

深圳市运天戈科技有限公司

**ShenZhenShi YunTianGe S&T CO .,LTD**

# PRODUCT SPECIFICATION

Customer (客户名称) : \_\_\_\_\_

Customer No.(客户编号) : \_\_\_\_\_

Product No. (产品编号): YTG-P70030-C1F1

深圳市运天戈科技有限公司

ShenZhenShi YunTianGe S&T CO .,LTD

| PREPARED (制作) | CHECKED (审核) | APPROVED (批准) |
|---------------|--------------|---------------|
|               |              |               |

|                           |   |
|---------------------------|---|
| Customer Approval<br>客户批准 | <input type="checkbox"/> Accept 接收 <input type="checkbox"/> Reject 拒绝<br>Comment 意见:<br><br>Approved by (确认人) |
|---------------------------|---|

ShenZhenShi YunTianGe S&T CO .,LTD

Tel: 138 23768287

Phone : +86 0755 81499055

Fax : +86 0755 81499010

Email : [wangxian8838@126.com](mailto:wangxian8838@126.com)

地址: 深圳市宝安区沙井镇和一鸿江工业园2栋5楼



深圳市运天戈科技有限公司

**ShenZhenShi YunTianGe S&T CO .,LTD**

**NOTICE:**

The content of this specification is subject to change without further notice. YTG assumes no responsibility concerning the accuracy, adequacy, or completeness of this specification. YTG makes no commitment to update, or to keep current the information and material contained in this specification.

Such information and material may change to conform to each confirmed order. In no event shall YTG be made responsible for any claims attributed to errors, omissions, or other inaccuracies in the information or material contained in this specification. YTG shall not be liable for direct, indirect, special incidental, or consequential damages arising from the use of such information or material.

The software (if any) described in this specification is furnished under a license or nondisclosure agreement, and may be used or copied only in accordance with the terms of such agreement.

YTG products are not intended for use in life support appliances, devices, or systems. Use of YTG product in such applications is not supported and is prohibited.

NO PART OF THIS SPECIFICATION MAY BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS WITHOUT THE EXPRESSED WRITTEN PERMISSION OF YTG.

# 深圳市运天戈科技有限公司

## ShenZhenShi YunTianGe S&T CO.,LTD

### Contents 目录

1. General Specification 产品规格
2. Electrical Characteristics 电气参数
3. Optical Characteristics 光学参数
4. Reliability 信赖性
5. Durability 寿命
6. Touch panel description 触摸屏功能描述
  - 6.1 touch panel drawing 外形图
  - 6.2 Block diagram 功能结构图
  - 6.3 Touch panel pin assignment 引脚定义
7. Appearance Inspection 外观检验
  - 7.1 Inspection Conditions 检验条件
  - 7.2 Criteria 判定标准
8. Precautions 注意事项
9. Packing Drawing 包装说明

### Appendix 附件

工程图

# 深圳市运天戈科技有限公司

## ShenZhenShi YunTianGe S&T CO.,LTD

### 1. General Specification 产品规格

| Item 项目                    | CONTENTS 内容          | Unit 单位 |
|----------------------------|----------------------|---------|
| Outline Dimension 外形尺寸     | 以确认工程图为准             | mm      |
| Active Area(W*L)动作区        | 156.25*87.95         | mm      |
| View Area 可视区              | 155.25*86.95         | mm      |
| TP size (inch) 英寸尺寸        | 7                    | inch    |
| Interface Type 接口种类        | -                    | -       |
| IC Type IC 型号              | -                    | -       |
| Number of touchpoint 触点数量  | -                    | -       |
| Operation Temperature 工作温度 | TOPL = -10, TOPH =60 | °C      |
| Storage Temperature 储存温度   | TSTL = -20, TSTH =70 | °C      |
| Sensor thickness ITO 厚度    | 0.55                 | mm      |
| Coverlens thickness 盖板厚度   | 0.55                 | mm      |
| Lens Color 盖板颜色            | 黑色                   | -       |
| Input force 输入外力           | <10                  | g       |
| Surface hardness 表面硬度      | >7                   | H       |

# 深圳市运天戈科技有限公司

## ShenZhenShi YunTianGe S&T CO.,LTD

### 2. Electrical Characteristics (Ta=25°C) 电气参数

| Item 项目           | Symbol 标识 | Condition 条件          | Min. 最小值 | Type 典型值 | Max. 最大值 | Unit 单位 |
|-------------------|-----------|-----------------------|----------|----------|----------|---------|
| Power Supply 电压   | VCC       | --                    | -        | -        | -        | V       |
| Supply Current 电流 | IDD       | Vcc =3.3V Free mode   | --       | --       | --       | mA      |
|                   |           | Vcc =3.3V watch mode  | -        | -        | --       | mA      |
|                   |           | Vcc =3.3V Active mode | -        | -        | --       | mA      |
|                   |           | Vcc =3.3V Fast mode   | -        | -        | -        | mA      |

### 3. Optical Characteristics 光学参数

| Item 项目          | CONTENTS 内容 | Remark 备注 |
|------------------|-------------|-----------|
| Transparency 透过率 | >86%        |           |

### 4. Reliability 信赖性

| Item 项目                               | Specifications 规格   | Remark 备注          |
|---------------------------------------|---|--------------------|
| High Temperature Storage 高温存储         | 70°C,240hrs, Normalized for 2 hrs                                 |                    |
| Low Temperature Storage 低温存储          | -20°C,240hrs, Normalized for 2 hrs                                | Non-condensing 无结露 |
| Temperature/ Humidity Storage 储存温度/湿度 | 60°C/90% RH,240hrs, normalized for 2 hrs                          | Non-condensing 无结露 |
| High Temperature Operation 高温工作       | 55°C,24hrs, Perform well  |                    |
| Low Temperature Operation 低温工作        | -10 °C,24hrs, Perform well  | Non-condensing 无结露 |
| Temperature/ Humidity Storage 储存温度/湿度 | 60°C/90%RH,24hrs, Normalized for 2 hrs                            | Non-condensing 无结露 |
| Thermal Shock 冷热冲击                    | -20 ~ 70°C, 60 Mins/cycle , Total 10 Cycles, Normalized for 2 hrs |                    |

# 深圳市运天戈科技有限公司

## ShenZhenShi YunTianGe S&T CO .,LTD

### 5. Durability 寿命

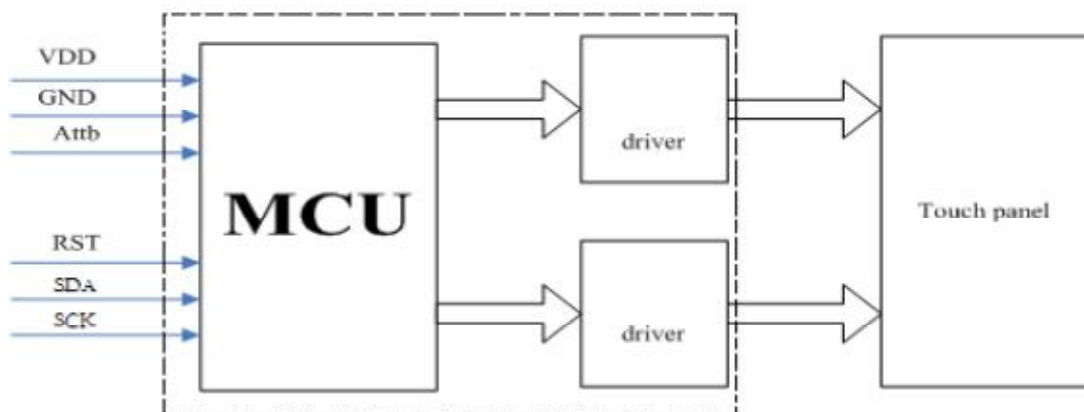
| Item                     | Specification             | Condition  |
|--------------------------|---------------------------|--|
| Hitting life<br>撞击寿命     | 35,000,000 times          | Hitting test may cause surface slight scratch yet the function stays intact 功能OK,外观轻微刮伤判OK |
| Panel Slide Test<br>滑动测试 | 250g, 20mm, 100,000 times | Slide test may cause surface slight scratch yet the function stays intact功能OK,外观轻微刮伤判OK.   |

### 6. Touch panel description 触摸屏功能描述

#### 6.1 touch panel drawing 外形图

See appendix(见附工程图)

#### 6.2 Block diagram 功能方框图



# 深圳市运天戈科技有限公司

## ShenZhenShi YunTianGe S&T CO.,LTD

### 6.3 Touch panel pin assignment 引脚定义

| Pin | Symbol | Pin | Symbol | Pin | Symbol | Pin | Symbol | Pin | Symbol |
|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|
| 1   | GND    | 13  | TX1    | 25  | TX13   |     |        |     |        |
| 2   | RX1    | 14  | TX2    | 26  | TX14   |     |        |     |        |
| 3   | RX2    | 15  | TX3    | 27  | TX15   |     |        |     |        |
| 4   | RX3    | 16  | TX4    | 28  | TX16   |     |        |     |        |
| 5   | RX4    | 17  | TX5    | 29  | GND    |     |        |     |        |
| 6   | RX5    | 18  | TX6    | 30  | GND    |     |        |     |        |
| 7   | RX6    | 19  | TX7    |     |        |     |        |     |        |
| 8   | RX7    | 20  | TX8    |     |        |     |        |     |        |
| 9   | RX8    | 21  | TX9    |     |        |     |        |     |        |
| 10  | RX9    | 22  | TX10   |     |        |     |        |     |        |
| 11  | RX10   | 23  | TX11   |     |        |     |        |     |        |
| 12  | GND    | 24  | TX12   |     |        |     |        |     |        |

### 7. Appearance Inspection 外观检验

#### 7.1 Inspection Conditions 检验条件

1. Environment:  $22 \pm 3^{\circ}\text{C}$ , Inspection distance:  $30 \pm 10\text{cm}$ .

2. Angle of Vision:  $30^{\circ} \sim 90^{\circ}$

3. Lighting illumination: 17W fluorescent luminant lamp is used for appearance inspection.

Detail of settings is shown in figure 13.1 & 13.2 .

4. Minor impurities outside viewing area are acceptable unless their existence affect electrical functions.



深圳市运天戈科技有限公司

ShenZhenShi YunTianGe S&T CO.,LTD

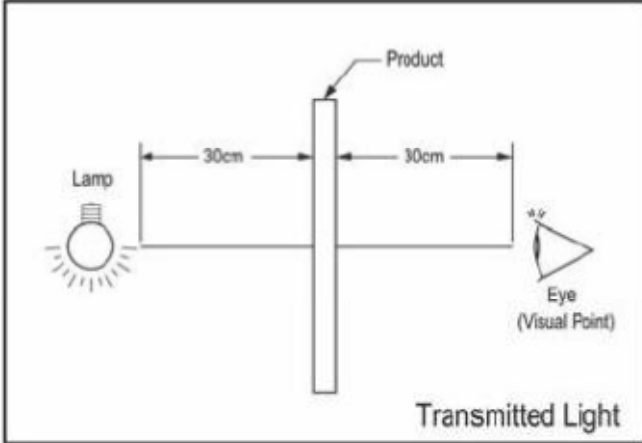


figure 13.1

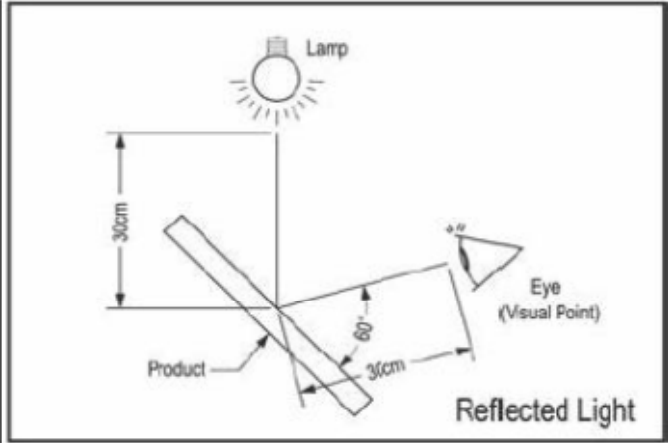


figure 13.2

7.2 Criteria 判定标准

| Item 项目               | Specification 规格   |
|-----------------------|--|
| Particle<br>灰尘        | (1) $D \leq 0.2$ OK<br>(2) $0.2 < D \leq 0.35$ (each area contains $\leq 3$ , total $\leq 5$ ) OK<br>(3) $D > 0.4$ NG  |
| Linear Object<br>线状异物 | (1) $W \leq 0.05$ OK<br>(2) $0.05 < W \leq 0.1$ and $L \leq 5.0$ , total $\leq 3$ OK<br>(3) $W > 0.1$ NG Remark: the particle will be ignored when it is removable by cleaning |
| Scratch<br>刮伤         | (1) $W \leq 0.025$ OK<br>(2) $0.025 < W \leq 0.05$ and $L \leq 12.0$ , total $\leq 5$ OK<br>(3) $0.05 < W \leq 0.1$ and $L \leq 6$ , total $\leq 5$ OK (4) $W > 0.1$ NG        |
| Remark<br>备注          | 1. D=Diameter<br>2. W=Width<br>3. L=Length   |

# 深圳市运天戈科技有限公司

## ShenZhenShi YunTianGe S&T CO.,LTD

### 8. Precautions 注意事项

|                  |  |
|------------------|--|
| Storage          | Store panel under the temperature and humidity range pre-specified. Direct sunlight exposure or piling should be avoided.  |
| Unpack拆包         | Unpack the box with the printed red arrow pointing up.   |
| Handling<br>使用中  | (1) Use clean sacks or glove to prevent fingerprints and/or stains left on the panel. Extra attention and carefulness should be taken while handling the glass edge.<br>(2) Avoid high voltage and/or static charge<br>(3) Holding the panel instead of the tail at all time |
| Cleaning<br>清洁   | (1) Use neutral detergent or isopropyl alcohol on a clean soft cloth to clean the panel surface (2) Prevent using any kind of chemical solvent, acidic or alkali solution.   |
| installing<br>安装 | (1) Excessive force or strain to the panel or tail is prohibited.<br>(2) Retain at least 0.3 mm clearance between panel and display module.<br>(3) Gasket or cushion pads around the edge of the panel may segregate waterand/or dust contamination.                         |
| Operating<br>操作  | (1) Touch the panel with your finger or stylus only to assure normaloperation. Any sharp edged or hard objects are prohibited.<br>(2) Operate the panel in a steady environment. Abrupt variation on temperature and humidity may cause malfunction of the panel.            |
| Others<br>其他     | (1) Keep the panel surface clean. Prevent any kind of adhesive applied on the surface.<br>(2) Avoid high voltage and/or static charge.   |

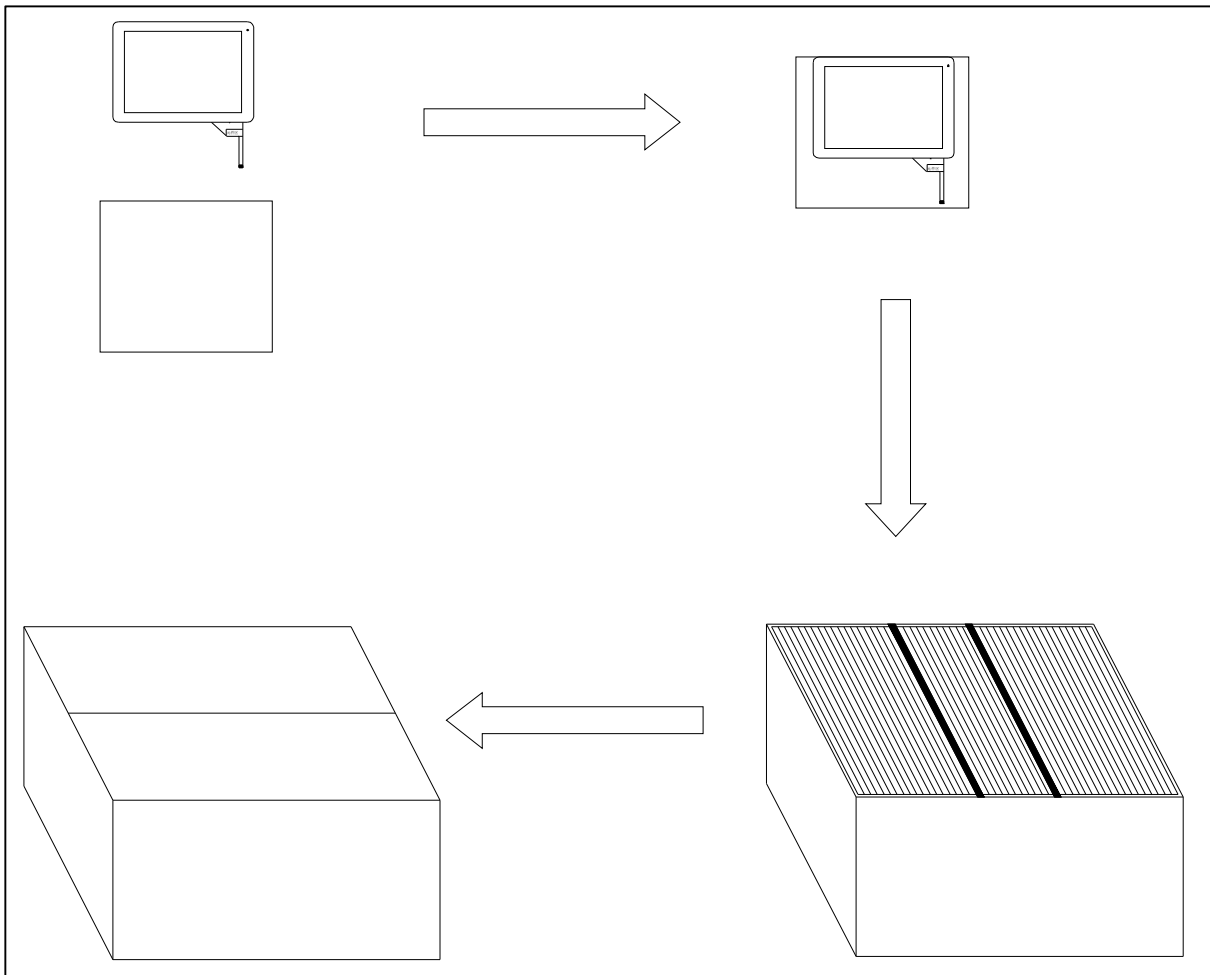
深圳市运天戈科技有限公司

**ShenZhenShi YunTianGe S&T CO.,LTD**

9. Packing Drawing 包装说明

| Packing Material 包装材料 | Size 尺寸       | Weight 重量 |
|-----------------------|---------------|-----------|
| Carton 纸箱             | 400*315*290mm | TBD       |
| Plastic Bag 气泡袋       | 290*275*5mm   | TBD       |

包装参考图

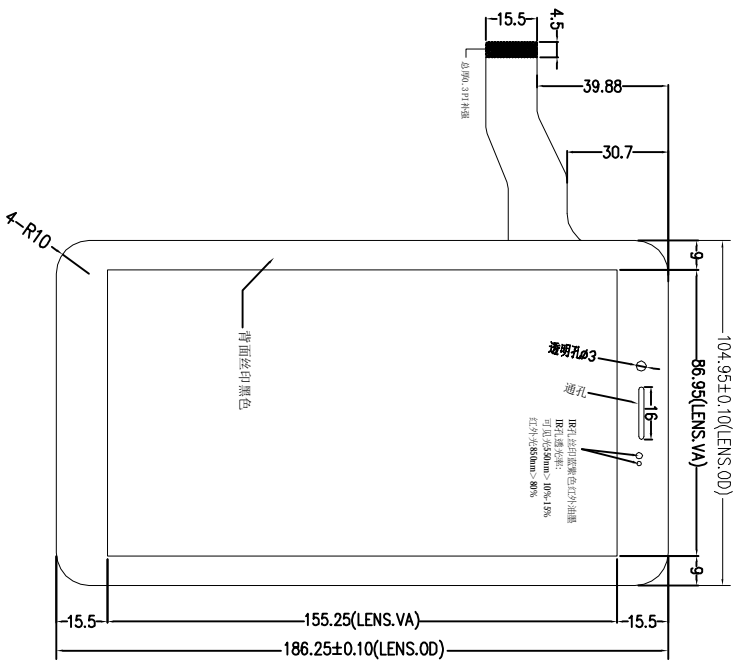


说明：每箱中有两个隔板，每箱装50片

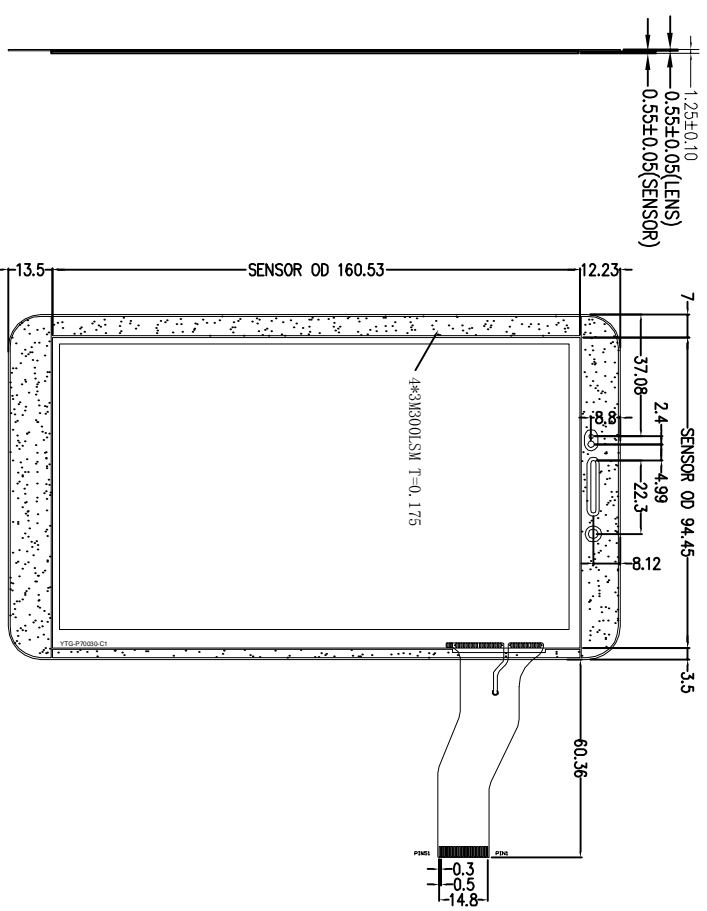
Appendix 附件

|      |            |                    |
|------|------------|--------------------|
| REV: | DATE       | CHANGE DESCRIPTION |
| 1.0  | 2013/11/13 | First Issue        |

### 正面视图



### 侧面视图



### 背面视图

| PIN脚  | 定义      | PIN脚  | 定义    |
|-------|---------|-------|-------|
| PIN1  | GND     | PIN6  | DRV3  |
| PIN2  | SENSOR0 | PIN7  | DRV4  |
| PIN3  | SENSOR1 | PIN8  | DRV5  |
| PIN4  | SENSOR2 | PIN9  | DRV6  |
| PIN5  | SENSOR3 | PIN10 | DRV7  |
| PIN6  | SENSOR4 | PIN11 | DRV8  |
| PIN7  | SENSOR5 | PIN12 | DRV9  |
| PIN8  | SENSOR6 | PIN13 | DRV10 |
| PIN9  | SENSOR7 | PIN14 | DRV11 |
| PIN10 | SENSOR8 | PIN15 | DRV12 |
| PIN11 | SENSOR9 | PIN16 | DRV13 |
| PIN12 | GND     | PIN17 | DRV14 |
| PIN13 | DRV0    | PIN18 | DRV15 |
| PIN14 | DRV1    | PIN19 | GND   |
| PIN15 | DRV2    | PIN20 | GND   |

|             |                 |
|-------------|-----------------|
| DRAW No:    | YTG-P70030-CLP1 |
| DRAWING BY  | JOE NOV13,2013  |
| CHECKED BY  | YZG NOV13,2013  |
| APPROVED BY |                 |

请客户确认图纸！  
确认签名：

**YTG** 深圳市运天戈科技有限公司  
TECHNOLOGY Shenzhen Yun Tange Technology Co., Ltd.

UNIT: MM SCALE: 1:1 SHEET: 1/1  
Unspecified Tolerance: ±0.2 REV: V1.0

- 备注:
- COVER LENS的表面硬度>7H,底色油墨区域没透光现象。
  - 油墨厚度8-12um,油墨硬度≧4H
  - LENS通过钢球冲击实验: 64克钢球,高度65CM作钢球冲击实验, 无破碎。
  - 产品物料满足ROHS和无卤素要求。
  - 无油墨处透光率≧90%。
  - CS ≧ 450MPA,DOL ≧ 8um。
  - 储存温度: -40℃ to 85℃。