

4 IN 1 wireless charging ambient light

一、 Scope of use

This specification describes the relevant parameter requirements and inspection rules for wireless charging produced by the company.

This product is a high-reliability and high-efficiency wireless charging transmitter. It has standard protocol 5W/15W mode, Samsung standard protocol 10W mode, Apple 7.5W protocol mode.

二、 Product parameter characteristics

Serial number	Project	Parameter characteristics
1.0	Model	SC-KTM6
1.1	Product type	Four-in-one wireless charging atmosphere
1.2	Product material	Plastic + Silicone
1.3	Charging input standard	5V/9V; overvoltage protection: 13.5V undervoltage protection 4.3V
1.4	Wireless charging	15W+5W+3W
1.5	Lamplight	15W power on: blue light flashes 2 times, standby: no light; charging: blue light is on, foreign matter: blue light flashes 5W power on: green light flashes 2 times, standby: no light; charging: green light is on, foreign matter: green light flashing
1.6	Temperature/humidity range	In a dry and ventilated room, the product should avoid contact with corrosive substances and stay away from fire and heat sources. The product is powered on once a month during storage. Work: 0~45℃, Storage: -10~45℃, working humidity: less than 70%, storage humidity: less than 70%

三、 Product Functions\Features

1.0	Fast charging agreement	Compatible with EPP fast charging protocol
1.1	Protective	The product has multiple security guarantees of undervoltage protection, overcurrent protection, overvoltage protection, and receiving bias protection.

四、 Test items and standards

4.1 Instruments/Tools:Computer, adapter, tester, charging cable, DC power supply

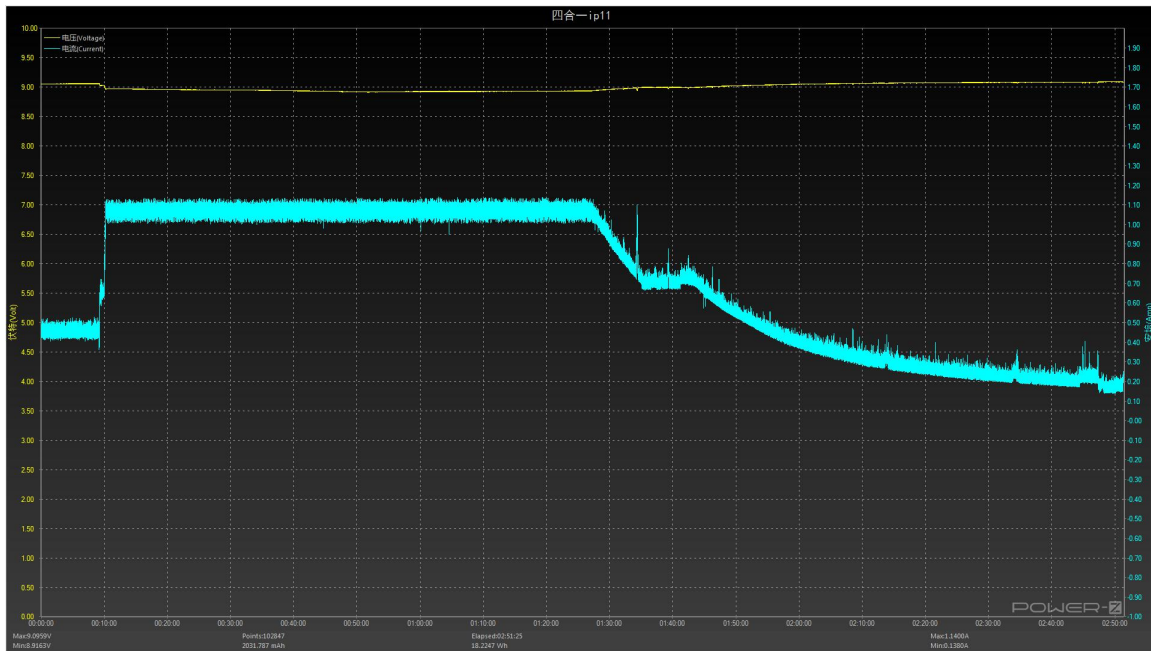
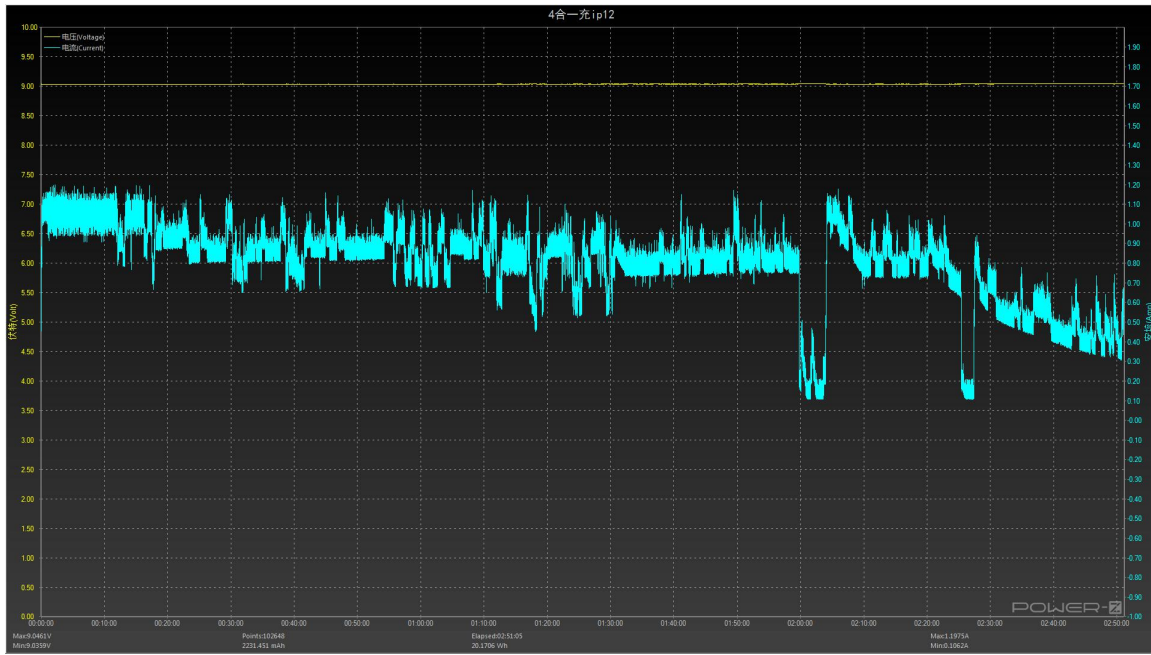
4.2 Wireless charging test items and standards:

1.0	Product QC fast	Power the product with a QC adapter and place	The voltage at the end of
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	charging test	the corresponding mobile phone on the board coil.	the charger rises to 9V, and there is an input current of more than 300mA, which enters the fast charging mode for the product.
1.1	Product PD fast charging test	Power the product with a PD adapter, and place the corresponding mobile phone on the board coil.	The voltage at the end of the charger rises to 9V, and there is an input current of more than 300mA, which enters the fast charging mode for the product.
1.2	Wireless charging and no-load power consumption	By means of QC/PD adapter Power supply to the product (no receiving module) and test the power consumption of no-load standby.	$\leq 1W$
1.3	Wireless charging efficiency	Use 5V 2A power supply to supply the product, use the TI 51020 receiving module to carry 500mA and 1000mA current, and test the efficiency of the board when the receiving and transmitting coils are 3mm apart.	Efficiency at 500mA output $\geq 72\%$ Efficiency at 1000mA output $\geq 70\%$
1.4	Wireless charging output no-load voltage	Test the output voltage with the TI 51020 receiving module (this voltage is determined by the receiving module)	4.85V-5.25V
1.5	Wireless charging and output with load current	Use QC/PD adapter Power the product, use the TI 51020 receiving module to connect the electronic load, and test the output load capacity of the product.	700mA-1250mA
1.6	Wireless charging rated output power	Product rated load capacity	5W, 10W (Samsung protocol), 7.5W (Apple protocol), 15W
1.7	Wireless charging sensing distance	The communication distance between the receiving coil and the transmitting coil, the reliable communication distance is within 5mm, and the limit distance is 6mm.	5mm
1.8	Wireless charging foreign body detection FOD	Use QC/PD adapter Power the product, put the one-dollar coin in the middle of the product induction coil or in the middle of the transmitting coil when the product is loaded.	The product closes the output and enters the protected state.
1.9	Communication standards	Communication protocol standards	Qi

五、Product use:

1. Product testing



六、 Appearance size diagram of the finished product:

