



HMC- DN8 NFC - RG3 NFC - DL3 NFC - MQ4 NFC - SE  
Requirement Specifications

FCC ID: KR5-DHSHMCNFCRG3

IC: 7812D-DHSHMCNFCR3

# Requirements Specification

## DHS HMC NFC RG3

## 13 SE Requirements

### 13.1 System Integration

#### 13.1.1 Product Specification Scope

This document specifies parameters for the DHS standalone module.

As performances may vary depending on the customer Door Handle application (module positioning, chrome strip, etc.), the main performance (sensitivity) will be characterized and provided in § Sensitivity - HANDLES Characterization

#### 13.1.2 Vehicle Integration Impact

Because integration on vehicle can likely have an impact on the DHS performances, this product specification might have to be changed (sensitivity, reaction time, current, special functions, etc.)

#### 13.1.3 Door Handle Integration DGL

ID: 315145	State: Released
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The Mechanical Design of the Door Handle shall be done in compliance with the Door Handle Integration Guideline.

**DHS Continental Door Handle Guidelines:** see ref in [Requirement 259711](#)

This document describes the requirements of the Door Handle (paint conductivity, distances to chrome, water drainage,...), that the customer **MUST** comply with, in order to achieve correct system performances.

#### 13.1.4 System Integration DGL


ID: 315144	State: Released
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The overall Access-System Design shall be done in compliance with the System Integration Guideline

**DHS Continental System Integration Guidelines:** 10 277 895 version AA

This document describes the requirements of the entire system (door panel grounding, cabling, LF antenna polling, ...), that the customer and the BCM system supplier **MUST** comply with, in order to achieve correct system performances.

### 13.2 Environmental Performance

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### 13.2.1 Special Conditions Compliance

ID: 315072	State: Released
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The overall DHS design shall be able to pass all the tests listed in the Special Conditions Test Specification..

### 13.2.2 DV/PV Environmental Compliance

ID: 315073	State: Released
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Environmental DV/PV test plan shall be defined and agreed with the Customer

## 13.3 Sensitivity

### 13.3.1 Lock Detection Area

ID: 315080	State: Released
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The Lock detection area shall be limited to the designated area :

No detection by touching the Rear-Side of the DH is allowed.

No detection by touching the Chrome element of the DH is allowed.

### 13.3.2 Unlock Detection Area

ID: 315074	State: Released
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The Unlock detection area shall be limited to the designated area :

No detection by touching the Front-Side of the DH is allowed.

No detection by touching the Chrome element of the DH is allowed.

### 13.3.3 NFC Detection Area

ID: 315056	State: Released
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The NFC detection area shall be limited to the designated area :


No NFC Detection by approaching a PICC on the Rear-Side of the DH is allowed.

### 13.3.4 Capacitive robustness to mixing

ID: 315076	State: Released
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The DHS capacitive functions shall be robust to mixing :

- By touching Unlock area, the Lock signal shall not be triggered.
- By touching Lock area, the Unlock signal shall not be triggered.

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### 13.3.5 Detection Distances Characterizations


Detection Distances are measured on Continental Automated Test Bench, with metallic targets (representative of user hand or finger).

The method is described in DHS Continental Door handle guideline described in [Requirement 259711](#) document #17 and #19

Values are computed after tuning phase with statistical data over 30 sensors (2 measurements per detection area)

Typical Value is the average of Detection Distance at Room Temperature.

Min Value is the (Average -  $4\sigma$ ) Detection Distance at worst-case Temperature.

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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 of the device.

This device complies with Industry Canada's licence-exempt RSSs. 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'Industrie 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, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

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.