SPECIFICATION

Product： Wireless Charger

MODEL NO.： ME103S

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# **Introduction**

This product based on the electromagnetic induction technology, meet the WPC (Wireless Power Consortium) released by QI wireless charging protocol, to support QI wireless charging equipment to provide energy or charge, at the same time have the FOD (Foreign Object Detection) function. Continuously output 5W power in regular use, supporting the 10W output of the Galaxy S /Galaxy S series and Galaxy NOTE series (with QC2.0\_3.0 adapters).

# **electrical performance**

## Input or Output

|  |  |
| --- | --- |
| Item | Description |
| Input voltage range | Normal Charge :DC4.9V-5.25V  Fast Charge: 9V\* |
| Maximum incoming current | Normal Charge :1.5A-1.8A  Fast Charge: 9V 1.67A\* |
| No-load consumption（@DC4.9V-5.25V） | 0.075W |
| Output power | Normal Charge :5W max,  Fast Charge:10W max\* |
| Peak Efficiency | Normal Charge :73% , Fast Charge:83%\* |
| Switching Frequency | 110-205KHz |
| Charging distance | ≤5mm（iPhone can be 10mm） |
| Charging Center offset | ≤5mm（iPhone can be 10mm） |
| Charging Mode | 60°Bracket form, vertical and horizontal charge |

NOTE: \* quick charging function requires QC2.0\_3.0 adapter, or samsung original adapter, only support samsung Galaxy s, Galaxy NOTE series. Output power and efficiency are converted values for reference only.

# **Specification**

|  |  |
| --- | --- |
| Item | Description |
| Size | 120\*80\*95mm |
| Coil | 2 coils |
| LED | Blue\*1; Green\*1 |
| Interface | Micro USB |
| Material | Fire retardant PC |
| Data wire | 4 core pure copper 1m micro usb wire |
| Box Size | 155\*95\*85mm |
| content | Wireless charger\*1；USBwire\*1；specification \*1 |

# **LED lights**

* After power on, Green light goes out after 0.5 S, blue light shine 3 S and put out after complete self-inspection, waiting for the equipment in the sensing area. Put the receiving device in the sensing area, the Blue LED light and start charging;
* Take away the receiving device during charging: Blue LED keeps 1S and goes out
* The receiving device is full of electricity: Green LED keeps light.
* Take away the receiving device after full of electricity: Green LED keeps 1S and goes out
* Detect metal foreign bodies or temperature over specified value, enter the FOD models/over temperature protection, Blue LED flashing, 1 times/sec.

# **Protection Requirements**

## Input overvoltage protection

When the input voltage exceeds 11V / 5v, it enters the overpressure protection, the blue LED quickly flashes, and when the input voltage is reduced to 10V / 5v, the work is restored. If the input voltage exceeds 13.2 V, there is a risk of permanently damaging the device.

## Input undervoltage protection

When the input voltage is lower than 4.6v + 0.1v, the transmission power will gradually decrease as the input voltage continues to drop, until the input voltage drops to 2.8v + 0.1v. The system enters into an unresponsive state.

## FOD (Foreign object detection)

When the surface of a wireless charger is detected with a metal foreign body larger than 30mm in diameter, it enters the FOD mode, and the blue LED flashes, 1 times/sec. When the metal foreign object is removed, the device exits the FOD mode into standby mode.

## Temperature protection

When the temperature sensor detects the temperature reaches 60 degrees Celsius will enter temperature protection mode, equipment to stop working, and blue LED flashing, 1 times /sec, when the temperature dropped to 40 degrees Celsius, equipment exit temperature protected mode.

# **Environment Requirements**

## Operating Temperature and Relative Humidity

-10℃~ +30℃

10%RH ~ 85%RH

## Storage Temperature and Relative Humidity

-20℃ ~ +80℃

5%RH ~ 95%RH

## Drop in

6 sides, drop height: 80 cm, fall to cement surface

# Mach. Outline Drawing



