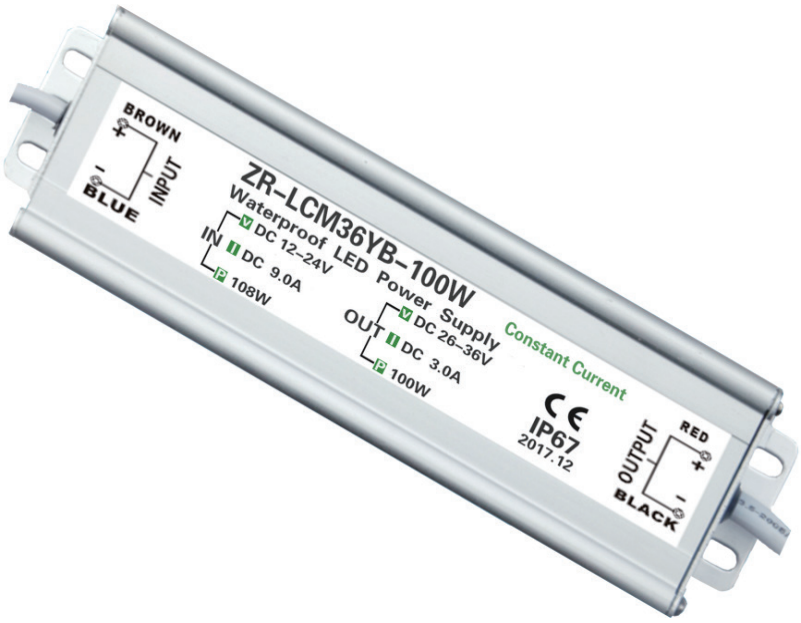
ZORANTECH
卓然照明

100W DC-DC C.C. Waterproof LED Driver



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Feature:

- Constant Current (C.C.) output
- Input voltage range: 12-24VDC (Support customization)
- High efficiency up to 94%, Output overshoot voltage change rate ≤10%
- Protections: Over current/Over voltage/Short circuit
- Customizable dimming type: 0/1-10V or PWM or Resister
- Flicker free, noise free design, 3-5 years warranty
- OEM & ODM, no MOQ, Support customization
- Comply with IEC international electrical quality standards

Application:

- LED outdoor lighting
- LED landscape lighting
- LED architectural lighting
- LED solar street light
- LED solar flood light
- LED solar garden light
- LED ship light
- LED car light

Description:

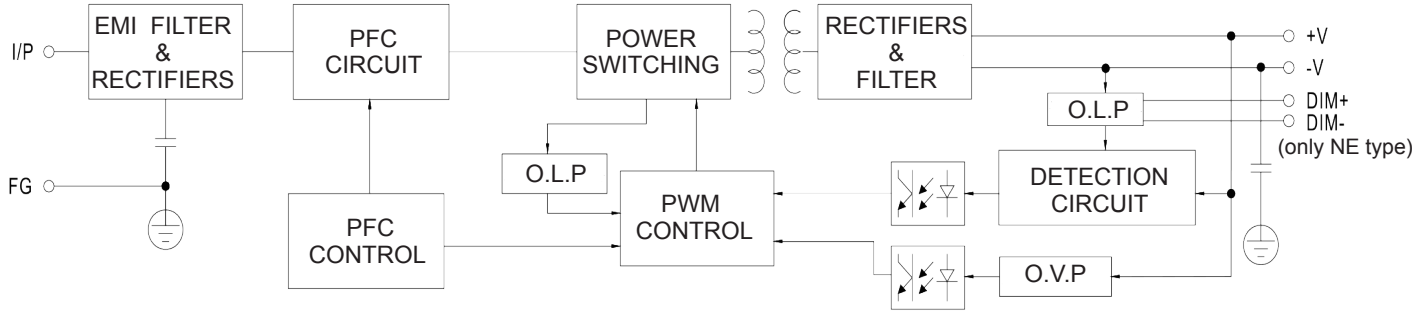
The DC-DC constant current waterproof series produced by Zoran Technology is a dedicated LED driver for LED solar lamps and LED low-voltage lamps, and is mainly divided into two types: boost series and step-down series. Its input voltage is 12-24VDC or 36-48VDC,It's the efficiency of up to 94% .which with natural air cooling and fanless design,allows it to operate in natural ambient temperatures from -25°C to +45°C. The whole series is IP67 rated and suitable for used in dry, wet, rainy environments. flicker free, no noise.

■ Electrical Specification

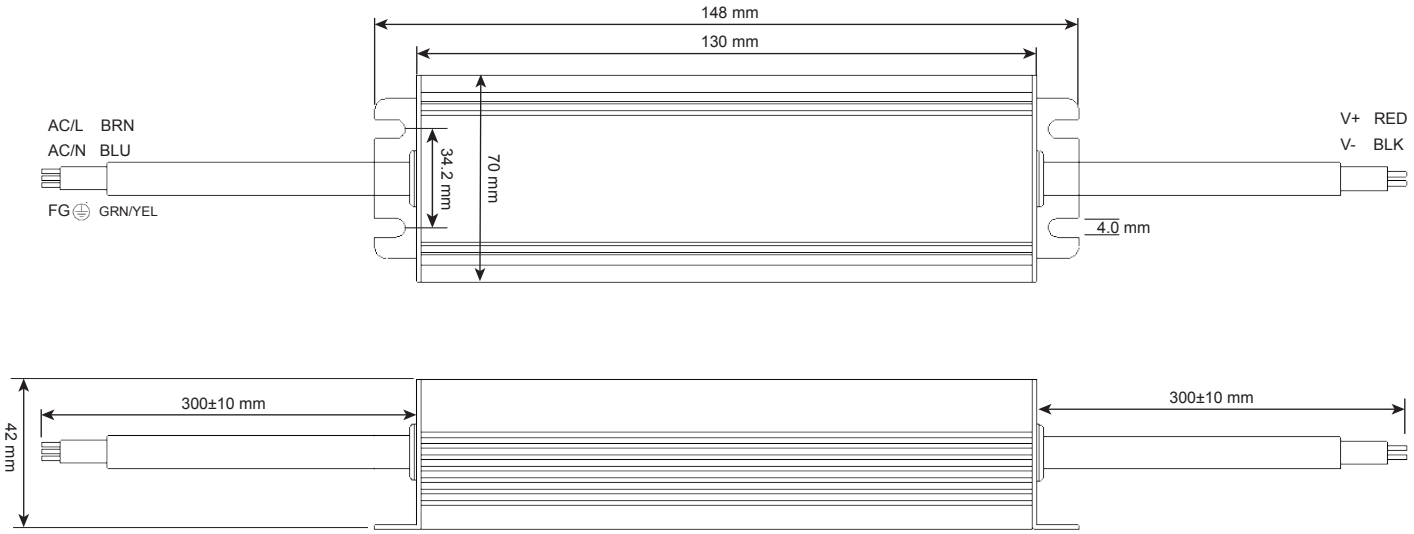
MODEL		ZR-LCM36NB-100W	ZR-LCM42NB-100W	ZR-LCM60NB-100W	ZR-LCM42NE-100W	ZR-LCM60NE-100W
Output	Output Volatge Note.1	24-36 VDC	27-42 VDC	45-60 VDC	27-42 VDC	45-60 VDC
	Output Current Note.2	2780 mA	2400 mA	1670 mA	2400 mA	1670 mA
	Rated Power	100 W	100 W	100 W	100 W	100 W
	Current Tolerance Note.4	±2%	±2%	±2%	±2%	±2%
	Load Regulation	±5%	±5%	±5%	±5%	±5%
	Setup, Rise Time Note.6	≤ 50ms, ≤ 100ms/12V DC ≤ 50ms, ≤ 100ms/24V DC				
	Hold Up Time (Typ.)	≥8ms/12V DC ≥15ms/24V DC				
Input	Rated Voltage Note.5	12~24V DC or 36-48V DC (support customization)				
	Frequency Rance	48-62Hz				
	Limit voltage (Typ.)	10V-28V DC or 33-52V DC				
	Input signal (customizable)	Support 0/1-10V，PWM，Resister(only NE series)				
	Full load Efficiency (Typ.)	≥91%	≥92%	≥93%	≥92%	≥93%
	DC Current (Typ.)	9.06A/12VDC 4.53A/24VDC 3.02A/36VDC				
	Inrush Current (Typ.)	20A/12V DC，40A/24V DC				
Protection	Over Current	95-108%				
		Protection type: Constant current limiting recovers automatically after fault condition is removed				
	Short Circuit	Hiccup Mode, Recovers automatically after fault condition is removed				
	Over Voltage	Protection type: Shut down O/P voltage, re-power on to recover				
Environmen	Working Temperature	Tcase=-25~+45℃ (Refer to “Derating curve”)				
	Max Case Temperature	Tcase=+60℃				
	Working Humidity	20-95%RH non-condensing				
	Storage TEMP. Humidity	-40~+85℃ 10-95%RH				
	Vibration	20-500Hz, 50G 10min/1 cycle，each X、Y、Z axes				
Safety & EMC	Safe Standards	UL8750,CSA C22.2 No.250.13-12;ENEC AS/NZS IEC EN61347-1;AS/NZS IEC EN61347-2-13 independent EN62348;GB19510.14 IP65 or IP67				
	Surge Voltage	L-N:2KV L/N-PE:4KV TCL.standard: Common mode:6KV,different mode:2KV				
	Withstand Voltage	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.0KVAC				
	EMC Emission	Compliance to EN55015,EN61000-3-2 Class C(≥60% load);EN61000-3-3;GB17743;GB17625.1				
	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11;EN61547 EN55024,heavy industry level(surge 4KV)				
Others	Dimension (L*W*H)	148*70*42 mm				
	Weight	600g				
	Packing	20pcs/12Kg/ctn				
Note	1.All parameters not specially mentioned are measured at 24VDC input, rated load and 25℃ of ambient temperature. 2.Length of seting time is measured at first cold starting. Turning ON/OFF the power supply may increase of the length of seting time. 3.The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufactures must re-qualify EMC Directive on the complete installation again. 4.When the maximum temperature point Tc of the shell of this series is lower than 60℃, the working life is more than 30,000 hours. 5.Please refer to the product warranty on Zoran Technology website http://www.zorantech.com. 6.If you need other special parameters, please contact our customer service for consultation!					

■ Block Diagram

Fosc: 48KHz(12V AC/DC)
62KHz(24V AC/DC)

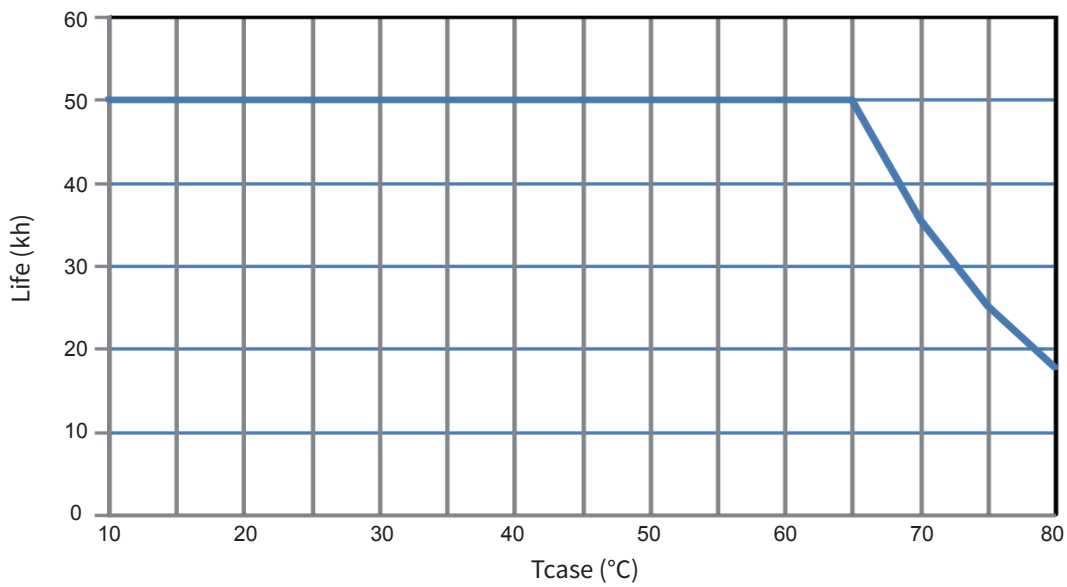


■ Mechanial Specification

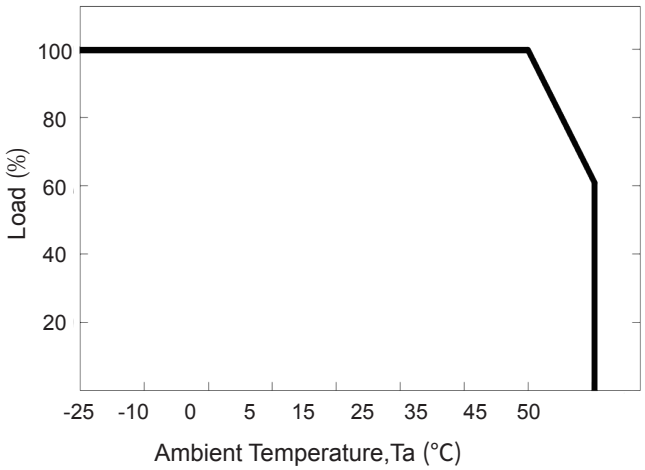


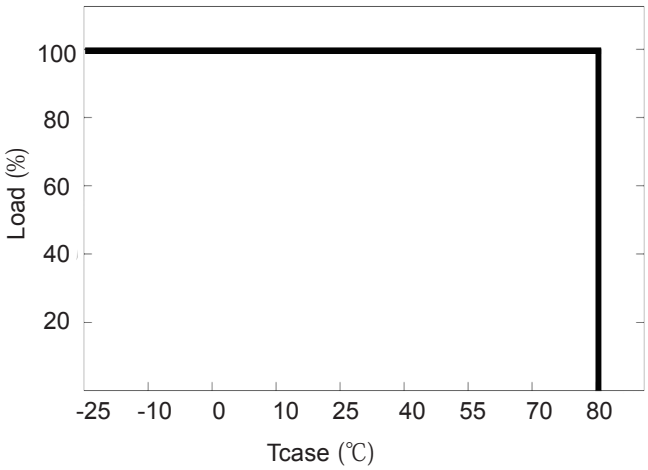
※ The yellow-green wire at the input is the ground (FG), the brown wire is the AC phase wire(L),and blue wire is the AC neutral wire (N);
※ The red wire at the output is the positive output voltage(V+)and black wire is the negative ouput voltage(V-);
※ In addition, the length and thickness of the input and output lines can be customized according to customer requirements. Please contact Zoran Customer Service for details;

■ Life

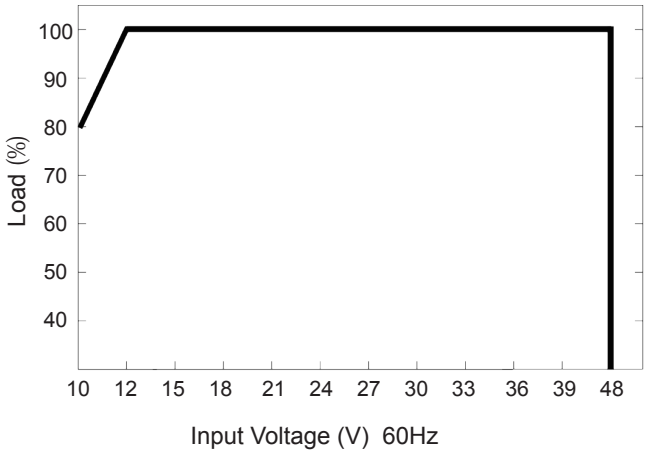


■ Output load VS Temperature

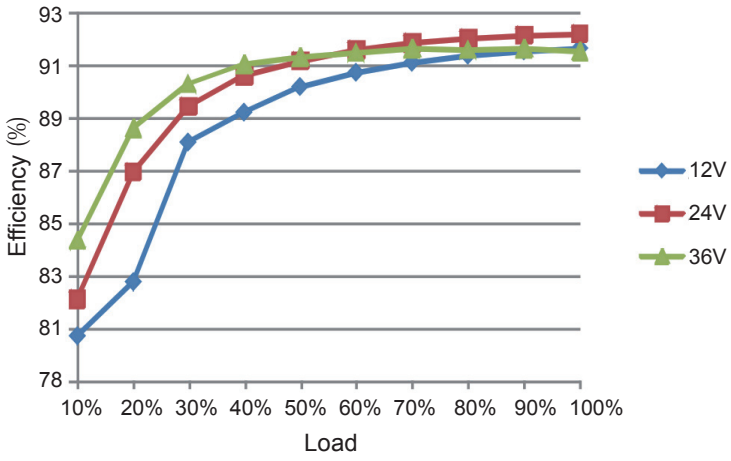




■ Static characteristic curve



■ Efficiency VS Load



■ Precautions：

1、Shiping：Adapted to the transportation of cars, boats and planes, should be sheltered during transportation, sun protection, civilization loading and unloading;

2、Storage：Product has not when using should be put in the box, warehouse environment temperature -45 ~ +85 °C relative humidity 10% ~ 90%, warehouse in does not allow to have the harmful gas, inflammable, explosive products and corrosive chemical products and no strong mechanical vibration, impact and strong magnetic field effect. Packing should fill from the ground at least 20cm high, distance wall, heat source, window of air inlet at least 50cm, in this stated conditions of storage period generally is 2 years, more than two years should perform re-examination.

3、When installation should be conducive to heat dissipation, cannot install near heat source place;

4、Avoid long-term job in abnormal condition, such as overloading, short-circuit, non-work voltage range work;

5、Installation use, please pay attention to the working voltage of lamps and lanterns with the power output voltage of the agreement, of lamps and lanterns working current cannot exceed the power rating of the maximum output current;

6、Wiring connection should be strong and reliable, and add insulation protection against leakage;

7、The installation process must be carried out by a qualified electrician to avoid danger! Do not disassemble it. Under no circumstances should the LED power supply be covered by a thermal pad or similar material to ensure adequate heat dissipation。