



PRODUCT SPECIFICATION

MODEL NAME: DBL06GLGV1

Date: 2019/4/10

Version: 1.0

- Preliminary Specification
- Final Specification

FOR CUSTOMER	
CUSTOMER APPROVED	

PREPARED BY	CHECKED BY	APPROVED BY	DATE

Record of Revisions

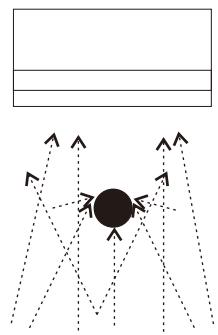
Rev	Date	Description of change
1.0	20190410	Preliminary Product Specification was first issued.

1. Introduction of Parallel lightsource

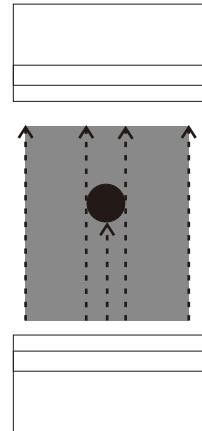
Parallel light source is normally used for high precision measurements.

It has a very high contrast at the edge.

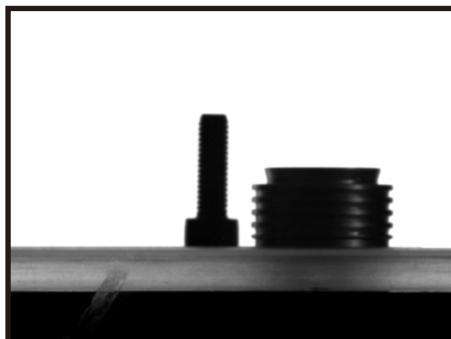
It reduces diffuse reflection, which is good for image boundary recognition.



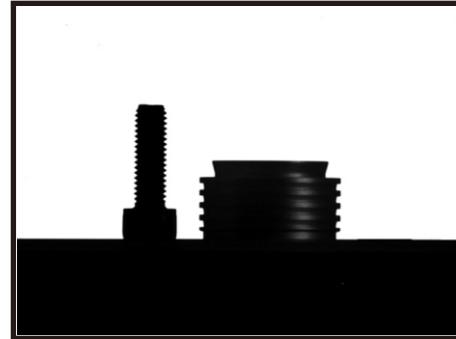
圆柱体



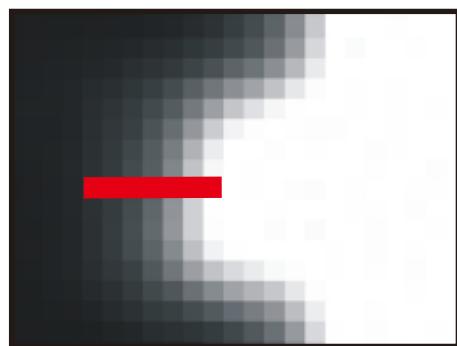
圆柱体



Normal light source 背光源效果



Parallel light source 平行光效果

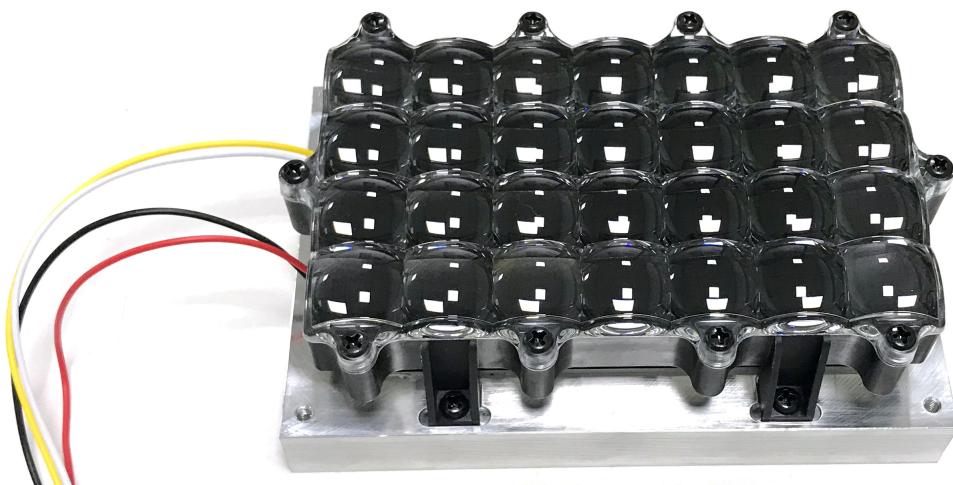


从0-256过渡区有7个像素
There are 7 pixels from 0 to 256



从0-256过渡区有3个像素
There are 3 pixels from 0 to 256

2. Full set of UV light source



Parallel UV light source



Driver board

3. LED driver board spec

This power module uses a new generation of high efficiency, advanced LED constant current drive control chip. It has the characteristics of high output current accuracy, small size, wide input voltage range, etc. The potentiometer and PWM function integrated by the constant current source can adjust the brightness of the light source.

This power supply is non-isolated, DC-DC boost, output constant current power module

3.1 Module Features:

Wide input voltage: 20-35V (higher input voltage can be customized)

High efficiency: more than 90% conversion efficiency

Working frequency: 150-250KHz

LED output constant current can be adjusted, it can automatically

adapt to the voltage of LED light board, support external 3.3V,

5VPWM dimming

The input uses quick-plug screw terminals, and the output uses DC sockets for easy connection.

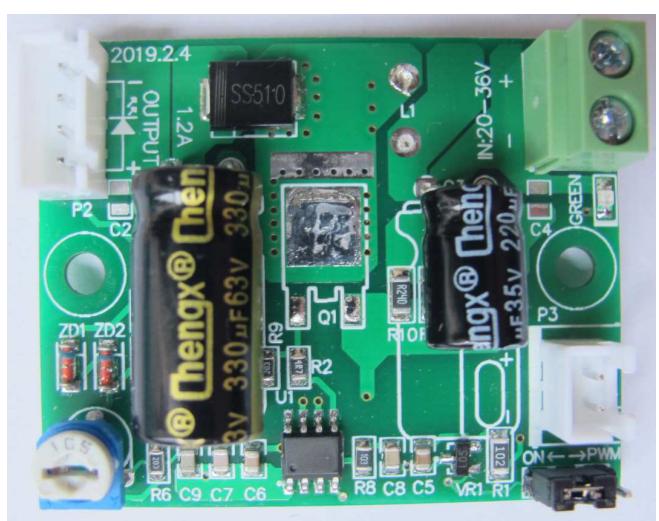
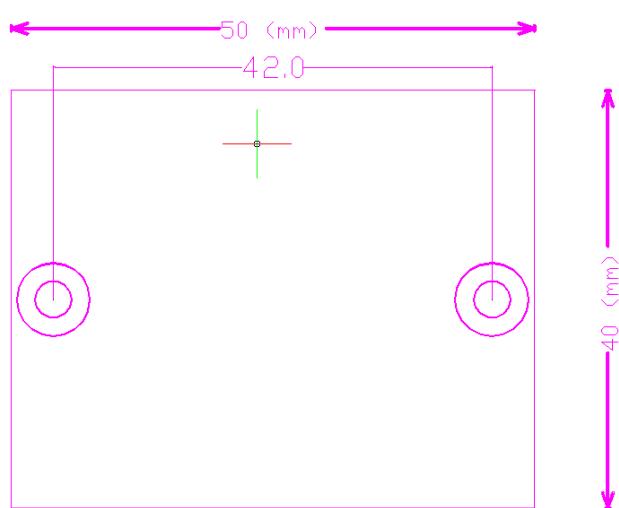
Electrolytic capacitors use high-quality high-frequency low-resistance

capacitors, and the inductors use iron-silicon-aluminum all-copper

wire. The output power is as high as 70W ($t_a = 25$

3.2 Module size

50mm (L) X 42mm (W) X 23mm(H)



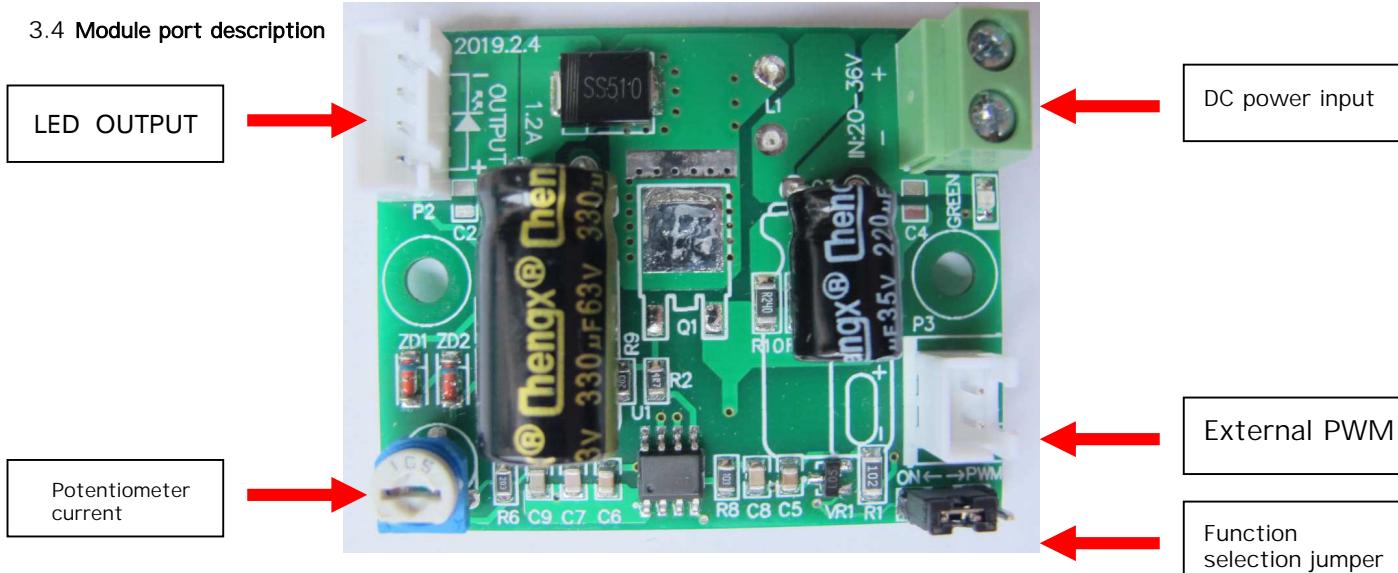
3.3 Module setting LED output current method:



顺时针旋转蓝白电位器, LED 输出电流变大
逆时针旋转蓝白电位器, LED 输出电流变小

Turn the white potentiometer clockwise to increase the LED output current. Turn it counterclockwise to reduce the LED output current.

3.4 Module port description



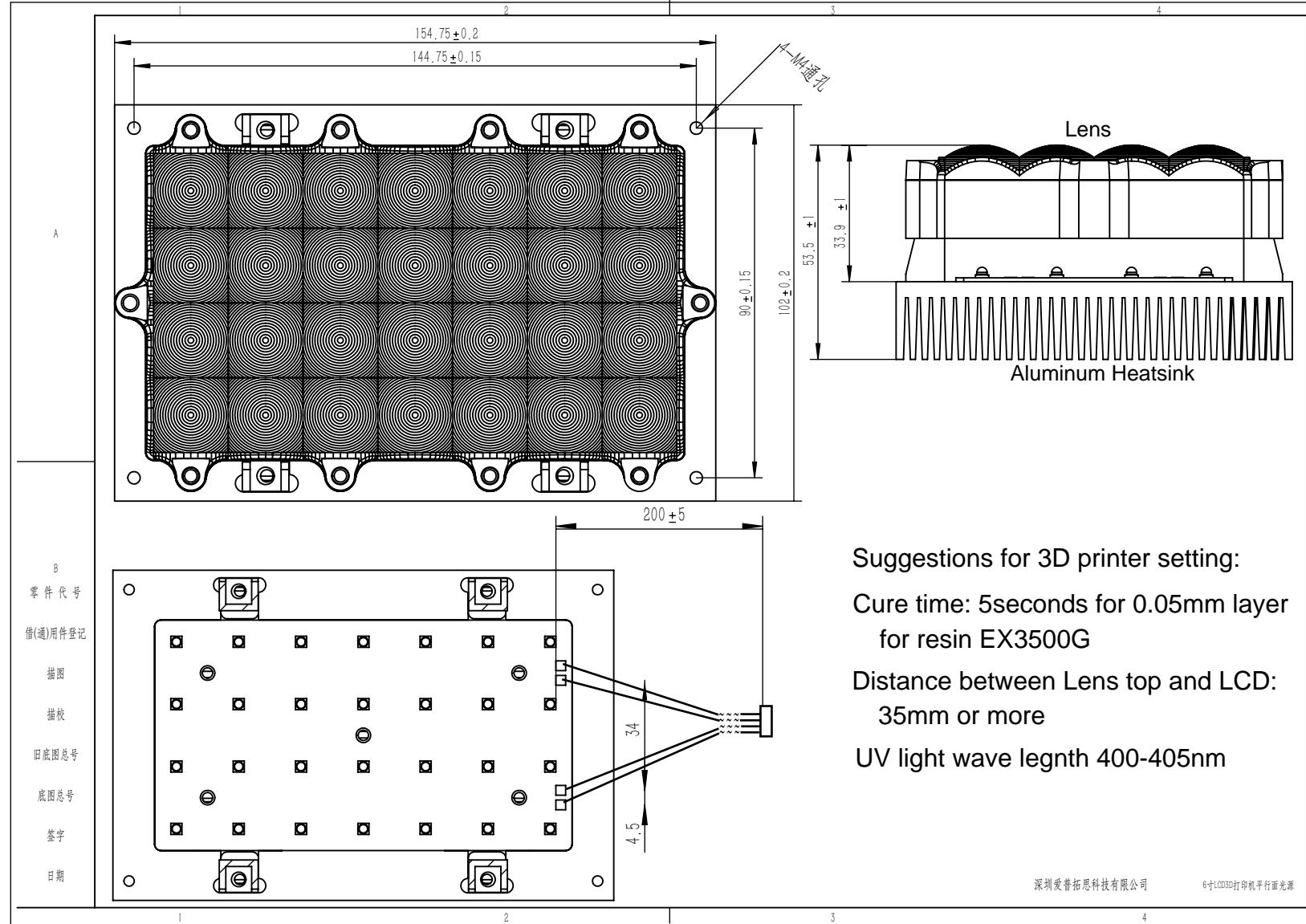
3.5 Precautions for external PWM dimming:

- Use external PWM dimming, the function selection jumper must be pulled to the right (the left is the potentiometer to adjust the current)
- When PWM dimming, support 3.3V or 5V level, active high
- The PWM dimming frequency is recommended to be set at about 500-1000Hz. The frequency is too low, the LED will flicker, the frequency is too high, and the power supply will emit sound. Note the polarity of the external PWMDC socket. Don't make mistake

3.6 Other considerations

- This power module is a boost module. The output must be 4V higher than the input. That is, when the input is 20V, the output must be used above 24V to be used normally. Otherwise, it may work abnormal
- After the temperature of the power module increases, the output current slightly decreases, which is normal.
- If the ambient temperature is high, heat dissipation measures are required.

4. Light Source Unit Dimension



Suggestions for 3D printer setting:

Cure time: 5seconds for 0.05mm layer
for resin EX3500G

Distance between Lens top and LCD:
35mm or more

UV light wave length 400-405nm