CONTENTS

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Contents list page

1. GENERAL INFORMATION

1.1 Description of WPC UNIT

The actual distance used by the EUT is 6cm.

WPC UNIT provides the following functions.

- MAX 15W Wireless Charging
- Wireless Charging : 114~116kHz (5W,15W),126~128kHz(7.5W)

Picture 1: System configuration

1.2 System overview

Wireless charging controller <LP, MP> - System for charging mobile phone wirelessly in vehicle using electromagnetic induction between coils

① After inputting IGN1 power, the reception coil (cell phone RX Coil)

② (TX side charging pad: wireless charger side) Current flows in the transmission coil

③ The magnetic field generated by the current of the transmission coil is guided to the receiving coil and induction current is generated in the receiving coil

④ The charging current starts to be charged through PMIC (Power module IC) of mobile phone

2 ELECTRICAL CHARACTERISTICS

2.1 Operating characteristics of MP

Item	Specification
Rated Supply Voltage	DC 12V
Operating Voltage	DC 9 ~ 16V
Operating Temperature	- 30 ~ + 75℃
Storage temperature range	- 40 ~ + 85℃
MP<WPC> Frequency	114 - 116 kHz(WPC 5W, 15W) 126 - 128 kHz(WPC 7.5W)
Standby Current	Below than 1mA

Table 1: Electrical characteristics of MP

2.2 UNIT Input/Output Interface

Pin No.	Description	Reference
1	GND	
2	GND	
3	WC_AMBER_IND_OUT	
4	WC_GREEN_IND_OUT	
5	B_CAN_LOW	
6	B_CAN_HIGH	
7	NC	
8	NC	
9	NC	
10	NC	
11	IGN1	
12	BAT+	

CAUTION :
This device complies with part 15 of the FCC Rules. 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.

Any changes or modifications (including the antennas) to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

FCC and IC RF Radiation Exposure Statement: This equipment complies with FCC and IC RF Radiation exposure limits set forth for an uncontrolled environment. This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.
This equipment should be installed and operated with a minimum distance of 20 cm between the radiator and your body.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada’s licence-exempt RSS(s). Operation is subject to the following two conditions:
(1) This device may not cause interference.
(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L’émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d’Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L’exploitation est autorisée aux deux conditions suivantes :
(1) L’appareil ne doit pas produire de brouillage;
(2) L’appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d’en compromettre le fonctionnement.

RF du FCC et IC d'exposition aux radiations: Cet équipement est conforme à l'exposition de FCC et IC rayonnements RF limites é-tablies pour un environnement non contrôlé.
L’antenne pour ce transmetteur ne doit pas être même endroit avec d’autres émetteur sauf conformément à FCC et IC procédures de produits Multi-émetteur.