

# User manual

Customer Name: TYLT, inc.

Manufacturer Name: SHENZHEN GOODWIN TECHNOLOGY CO.,LTD

Product Model: QIPVTPPBK-T

Product Type: Wireless charger Pivot



## TABLE OF CONTENTS

1. Description.....	Page4
2. Input Characteristics.....	Page4
3. Key function description.....	Page4
4. Output Characteristics.....	Page4
5. Battery Characteristics.....	Page5
6. Protection Characteristics.....	Page5
7. LED Indication.....	Page5
8. Product Appearance Drawing.....	Page6
9. Product Pictures.....	Page7
10. Reliability Test.....	Page8
11. Certifications.....	Page9

## 1. Description.

This is a portable product of mobile power + wireless transmitter, which uses cost-effective integrated chip, high-quality ultra-thin polymer lithium-ion battery, cost-effective products that meet safety standards.

## 2. Input Characteristics.

### 2.1. Lightning Input voltage: 5V

When the Lightning input is charged, the priority Qi wireless charging works, the wireless charging is 5W, and the input maximum current is 1.5A (the wireless charging conversion rate is  $\geq 61\%$ ).

When the wireless charging stops or does not work, it automatically switches to the mobile power charging, the charging current is 1A-2A (Note: the charging current depends on the battery voltage).

Note: When the Lightning input is charged, the USB port has no output.

## 3. Key function description.

3.1. Tap to open the output, often press to close the output;

3.2. When you need to check the power, you need to press the button once.

## 4. Output Characteristics.

4.1. When the USB port has a mobile phone, it preferentially outputs 5V/2.1A to the USB port and turns off the wireless charging;

4.2. When the USB port is not loaded, the wireless charging is automatically turned on, and the wireless charging output is 5W; (Note: the wireless charging conversion rate is  $\geq 55\%$ );

Note: Wireless charging conversion rate  $\geq 55\%$

4.3. When the USB port is not connected to the mobile phone, when the wireless

charging is no load, the output is turned off around 30S .(Note: USB port output conversion rate  $\geq$  90%)

## 5. Battery characteristics.

5.1. Lithium-ion battery, nominal capacity (3.7V/5000mAh), in line with UL certification standards.

## 6. Protection Characteristics.

- 6.1. Product with overcurrent protection, overcurrent range (2.4-2.8A).
- 6.2. Product with over-discharge protection, protection voltage range: (2.9-3V).
- 6.3. Output short circuit protection.
- 6.4. Product with overcharge protection, protection voltage range: (4.3-4.35V).
- 6.5. Foreign Object Detection FOD

The unit has Foreign Object Detection based on the Qi standard requirements.

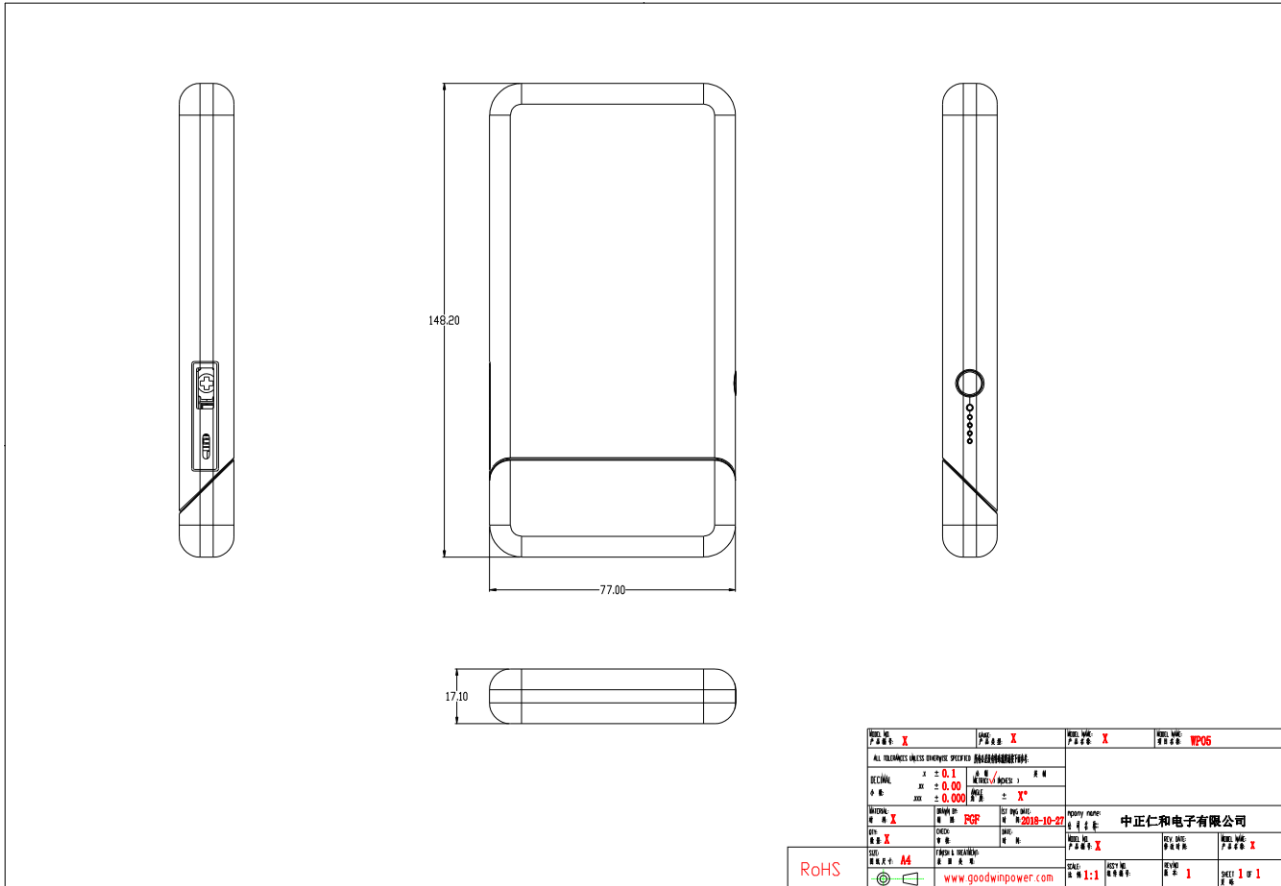
## 7. LED indication.

7.1. The white LED lights up when charging and indicates the current battery level;

<b>1%-5%</b>	<b>The first LED light is shining</b>
<b>5%-25%</b>	<b>The first LED light is shining</b>
<b>25%-50%</b>	<b>The second LED is always on</b>
<b>50%-75%</b>	<b>The third LED light is always on</b>
<b>75%-99%</b>	<b>The fourth LED light is always on</b>
<b>100%</b>	<b>All lights off</b>

7.2. When the wireless charging is working, the blue LED lights up and it flashes abnormally.

# 8. Product Appearance Drawing.



**9 . Product Pictures.**



## **10. Reliability Test .**

### **10.1. (High-Low Temp):**

Place products into  $70^{\circ}\text{C} \pm 5^{\circ}\text{C}$  temperature test chamber in 8 hours, Then to have products recover to normal temp in normal room temperature.

Place products into  $-20^{\circ}\text{C} \pm 5^{\circ}\text{C}$  temperature test chamber in 8 hours, Then to have products recover to normal temp in normal room temperature.

### **10.2. Drop test:**

Drop to the concrete for all 6 faces freely, Height: 1m

Criterion: Housing won't be divided and be without crack during test or after test. And all functions should work as before test.

### **10.3. Burn-In Test:**

Normal temperature  $25^{\circ} \pm 5^{\circ}$  , 5W aging 2H.

### **10.4. Salt Spray Test:**

Salt Water Concentration: 5% (9.5L water+500gNaCl)

Pressure/:  $1.0 \pm 0.1 \text{Kg/cm}^2$ ;

Air Pail Temp:  $47 \pm 1^{\circ}\text{C}$ ;

Salt Water Pail:  $35 \pm 1^{\circ}\text{C}$ ;

Test Time: 24hours

Criterion: All metal parts surface are without rust, Bubble, Peeling off after test and cleaning all water on surface

### **10.5. Connector Inserting and Removing:**

Frequency: 8 Times/1minute

Micro USB : 2000times, Inserting force after test should be:  $F \leq 3.5\text{KG}$ ; And

Removing force after test should be:  $3.5\text{kg} \geq F \geq 1\text{kg}$

Criterion: Connector still works well and structure still look good after test. And inserting and removing force after test is still in range.



## **11. Certifications.**

### **11.1. EMC Standards: FCC ID (FCC CFR47 PART 15C:2017)**

EMC: FCC ID (FCC CFR47 PART 15C: 2017)

### **11.2. Wireless charging standard: WPC Qi V1.2.4**

WPC Qi V1.2.4

### **11.3. CEC Standards: CEC-400-2017-002A**

CEC-400-2017-002A

### **11.4. CB certification:**

## **Warning**

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

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.

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.