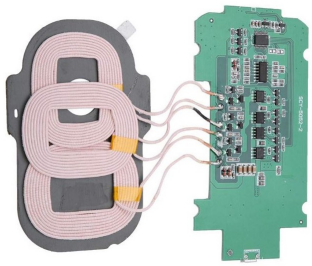

Bcs Automotive Interface Solutions WPC003-5 5W Wireless Charging Module TX Controller User Manual

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5W Wireless Charging Module TX Controller

Product Description

(WPC003-5)

Version:	Description:	Date:	Editor:
A1	Initial Release	2022-01-12	Bo Zhang

Contents

1 Overview

1.1 Purpose This document describes the basic functions, dimensions, performance parameters and other important information of WPC003-5. The main purpose is to do RF and other related certification testing, to help certification bodies to understand the main functions of WPC003-5.

1.2 Basic Product Information Product Name: wireless mobile phone charger Model: WPC003-5 Manufacturer: BCS automotive interface solutions (Suzhou) Co., Ltd

1.3 design and experimental standards
1.3.1 Design Criteria
Environmental requirements
Qi The Qi Wireless Power Transfer System Power Class 0 SpecificationV1.2.4
DeltaLAH_Modul_Basis_CouplingAntennaGen2WLC_LAH5G0035ADV01F
Wireless_Charging_Interface_SpecV1.6

1.3.2 Experimental Standard

1. VW800002013-06
2. TL 810002016-02
3. Modul_Erprobung_CouplingAntennaGen2_LAH5G0035SV01F
4. Qi The Qi Wireless Power Transfer System Power Class 0 SpecificationV1.2.4

1.4 Abbreviations of Terms and Definitions
The following abbreviations or acronyms are used throughout the specification:

Item	Description	Explanation
WPC	Wireless Power consortium	Wireless charging Alliance
Qi	/	Qi standard
Tx	Power Transmitter	Wireless charging transmitter
Rx	Power Reciever	Wireless charging receiver
FOD	Foreign Object Detect	Foreign body detection
TBD	To Be Defined	To be defined
NC	NO Change	Undefined

Chart 1 abbreviations of noun definitions

2 Product Introduction

2.1 Product Introduction
This product is a car wireless charging product, which is used to charge the wireless charging receiver (such as mobile phone, watch, etc.) that meets the Qi standard.

Chart 2-1 logic block diagram

As shown in the figure above, the input power of this product is provided by the automobile battery, that is, BAT +.

Figure 2-2 schematic diagram of charging position

As shown in the figure above, this product can charge a wireless charging receiver, which can ensure that the maximum power received by RX terminal is 5W.
This wireless mobile phone charger can charge smart phones that meet the Qi standard. Just put the phone on the charging silicone pad above the charger. The charging power of this wireless mobile phone charger can reach 5W.

Notice: If the protective case of the mobile phone is made of metal, the wireless mobile phone charger may not be able to charge. In this case, please remove the protective case and place the phone on the charger again.

2.2 Mechanical Appearance
2.2.1 Product 3D diagram

Chart chart2-3 3D

2.3 Technical Parameters

Electrical specifications	Parameters:	Value:
Output specification	Maximum output power	5W
Applicable temperature range	Operating temperature range	-40℃~70℃
	Storage temperature range	-40℃~85℃
Input parameter	Wireless charging function	Nominal：12V(±5%)
	Voltage / current	5V/1A
Charging efficiency	RX output power vs TX input power	Coil Center:>70%
working frequency	/	110KHz±5KHz
Maximum charging distance	TX coil to RX coil	≤10mm
Protection level	Dustproof & waterproof	IP5K0
Protection function	Under voltage protection	Vin≤8.5V
	Over voltage protection	Vin≥16.5V
	Over temperature protection & Recovery	Protection ≥ 70 ℃ Recovery ≤ 60 ℃
	Over current & overload protection	≥1.2A
	FOD protection	Meet Qi standard

Chart 2-6 technical parameters

3 Safety Instructions

- Before using and operating the equipment, please read and observe the following precautions.
- This product meets the technical standards of short distance micro power class an equipment and relevant specifications.
- It is not allowed to disassemble the equipment, change the internal structure, antenna, etc. to avoid danger.
- In places where the use of wireless devices is prohibited according to laws and regulations, such as in-flight, medical and other places, please comply with the relevant regulations and requirements, stop using or turn off the devices. The use of micro power equipment in relevant electromagnetic environmental protection areas shall comply with the requirements of electromagnetic environmental protection and relevant industry authorities.
- The radio waves generated by devices may affect implantable medical devices, such as pacemakers, cochlear implants, hearing aids, etc. When using the wireless charging device, please keep a distance of at least 30 cm from the implanted medical device.

This product has passed the Qi certification of WPC, and can charge the products that also pass the certification of WPC. Please don’t charge the wireless charging equipment that doesn’t meet the requirements of Qi, and don’t use unauthorized or incompatible power supply, charger, battery, etc. to power the equipment, which may cause

fire or other hazards.

This device complies with Part 15 of the FCC Rules and Industry Canada's license exempt RSS Standard(s). 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.

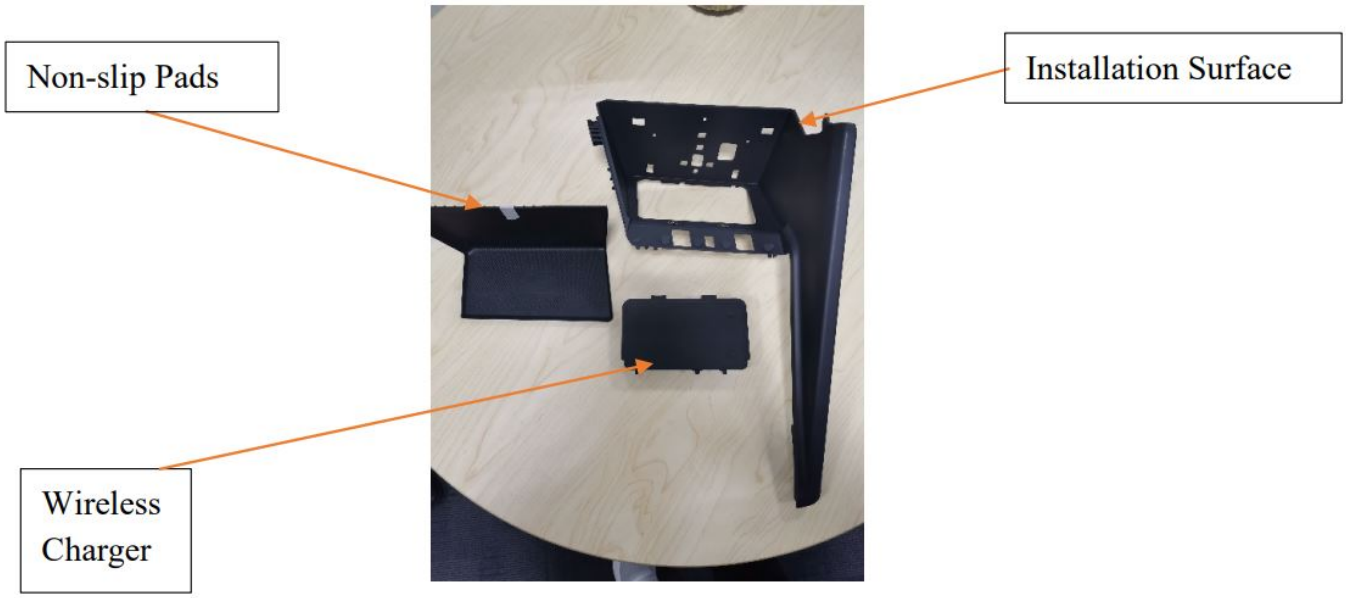
Radiation Exposure Statement: This equipment complies with IC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

	DE	IE	DK	FI	NO	SE	IS	EE	LV	MC
	BE	NL	LU	AT	CH	FL	IT	SM	HR	CS
	ES	PT	TUR	GR	AD	IC	CY	MT	FR	
	SI	CZ	PL	HU	BG	RO	SK	BA	LT	

The users manual or instruction manual for an intentional or unintentional radiator shall caution the user that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

4 Installation Instructions



Step 1

1. Align the wireless charger to the card slot on the mounting panel;

Step 2

2. Press the wireless charger into the card slot:

Step 3

3. Place a non-slip pad on top of the wireless charger

Step 4

4. Complete the installation

Documents / Resources

	**Bcs Automotive Interface Solutions WPC003-5 5W Wireless Charging Module TX Controller** [pdf] User Manual WPC003-5, WPC0035, 2AXPS-WPC003-5, 2AXPSWPC0035, WPC003-5 5W Wireless Charging Module TX Controller, 5W Wireless Charging Module TX Controller, 5W Wireless Charging Module, Wireless Charging Module TX Controller, Charging Module TX Controller, Module TX Controller, Module Controller