

# SPECIFICATION FOR APPROVAL

**CUSTOMER:** \_\_\_\_\_

**MODEL NO. :** \_\_\_\_\_ U15QT-7321 \_\_\_\_\_

**PART NO. :** \_\_\_\_\_ SBM-U15QT7321-U-02 \_\_\_\_\_

**MODEL NAME:** \_\_\_\_\_ 15W magnetic hollow wireless charging \_\_\_\_\_

**REVISION:** \_\_\_\_\_ A1 \_\_\_\_\_

**DATE:** \_\_\_\_\_

## APPROVED SIGNATURES

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|

**LinkCom®**

- ☐ 聯寶電子股份有限公司  
☐ 東莞聯寶光電科技有限公司  
☒ 深圳聯驊電子科技有限公司  
☐ LinkCom USA, Inc.  
☐ 其他

(Taiwan Headquarter)

5F., No.127, Ln. 235, Baoqiao Rd., Xindian Dist, New Taipei City 231 ,Taiwan(R.O.C.)

Tel: (886) 2-8919-1380

Fax: (886) 2-8919-1370

E-mail: sales@linkcom.com.tw

(China Plant)

Technology Industrial Park Chi-Shi Town Dong Guan City China

Tel: (86-769) 8678-6368

Fax: (86-769) 8678-8988

E-mail: sales@linkcom.com.tw

|           |                    |            |                                       |
|-----------|--------------------|------------|---------------------------------------|
| Model No. | U15QT-7321         | Model Name | 15W magnetic hollow wireless charging |
| Part No.  | SBM-U15QT7321-U-02 | Size       | 59*59*6.0mm                           |

## Product Specification

## 產品規格書

**Product name/產品名稱:** 15W磁吸中空无线充

**Model No/ 產品型號:** U15QT-7321

**File number /文件編號:** \_\_\_\_\_

**Revision/版本號:** A1

**Date/日期:** \_\_\_\_\_



|                   |                  |                   |
|-------------------|------------------|-------------------|
| APPROVED BY<br>批准 | CHECKED BY<br>審核 | DESIGNED BY<br>製作 |
|                   |                  |                   |

|           |                    |            |                                       |
|-----------|--------------------|------------|---------------------------------------|
| Model No. | U15QT-7321         | Model Name | 15W magnetic hollow wireless charging |
| Part No.  | SBM-U15QT7321-U-02 | Size       | 59*59*6.0mm                           |

## 目錄

|                                         |   |
|-----------------------------------------|---|
| 1.Scope/概述 .....                        | 5 |
| 2.Product Characteristic/产品特点 .....     | 5 |
| 3. Performance Parameter/性能参数 .....     | 5 |
| 4. Safety Control/安全机制 .....            | 5 |
| 5. Reliability Requirements/可靠性要求 ..... | 6 |
| 6. Environment Requirement/环境要求 .....   | 7 |
| 7.Execution Standards/执行标准 .....        | 7 |
| 8. Attentions 使用注意事项.....               | 7 |
| 9. Size 尺寸 .....                        | 7 |
| 10. Weight 重量.....                      | 8 |
| 11. Statement / 聲明 .....                | 8 |



|           |                    |            |                                       |
|-----------|--------------------|------------|---------------------------------------|
| Model No. | U15QT-7321         | Model Name | 15W magnetic hollow wireless charging |
| Part No.  | SBM-U15QT7321-U-02 | Size       | 59*59*6.0mm                           |

Reversion History / 更新記錄

| Revision | Date       | Changes                         |
|----------|------------|---------------------------------|
| A0       | 2024-01-23 | 初版發行                            |
| A1       | 2024-4-10  | 新增 2.1 Product accessories 产品配件 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |
|          |            |                                 |

|           |                    |            |                                       |
|-----------|--------------------|------------|---------------------------------------|
| Model No. | U15QT-7321         | Model Name | 15W magnetic hollow wireless charging |
| Part No.  | SBM-U15QT7321-U-02 | Size       | 59*59*6.0mm                           |

## 1.Scope/概述

U15QT-7321 is a Polo magnetic wireless charging aluminum pad . Free position RX for wireless charging when it with magnetic and TX&RX offset will not occur in the whole charging process. The charging pad support iPhone magsafe series mobile phones and airpods wireless fast charging . Please use PD adapter for power in.

U15QT-7321 产品是一款中空带磁吸功能无线充电板，当 RX 端也支持磁吸功能时可以随意放置即可让 TX&RX 线圈进行无缝对接并保持通讯，而且在整个充电过程不会发生 TX&RX 偏移现象，该产品仅兼容 iPhone 系列及带磁吸功能的手机&苹果耳机，并且支持 PD 适配器输入。

## 2.Product Characteristic/产品特点

◆ Support phone magnate series mobile phones wireless fast charging

支持 phone 系列及带磁吸功能手机无线快充

◆ Support wireless charging for Apple Air pods

支持苹果耳机无线充电功能

◆ TYPE\_C INPUT

TYPE\_C 输入

◆ Support magnetic suction function

支持磁吸功能

### 2.1 Product accessories 产品配件

| 料号 Part number | 产品叙述 Description         | 图片 Photo                                                                              | 备注 Remarks |
|----------------|--------------------------|---------------------------------------------------------------------------------------|------------|
| UNIPA-2184     | PD 20W Adapter           |   |            |
| UNITD-7312     | Plating Black Metal Ring |  |            |

## 3. Performance Parameter/性能参数

|     |                                          |                         |
|-----|------------------------------------------|-------------------------|
| 3.0 | Power input protocol/电源输入协议              | PD2.0/PD3.0             |
| 3.1 | Input voltage &current /输入电压电流           | 9V/2.0A ,12V/1.8A(15W)  |
| 3.2 | Working voltage&current/工作电压电流           | 9V/1.6A, 12V/1.65A(15W) |
| 3.3 | Wireless charging output power /无线充电输出功率 | 5W/7.5W/10W/15W         |

|           |                    |            |                                       |
|-----------|--------------------|------------|---------------------------------------|
| Model No. | U15QT-7321         | Model Name | 15W magnetic hollow wireless charging |
| Part No.  | SBM-U15QT7321-U-02 | Size       | 59*59*6.0mm                           |

|     |                                    |                                                       |
|-----|------------------------------------|-------------------------------------------------------|
| 3.4 | Power Transfer Efficiency/转换效率     | 70%±5%                                                |
| 3.5 | 5W/10W/15W Frequency /5W/10/15W 频率 | frequency conversion 110KHz-205KHz / 变频 110KHz-205KHz |
| 3.6 | Apple 7.5W frequency/苹果 7.5W 频率    | Constant frequency 127.7KHz 定频 127.7KHz               |
| 3.7 | Ripple noise/纹波及噪音                 | ≤100mV <sub>p-p</sub>                                 |
| 3.8 | Operating temperature/工作温度         | 0-40℃                                                 |
| 3.9 | Relative humidity/相对湿度             | 10%~80%                                               |

## 4. Safety Control/安全机制

### 4.1. Short Circuit Protection/短路保护

In the case of short-circuit at the receiver output, the transmitter red light on and stop output. When removed the receiver or short circuit, the transmitter will resume normal operation.

在接收端输出短路的情况下，发射端红色指示灯亮并停止输出。当移除接收或者短路解除时，发射端将恢复正常工作。

### 4.2. Over Current Protection/过流保护

When the receiver load exceeds the rated value(110% - 130%), the over current protection is triggered and the transmitter stops working. When removed the receiver, the transmitter will resume normal operation.

当接收器负载 > 额定值的 110% - 130% 时，触发过电流保护，发射端停止工作，当接收器被移除时，发射端将恢复正常工作。

### 4.3. Over-temperature Protection/过温保护

#### 4.4.1. Wireless charging over-temperature protection/无线充电过温保护

The NTC temperature protection of the PCBA is 75 °C ± 5 °C. The transmitter stops working when the temperature exceeds the value. Resets the receiver or cools to 55-60°C, the transmitter returns to normal operation (optional replacement with external NTC)

PCBA 贴片 NTC 温度保护设定值为 75°C ± 5°C，当温度超过设定值，发射端停止工作，重新放置接收或者降温至 55-60°C 时，发射器恢复正常工作。(可选择更换成外接 NTC)

## 5. Reliability Requirements/可靠性要求

5.1 For other tests, please refer to Reliability Test Specification and Reliability Test Report.

其他测试请参考《可靠性测试规范》与《可靠性测试报告》

### 5.2 Burn-in 老化

Burn-in for 2 hours under 35°C (±5°C), Nominal input voltage, Nominal load.

在 35°C (±5°C) 的环境下，额定输入电压，额定负载，老化 2 小时

|           |                    |            |                                       |
|-----------|--------------------|------------|---------------------------------------|
| Model No. | U15QT-7321         | Model Name | 15W magnetic hollow wireless charging |
| Part No.  | SBM-U15QT7321-U-02 | Size       | 59*59*6.0mm                           |

## 6. Environment Requirement/环境要求

6.1. Operating Temperature and Relative Humidity 操作温度和相对湿度

0°C-40°C 20%RH to 80%RH

6.2. Storage Temperature and Relative Humidity 储存温度和相对湿度

-20°C to +60°C 10%RH to 90%RH

## 7. Execution Standards/执行标准(Compatible with these specifications)/

7.1. EMC Standards 电磁兼容标准

|         |         |            |
|---------|---------|------------|
| EN55032 | EN55035 | FCC-Part15 |
|---------|---------|------------|

## 8. Attentions 使用注意事项

- ◆ Please use the correct rated AC Adapter, to ensure the normal function.

请使用配置的正确规格火牛，保证功能正常；

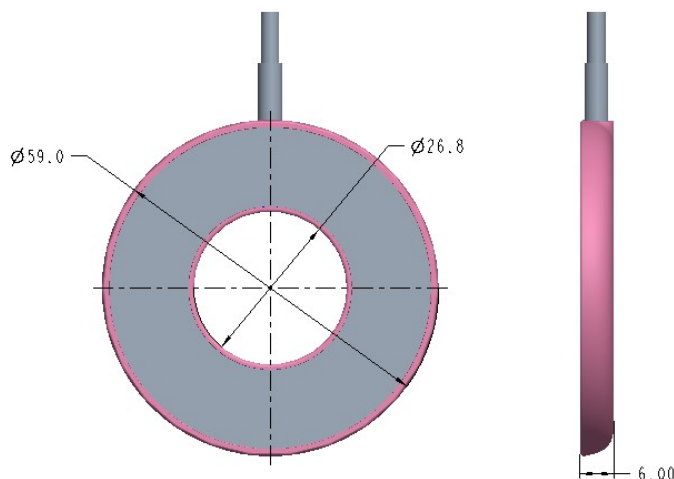
Support phone magnate series mobile phones wireless fast charging.

本产品支持 I Phone 系列和带磁吸功能的手机进行无线充电功能

- ◆ Supports wireless charging for Apple headphones.

支持苹果耳机无线充电功能

## 9. Size尺寸: $\phi 59*6.0\text{mm}$ (公差 $\pm 0.2\text{mm}$ )



|           |                    |            |                                       |
|-----------|--------------------|------------|---------------------------------------|
| Model No. | U15QT-7321         | Model Name | 15W magnetic hollow wireless charging |
| Part No.  | SBM-U15QT7321-U-02 | Size       | 59*59*6.0mm                           |

## 10. Weight 重量

67±3g

## 11. Statement / 聲明

All rights reserved by LinkCom Manufacturing Co., Ltd. for all of this specification for approval.  
About warranty, please refer to LinkCom company warranty policy.

---