

# 15W WIRELESS CHARGING PAD

## MANUAL

**Model No 型号:** 22429

**Specification 规格:**      INPUT:5V/2A                      OUTPUT:5W  
    INPUT: 9V/2A                      OUTPUT:15W

2.2	Output Characteristics 输出特性 .....	4
2.2.2	Charge delay time 充电延迟时间 .....	5
3	Protection function 保护功能 .....	5
3.1	Over Temperature Protection(OTP)过温保护 .....	5
3.2	Foreign Object Detect function(FOD)异物检测功能 .....	6
3.3	Over Voltage Protection(OVP)过压保护 .....	6
3.4	Under Voltage Protection(UVP)欠压保护 .....	6
4	LED Indicator/指示灯状态 .....	7
5	Regulatory Standards/安规标准 .....	7
6	Operating Environment 工作环境 .....	8
6.1	Temperature 环境温度 .....	8
6.2	Humidity 环境湿度 .....	8
6.3	Altitude 海拔高度 .....	8
6.4	Cooling Method 冷却方式 .....	8
7	Photo of the product and PIN Assignment 成品图及端口定义 .....	8
7.1	2D Drawing and PIN Assignment 2D 视图及端口定义 .....	8
8	Precautions 注意事项 .....	9

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## 1. 产品概述 Products Overview

本规格书详细描述了一款DC/DC无线充电发射端的电气性能、产品结构、产品可靠性等详细技术参数，符合QI标准，TX端可提供15W（MAX）功率。This specification describes in detail the electrical performance, product structure, product reliability and other detailed technical parameters of a DC/DC wireless charging transmitter. It conforms to QI standard, and the TX terminal can provide 15W (MAX) power.

### FCC COMPLIANCE STATEMENT:

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

**Warning:** Changes or modifications to this unit not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

### FCC Radiation Exposure Statement

The device has been evaluated to meet general RF exposure requirement.

The device can be used in mobile(min20cm) exposure condition.

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2. 电性能指标 Electrical performance index

2.1 Input Characteristics（输入特性）

Input/输入	(Min) 最小	(Typ) 标准	(Max) 最大	Comments 备注
5V rated input voltage 5V 额定输入电压	4. 75V	5V	5. 25V	This voltage is the plate end voltage 此电压为板端电压
5V rated input current 5V 额定输入电流			2A	Minimum input maximum load when tested 最低输入最大 负载时测试
9V rated input voltage 9V 额定输入电压	8. 55V	9V	9. 45V	This voltage is the plate end voltage 此电压为板端电压
9V rated input current 9V 额定输入电流			2A	Minimum input maximum load when tested 最低输入最大 负载时测试
Standby Power Consumption			0. 7W	

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## 2.2 Output Characteristics 输出特性

### 2.2.1 Output Voltage, Current 输出电压、电流

Output 输出	(Min) 最小	(Typ) 标准	(Max) 最大	Comments 备注
5V rated output voltage 5V 额定输出 电压	4.75V	5V	5.25V	Plate end voltage or Voltage displayed on RX fixture 板端电压或者 RX 治具上显示电压
5V rated output current 5V 额定输出电流			1A	
Output 5V efficiency 输出 5V 效率	60%			The plate end efficiency 板端效率
9V rated input voltage 9V 额定输出电压	8.55V	9V	9.45V	Plate end voltage or Voltage displayed on RX fixture 板端电压或者 RX 治具上显示电压
9V rated input current			1.66A	

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9V 额定输出电流				
Output 5V efficiency 输出 9V 效率	70%			The plate end efficiency 板端效率
Working frequency 工作频率	110. 5KHz	—	205KHz	
Charging high 充电高度	3mm			TX shell to phone shell distance (geometric center alignment)TX 外 壳至手机外壳距离（几 何中心对准）

**2.2.2 Charge delay time 充电延迟时间**

Detection time/检测时间	Connection time/握手时间	NOTE
<3S	<7S	—

**3 Protection function 保护功能**

**3.1 Over Temperature Protection(OTP)过温保护**

Temperature/过温点	Comments/备注
70℃	When the temperature of the transmitting coil is higher than 70℃ (±5℃), the output is closed, and the blue light flashes;The system works properly when the temperature is lower than 45 °C (±5℃). 当发射线圈的温度高于 70℃(±5℃)时关闭输出，同时蓝灯闪烁； 当温度恢复到 45℃(±5℃)以下后系统会恢复正常工作。

### 3.2 Foreign Object Detect function(FOD)异物检测功能

Foreign object/异物	Comments/备注
Foreign object/异物	The metal 1 yuan coin is placed in the center of product TX or TX and RX, and the blue light blinks and the output is shut off. 金属 1 元硬币放于产品 TX 正中心或者 TX 与 RX 正中心，蓝灯闪烁，关断输出。

### 3.3 Over Voltage Protection(OVP)过压保护

Input Voltage/输入电压	最小 (Min)	标准 (Typ)	最大 (Max)	Comments/备注
9V	12.8V	13V	13.5V	When the input voltage is at the over-voltage protection value, the product stops working and the blue light flashes. The system can automatically recover after removing the fault (test under no-load state). after removing the fault (test under no-load state).当输入电压处于过压保护值时，产品停止工作，蓝灯闪烁，系统在去除故障后可自动恢复（空载状态下测试）

### 3.4 Under Voltage Protection(UVP)欠压保护

Input Voltage/输入电压	low-voltage /低电压	Comments/备注
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5V	≤4.2V	When the input voltage is under voltage protection value, the product stops working, the blue light flashes, and the system automatically recovers after removing the fault (test under no-load state).当输入电压处于欠压保护值时，产品停止工作，蓝灯闪烁，系统在去除故障后自动恢复（空载状态下测试）
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4 LED Indicator/指示灯状态

LED color: blue and green 蓝绿

State/状态	Indicator/显示
First power on/第一次上电	The green light flashes three times and then goes out /蓝绿灯同时闪烁 3 次后熄灭
Standby/待机	Not bright lights/不亮灯
Charging/充电状态	Normally on a green light/绿灯常亮
abnormal /异常（过温、过压、欠压、短路、过流）	The blue light flashing/N 蓝灯闪烁（快闪）
FOD/异物检测(空载、带载)	The blue light flashing/蓝灯闪烁（快闪）
Full charge/充满电状态	Normally on a green light/绿灯常亮

5 Regulatory Standards/安规标准

Type	Country	Standard
■ FCC	U.S.	FCC ID
□ CE	Europe	CE-RED
□ CCC	China	GB4943
□ Qi	-	QI 1.3.2

## **6 Operating Environment 工作环境**

### **6.1 Temperature 环境温度**

\* Operating: 0℃ to +35℃.

\* Storage: -10℃ to +45℃.

### **6.2 Humidity 环境湿度**

\* Operating: From 20% to 80% relative humidity (non-condensing).

\* Storage: From 10% to 90% relative humidity (non-condensing).

### **6.3 Altitude 海拔高度**

\* Operating: to 2000m

\* Storage: to 2000m.

### **6.4 Cooling Method 冷却方式**

\* Ventilation cooling. 自然通风冷却

## **7 Photo of the product and PIN Assignment 成品图及端口定义**

### **7.1 2D Drawing and PIN Assignment 2D 视图及端口定义**





**Type-C 输入: 5V/2A  
9V/2A (Type-C input  
5V/2A 9V/2A)**

**LED: 蓝绿双色  
(LED:blue and  
green)**

**输出: 15W (output  
15W)**

## 8 Precautions 注意事项

1) This product is limited to charge the mobile phones which are compatible with Qi protocol. 仅限用于对兼容 Qi 协议的手机进行充电。

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- 2) Don't try to decompose or disassemble this product. 请勿分解或组装适配器。
- 3) Don't drop this product on ground or place heavy objects on it. 请勿使无线充电器落地或将重物置于其上。
- 4) Children must be supervised to use it. 儿童须成人的监督下使用本充电器。
- 5) This product should be used in the temperature range of 0℃～35℃. 须在 0℃～35℃温度范围内使用本充电器。
- 6) Don't use or store this product under direct sunlight, near the heating equipment or in other high temperature environment.

请勿在直射阳光下、发热的设备旁或其它高温场所使用或储存本充电器。