	-	-

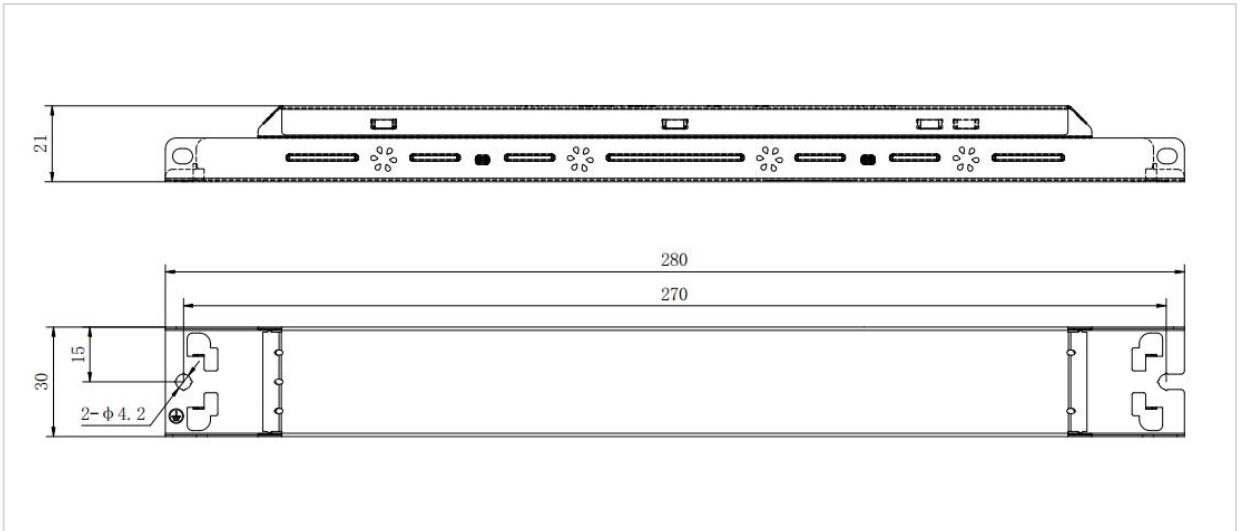
Remark: "-": shift OFF. This table is only for DIP version.

■ **Structure & Dimensions (unit: mm)**

Product Dimensions

Model	Overall Appearance (L*W*H)	Distance Between 2 Positioning Holes (L)	Diameter of Positioning Hole (D)
LF-FMR150YS	280*30*21 mm (±0.5mm)	270 mm (±0.2mm)	4.2 mm

Structure Diagram



■ **Packaging Specifications**

Model	LF-FMR150YS
Carton Size	385*285*210mm (L*W*H)
Quantity	6 pcs/layer; 7 layers/ctn; 42 pcs/ctn
Weight	0.22 kg ±5%/pc; 10.21 kg ±5%/ctn

## ■ Transportation and Storage

### 1. Transportation

- Suitable transportation means: vehicles, boats and aeroplanes.
- In transit, it is necessary to prepare awnings for rain or sun protection. Moreover, please keep civilized loading and unloading to prevent the vibration or impact of LED driver as much as possible.

### 2. Storage

- The storage of LED driver shall conform to the standard of Class I environment. When using LED drivers which have been stored for more than 6 months, please re-test them firstly. Do not use them unless they are tested to be qualified.

## Cautions

- Please use Lifud LED driver according to its parameters in the specification, otherwise the LED driver may malfunction.
- Using any incompatible light fixtures or those that have not been certified may cause fire, explosion or other risks.
- Man-made damage is beyond the scope of Lifud warranty service.

Remark: Lifud Technology Co., Ltd. reserves the right to interpret any contents of this specification.