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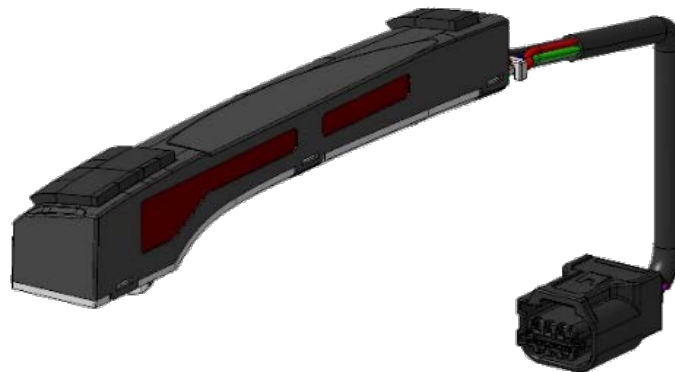
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SX2 NFC Touch Door Handle User Manual

V 1.0



Winnercom Co., Ltd.

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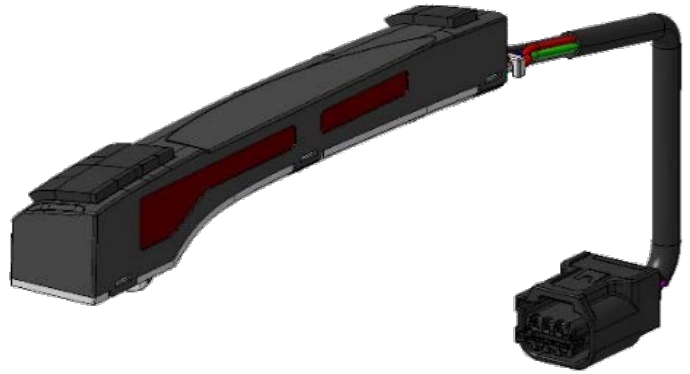
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1. Introduction

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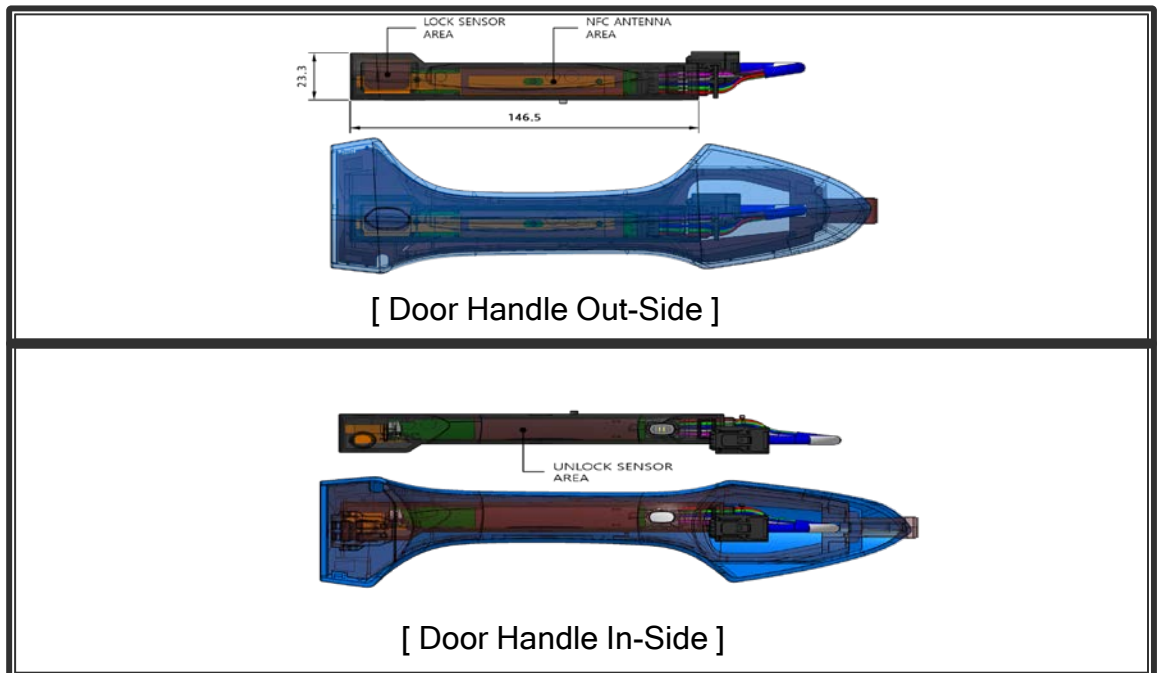
- Door handle Module (DHS)
- NFC & Capacitive Touch
- Pocket Light LED
- Hi-Speed CAN



The door handle module for Automotive has a NFC Reader and lock/Unlock 2Channel Capacitive touch Sensor function. This module is installed inside of the door handle covers and will be attached to the outside door panel.

This module is communicated with CAN network which enables to connect to the car network to send the signal of lock and unlock of door and Pocket light LED On/Off control.

It receives DC power from car battery at all time.



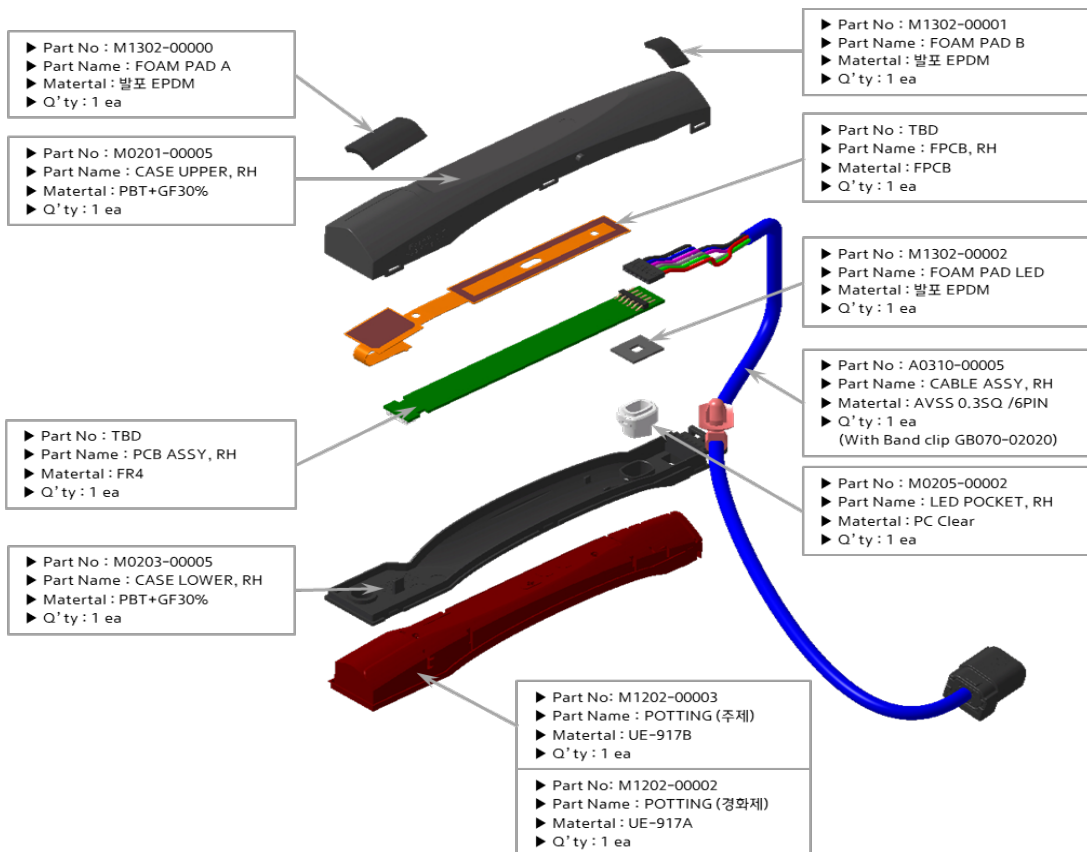
[Assembled cover and DHS]

2. NFC DHS Design(BOM) & Application

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CE - NFC Touch Door Handle

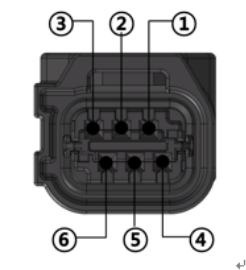
ITEMS	SPECIFICATION
Size	146.5 x 23.3 x 19.5(h) [mm] (Length x Width x Height)
Color	Black
Weight	76g
Waterproof	Polyurethane full potting inside of module. Protective of humidity ,vibration, waterproof.
Material	Case : PA6+GF15% , ABS / PRESS : SPTE(Tin-Plating) / PCB : FR-4, 4Layer / Foam Tape : EPDM/ FPCB : Polyimide film



3. Attentions

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- Please always mount the Door handle Module before power on the device to avoid circuit damage
- Before power on the Module, check the power supply(Fig. 1)
- Module Input Power connect to the connector(Fig. 1)
 - **Type** : 6pin Connector Sealed
 - **Maker & Part No** : 경신, HKC06-12721 6P Female



Pin #.	Name	Description	In/Out	Wire Color	I/O Level
1	V Bat(+Vcc)	Power Supply	Power	RED	Battery +
2	L_CAN(L)	CAN Low Signal	I/O	GREEN	2.5±TBD V
3	TOUCH_1	LOCK	O	GRAY	
4	TOUCH_2	UNLOCK	O	PINK	
5	L_CAN(H)	CAN High Signal	I/O	BLUE	2.5±TBD V
6	GND	Electric Ground	Power	BLACK	Gnd

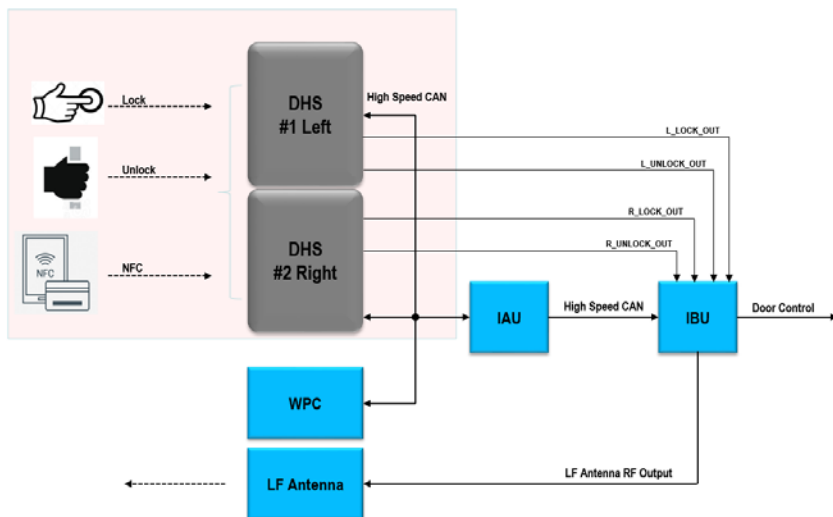
Fig. 1 Connector

4. Specifications

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NFC Touch Data

Frequency Range	13.56MHz for NFC
Operating Voltage	9.0 ~ 16.0 [Vdc], Typical 12.0 [Vdc]
Current	Max 400mA @ Operation Mode
Operating Temp.	-30°C ~ 75°C
Storage Temp.	-40°C ~ 85°C
Symbol	DC, IEC 60417-5031 (2002-10)
NFC maximum output power	4.49dBuA/m at 10m



[System Block Diagram]

5. User Information and Instructions

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FCC Compliance Statement

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.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

5. User Information and Instructions

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Industry Canada Statement

This device complies with ISSED 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.

- Le présent appareil est conforme aux CNR d'ISED 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'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement

Manufacturer information

Manufacturer name	WINNERCOM Co., Ltd.
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Product name (type) :	Touch door