



U S E R M A N U A L

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ESTABLISHED BY  
SEOYON ELECTRONICS

**Brand : SEOYON ELECTRONICS CO., LTD**

**MODEL : SYECWPC1907**

**PMN : Wireless Charging System**

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1. GENERAL INFORMATION
2. ELECTRICAL CHARACTERISTICS

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## 1. GENERAL INFORMATION

### .1. Description of WPC UNIT

WPC UNIT provides the following functions.

- MAX 15W Wireless Charging
- Wireless Charging : 115kHz



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 Confirmation of non-mobile NFC mounting via NFC Multi Tagging <MP + NFC>
- ③ (TX side charging pad: wireless charger side) Current flows in the transmission coil
- ④ 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
- ⑤ 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°C
Storage temperature range	- 40 ~ + 85°C
MP<WPC> Frequency	115kHz
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	AUTH_CAN_LOW	
9	AUTH_CAN_HIGH	
10	NC	
11	IGN1	
12	BAT+	

**FCC warning statement:**

**15.19**

λ. 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.

**15.21**

- Any changes or modifications not expressly approved by the party responsible for compliance could void the authority to operate equipment.
- This device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.
- End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

**FCC/ IC RF Radiation Exposure Statement:**

This equipment complies with FCC/ ISED RF radiation exposure limits set forth for an uncontrolled environment for body-worn configuration in direct contact to the phantom.

This device complies with FCC/ ISED radiation exposure limits set forth for an uncontrolled environment.

IC warning statement:

**RSS-Gen Issue 5.**

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.

**Co-located**

This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.