



SPECIFICATION

(产品规格书)

PART NO. : RX-070-HDMI-MIPI
(产品型号)
SPEC NO. :V2.0
(规格书编号)
DESCRIPTION :HDMI_TO_MIPI
(产品描述)
DATE :2019-05-29
(日期)

R&D DEPARTMENT (技术部)		
APPROVED (核准)	CHECKED (审核)	PREPARED (制定)



CONTENTS (目录)

TITLE (标题)

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2.RECORD OF REVISIONS (修改记录)

REVISION NO.	DATE	PAGE	DESCRIPTION
V1.0	5-29	1	

3.GENERAL DESCRIPTION (整体概述)

RX-070-HDMI-MIPI It is a driver board for HDMI input and MIPI output, and can convert LCM_MIPI signal screen vertically to horizontal display. In order to solve the scarcity of horizontal screen in the market, it also makes customized product driver board for customers.

SYN&YMK-DT900 是一个 HDMI 输入 MIPI 输出的驱动板, 并可以把 LCM_MIPI 信号屏竖方向转成横屏显示, 为解决市场横屏稀缺, 也为客户做定制化的产品的驱动板;

SYN&YMK-DT900 Support raspberry pie, PS4 game console, Android motherboard, X86 industrial control motherboard, TV set-top box and other signal input



RX-070-HDMI-MIPI 支持 树莓派、香橙派、PS4 游戏机、安卓主板、X86 工控主板、电视机顶盒等信号 输入

Note: The specification of the board includes the description of all functions. Therefore, our clients can select the functions which they require to produce the board. But the specification can be introduced universally.

(注：此规格书为板卡全功能规格书，客户可以根据需要选择性的生产。此规格书具有通用性)

■ Description

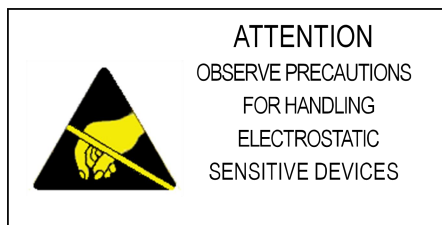
(描述)

- ◆ Part NO. (产品型号): **SYN&YMK7 DT900**
- ◆ Main Board: Material(材质), **FR-4**
- ◆ Main Board Color(LED 发光颜色): **Red(红色)**
- ◆ Signal interface (信号接口): **HDMI (Audio and video)**
- ◆ Power Supply (电源): **5V1A(microusb)**
- ◆ Supporting maximum resolution (最高分辨率): **1080x2340 @60hz**
- ◆ Capacitive Touch Support (可支持触摸): **CTP**
- ◆ External control buttons (外接控制按键): **Keys**

■ Applications

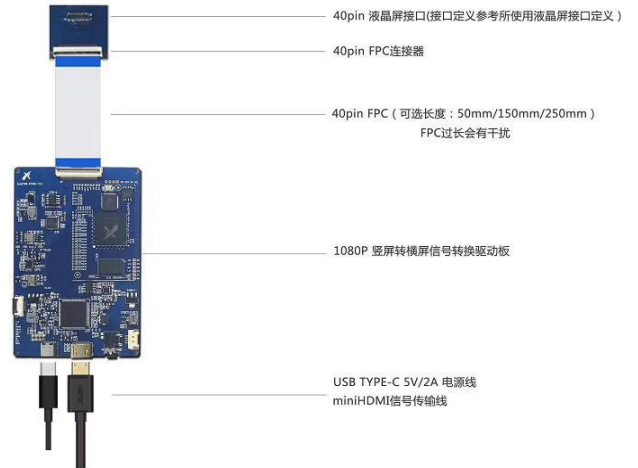
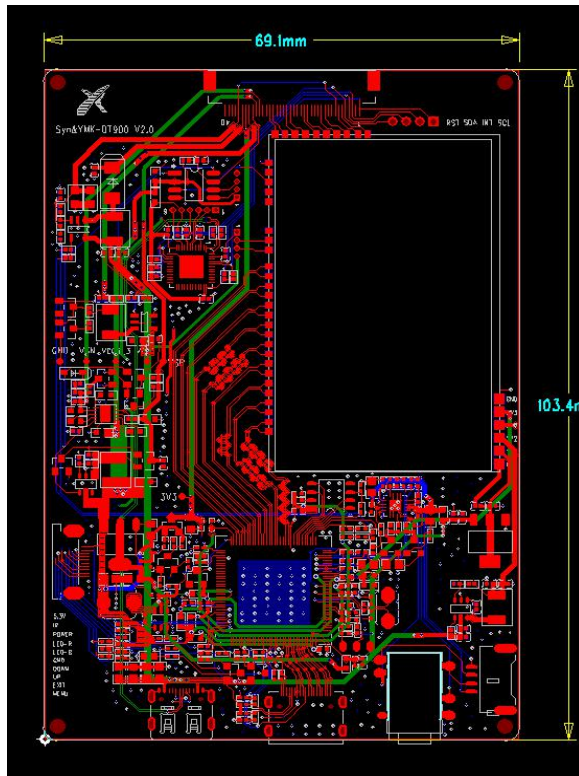
(应用)

- ◆ raspberry pi 3B+ (树莓派 3B+)
- ◆ PS4 game console (PS4 游戏机)
- ◆ Android motherboard (安卓主板)
- ◆ TV set-top box (电视机顶盒)
- ◆ Projection equipment (投影设备)





4.Package Dimensions(外观尺寸)



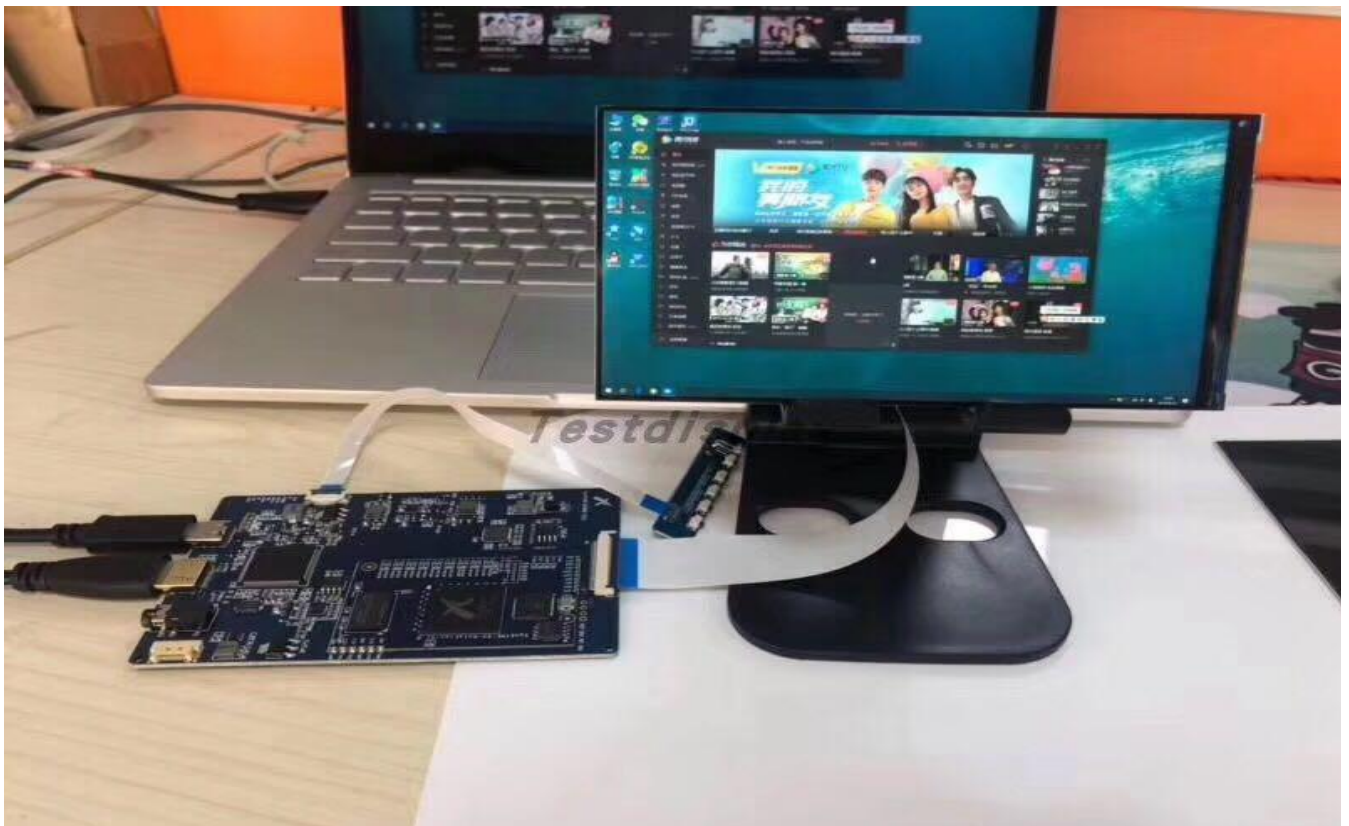
Notes:

- 1.All dimensions are in millimeters.
(所有尺寸以毫米为单位)
- 2.Tolerance is ± 0.25 unless otherwise noted
(未标注公差为: ± 0.25)



套件参数		
液晶屏	驱动板	
型号: LS055T35X05	型号: synSymk-DT900v2.0	
屏幕尺寸: 5.5英寸	外观尺寸: 105×74 (mm)	
分辨率: 1080(RGB)×1920, FHD	信号转换类型: HDMI转MIPI	
像素间距(W×H): 0.063×0.063 mm	支持分辨率: 1080(RGB)×1920, FHD	
显示尺寸(W×H): 68.04×120.96 mm	兼容: 安卓、树莓派、机顶盒、PS4游戏机。	
亮度(cd/m ²): 450 (Typ.)	输入接口: miniHDMI	
光学模式: New Mode2, 常黑显示, 透射式	电源: USB type-c 5V/2A	
	信号输出接口: 40pin MIPI输出接口。	
	适用功能: 音频, 菜单按键, 背光调节	
	特殊功能: 显示屏亮, 带背光恒压恒流保护电路	
转接小板	FPC	
尺寸: 3×2.8 (mm)	长度: 50mm/100mm/150mm/250mm/400mm	
连接器型号: AXE540124	PIN脚: 40pin	
类型: BTB	接口方向: 同向	
间距: 0.4 (mm)	间距: 0.4mm	
pin脚: 40pin		
排数: 2排		
安装类型: 焊接、SMT		

Product Picture Introduction (图片介绍)



HDMI信号超强兼容



智能安卓4K机顶盒



Raspberry pi树莓派3b/b+



PS4游戏机



PC windows 系统

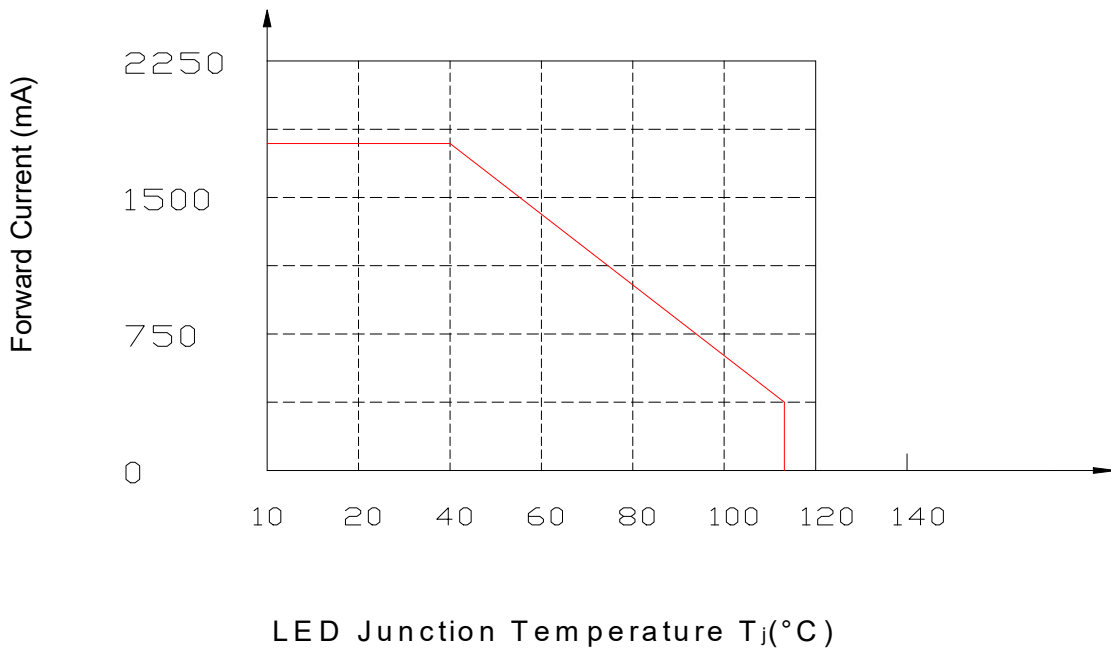


5. FEATURES (产品特性)

● Absolute Maximum Rating(At TA=25°C)
(极限参数)

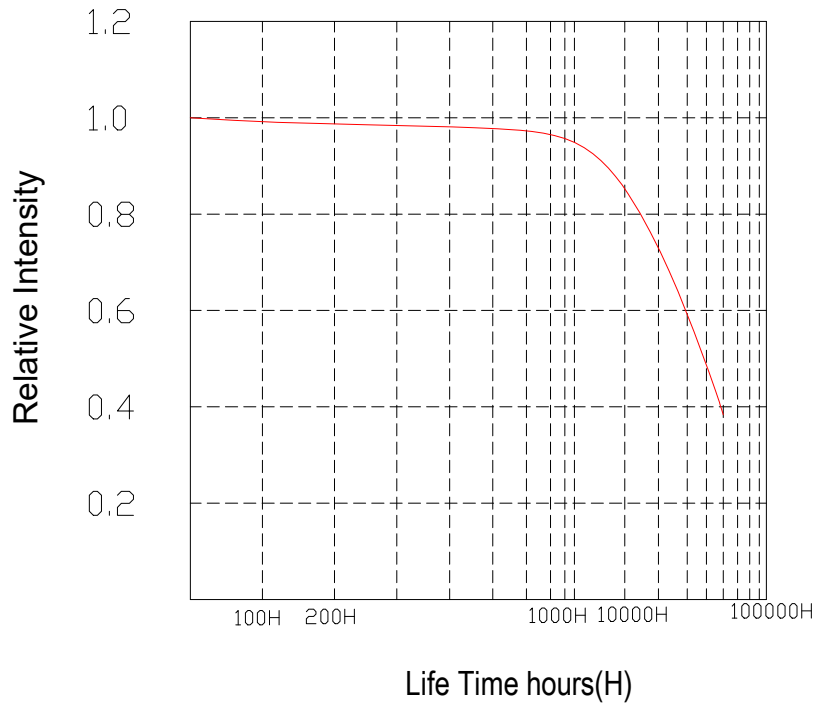
Parameter (参数)	Symbol (符号)	Ratings (数值)	Units (单位)
Input Current 输入电流	I _{dd}	800	ma
Supply voltage for logic 逻辑电压	VCC	5	v
Input voltage 'H' level 输入高电平	V _{IH}	0.7min	v
Output voltage 'H' level 输出高电平	V _{OH}	-0.4min	v
LED Junction Temperature (结点温度)	T _J	120	°C
Reverse Voltage (反向电压)	V _R	30	V
Operating Temperature Range (工作温度)	T _{OPR}	-20°C To +60°C	
Storage Temperature Range (储存温度)	T _{STG}	-40°C To +100°C	
Manual Soldering Temperature (手工焊接温度)	T _{SOL}	350°C± 20°C For 3~5 Seconds	
ESD Sensitivity (抗静电能力)	ESD	2000V BM	

LED Junction Temperature vs. Maximum Forward Current



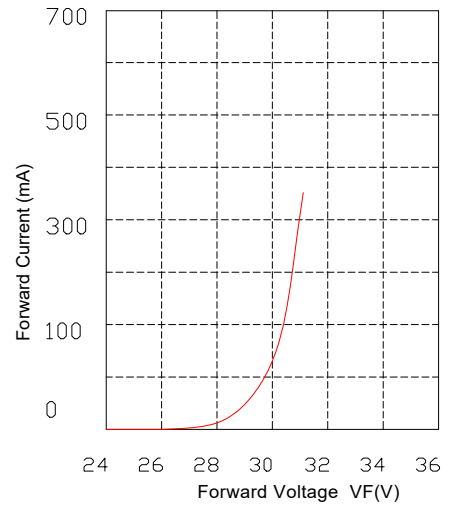


Relative Intensity vs. Life Time





Forward Voltage vs. Forward Current (Ta=25°C)



Relative Intensity vs. Wavelength (Ta=25°C)

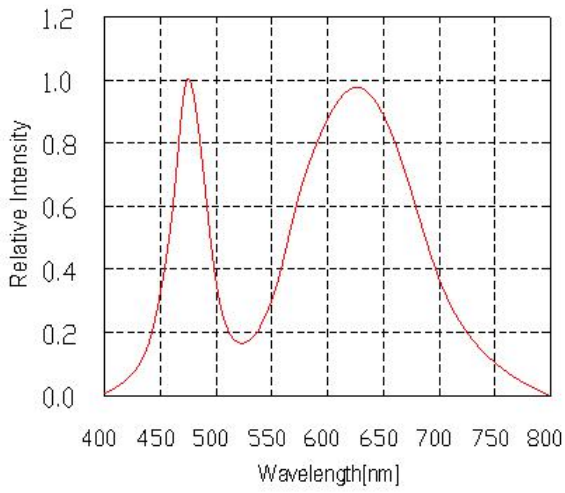
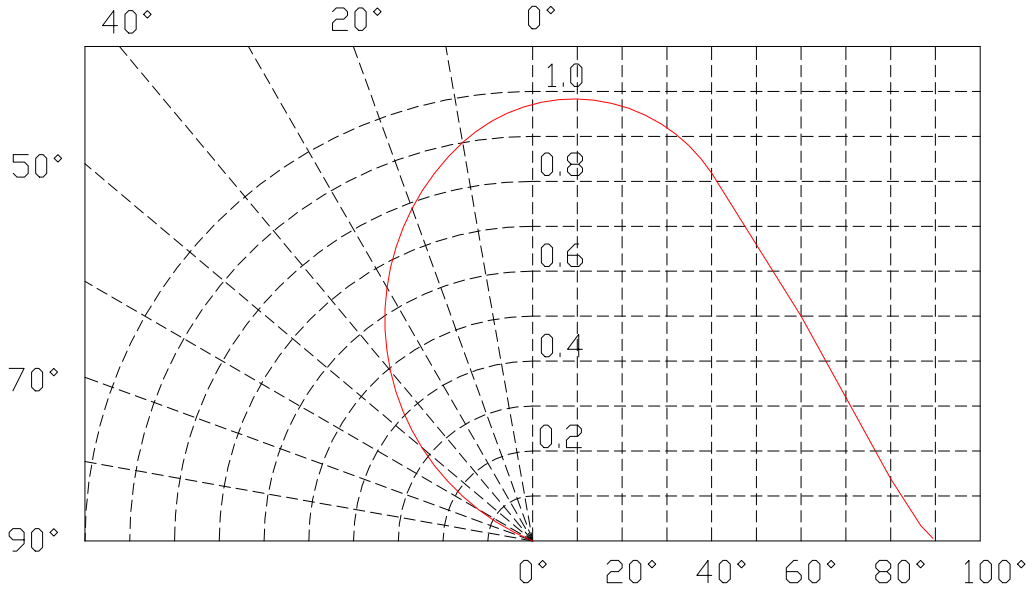
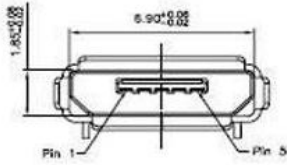


Diagram characteristics of radiation

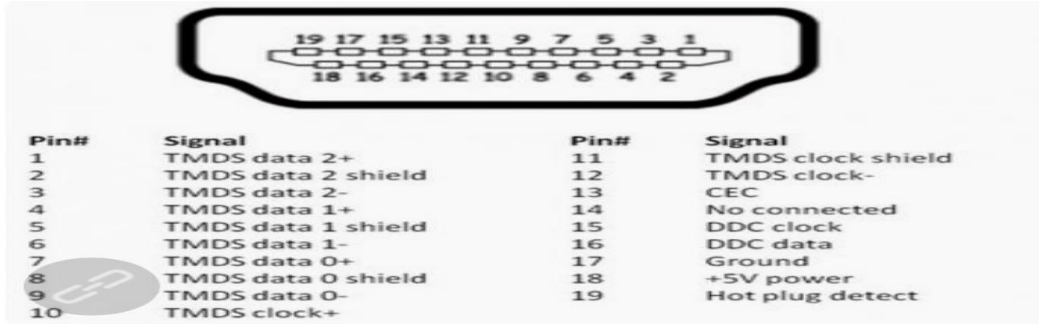


6. INTERFACE DEFINITION (接口定义)

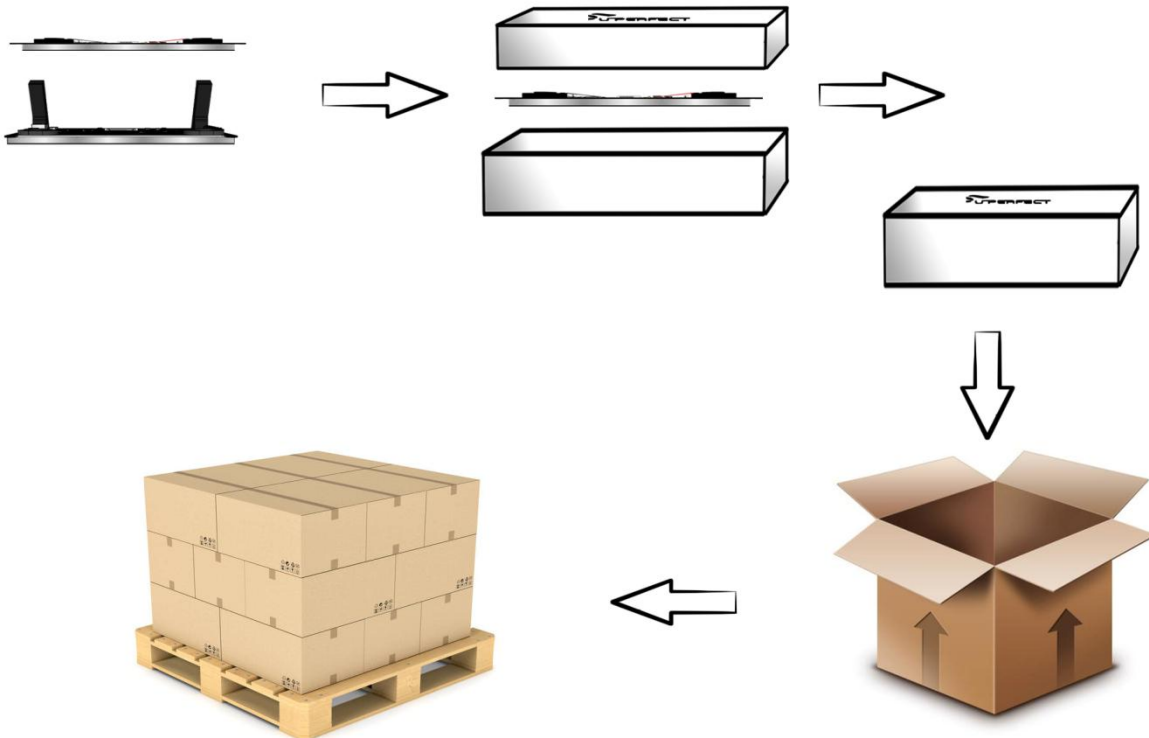


micro usb引脚定义

引脚	功能	颜色	备注
1	V Bus	红	电源正5V
2	Data-	白	数据-
3	Data+	绿	数据+
4	ID		A型:与地相连 B型:不接地(空)
5	GND	黑	地



7. 包装标准:





8. Precautions For use

(1) Storage

In order to avoid absorption of moisture it is recommended that the products are stored in the dry box (or dessicator) with a dessicant. Alternatively the following environment is recommended:

Storage temperature :5°C~30°C Humidity:60% HR max.

(2) Any mechanical force or any excess vibration should be avoided during the cooling process after soldering.

(3) Solder paste or have banned welding flux splashed down silicon surface.

(4) Devices should not be used in any type of fluid such as water,oil,organic solvents etc. When cleaning is required,IPA should be used.

(5) Devices should be soldered within 7 days after opening the moisture-proof packing.

(6) ESD Precautions.Static Electricity and surge damages LEDs.

It is recommended that wrist bands or anti-electrostatic gloves be used when handing the LEDs.All devices,equipment and machinery should be properly grounded.

(7) Note: the product use dc stablized power supply