## **SPECIFICATION FOR APPROVAL**

CUSTOMER ITEM:	Wireless Transmitter Module for max 12W Rx Module  PWS-T3-1201 _Rev.1.00
	APPROVAL SIGNATURE
Please return to us one cop	by of "SPECIFICATION FOR APPROVAL" with you approved signature.

APPROVED	SALES BY	QUALITY ASSURE	ENGINEERING

## CATALOG

1.	Scope
2.	Product Characteristic
3.	Input Characteristics
	3.1. Input Voltage & Frequency
	3.2. Standby Current Consumption
4.	Output Characteristics
	4.1. Static Output Characteristics <vo &="" r+n=""></vo>
	4.2. Line & Load Regulation
5.	Reliability Requirements
	5.1. Reliability Test
	5.2. Burn-in
	5.3. Vibration
6.	Environment Requirement
	6.1. Operating Temperature and Relative Humidity
	6.2. Storage Temperature and Relative Humidity
7.	Photo of Product
8.	Exterior Features
9	Major Test Fauinment

## 1. Scope

- 1.1 The purpose of the document is to specify the functional requirement of a Wireless Power Supply's Tx Module for max 12W Rx Module..
- 1.2 The Wireless Power supply's Tx Module shall meet the ROHS requirement.

#### 2. Product Characteristic

PWS-T3-1201 is a multi-function wireless charging platform: Its transmission efficiency is up to 75% and can provide up to max 12W transmission capacity.

System operation frequency from 50KHz to 500KHz.

Once the RX Receiver is identified, the Tx Module will output power by automatic adjustment.

Provide the protection of power overload and metal sensing.

LED light indicates the working activity.

LED indication light:

- ① LED is OFF standby mode;
- 2 Red LED (LED1) is ON flashing -operating mode;

Its dedicated power adapter has ultra-wide input voltage design, can work stably under AC100-240V/50-60HZ and can be used for users from all countries and regions.

## 3. Input Characteristics

#### 3.1. Input Voltage & Frequency

Item	Minimum	Normal	Maximum
Input Voltage	11.4VDC	12VDC	12.6VDC

#### 3.2. Standby Current Consumption

At 12VDC, Standby Current Consumption ≤ 0.002A

# 4. Output Characteristics (Rx Module)

#### 4.1. Static Output Characteristics <Vo & R+N>

Output	Rated	Load	Peak Load	Output Range	R+N	Remark
Power	Min Load	Max Load				
12W	0A	1A(12V)	1.2A	12V±5%	<200mVpp	

Note: Ripple & Noise: Measurement is done by 20MHz bandwidth oscilloscope and the output paralleled a 0.1uF ceramic capacitor and a 10uF electrolysis capacitor.

#### 4.2. Line & Load Regulation

Output	Load Condition		Line Regulation	Load Regulation	Remark
Power	Min Load	Max Load			
12W	0A	1A(12V)	±5%	±5%	

## 5. Reliability Requirements

### **5.1 Reliability Test**

Test Items	Test conditions	Test quantity
Storage at high	+80°C 16 Hrs	2PCS
temperature test		
Storage at low	-20℃ 16 Hrs	2PCS
temperature test		
Operating at high	+45°C 8 Hrs	2PCS
temperature test		
Operating at low	-20°C 8 Hrs	2PCS
temperature test		
Low Temperature turn	EUT should start-up normally	2PCS
on test	after storage at 0°C of 2 hours	
	under minimum input voltage and	
	maximum load.	
High/low Temperature	45°C(2Hrs)→ $-40$ °C(2Hrs)→ $45$ °C (2Hrs) → $-40$ °C(2Hrs)	2PCS
circle test	Continually work 16 Hours	
Constant Temperature	+25 °C 80%RH,continually	2PCS
_		21 05
turn on test	operating 48 hours	

#### 5.2. Burn-in

4 hours at  $40^{\circ}$ C(+/- $5^{\circ}$ C), Nominal input voltage, Nominal load.

#### 5.3. Vibration

10 to 300Hz sweep at a constant acceleration of 1.0G  $\,$  (Breadth:3.5mm) for 1Hour for each of the perpendicular axes X,Y,Z

## 6. Environment Requirement

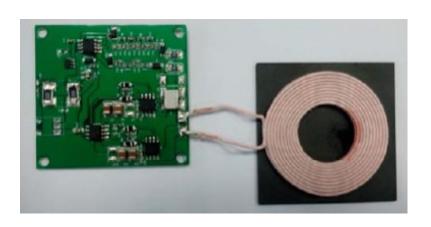
### 6.1. Operating Temperature and Relative Humidity

 $0^{\circ}$ C to  $40^{\circ}$ C 20%RH to 80%RH @Sea level shall below or no more than 10000 feet.

## 6.2. Storage Temperature and Relative Humidity

 $-30^{\circ}$ C to  $+70^{\circ}$ C 10%RH to 90%RH(non-condensing) @Sea level shall below 30000 feet.

## 7. Photo of Product



# **Description:**

- 1. The distance between Tx Coil with PCB and other metal components is Min: 5.0mm
- 2. The surface distance between Tx Coil and Rx Coil is 3 –5mm.

## 8. Exterior Features

### 8.1. Size

L\*W\*H

PCBA: 132\*72 \*15 mm

Coil + Shielding : 50 \* 50 \*3 mm

# 9. Major Test Equipment

- 9.1. DC Supply
- 9.2. Rx\_Module: JY-R3-0701
- 9.3. ELECTRONIC LOAD
- 9.4. OSCILLOSCOPE
- 9.5. Logical Analyzer