

# Chipkey Tag User' Manual

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## Revision History

Rev.	날짜	수정 내용	담당
1.0	2020.02.11	First Release	Park Jeguk

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### **Revision History**

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## 1. Synopsis

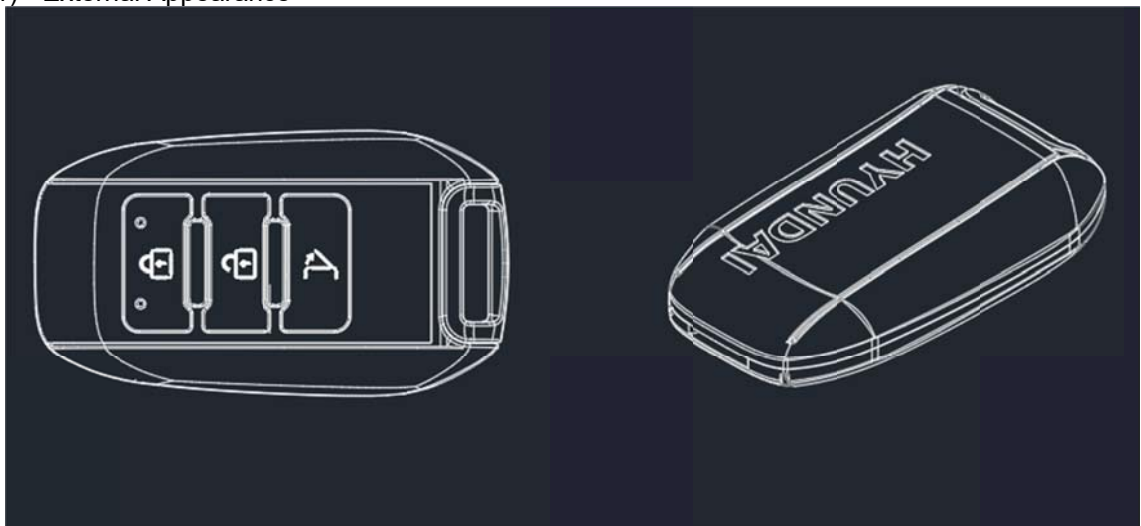
This document is specifically-written manual for receiver and transmitter (Chipkey Tag) of wireless communication, which is to confirm user identifications under engine-start limiting function in heavy equipments.

Chipkey Tag is defined as following: it receives signals with RFID 125 KHz and wakes up. After then, it transmits password-secured information to Chipkey/Flipkey Reader by using 433MHz wireless signals.

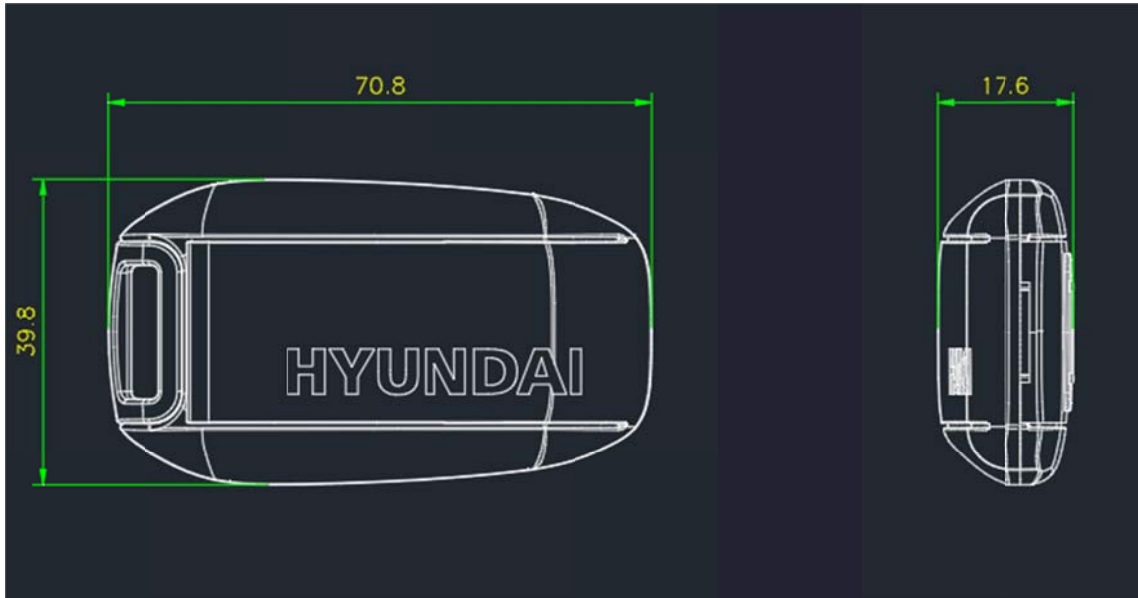
 <b>WARNNIG</b>
<b>Exchanging batteries in incorrect way, It may cause explosion</b> <b>Discard used batteries according to manufacturer's instructions</b>

## 2. Product Image

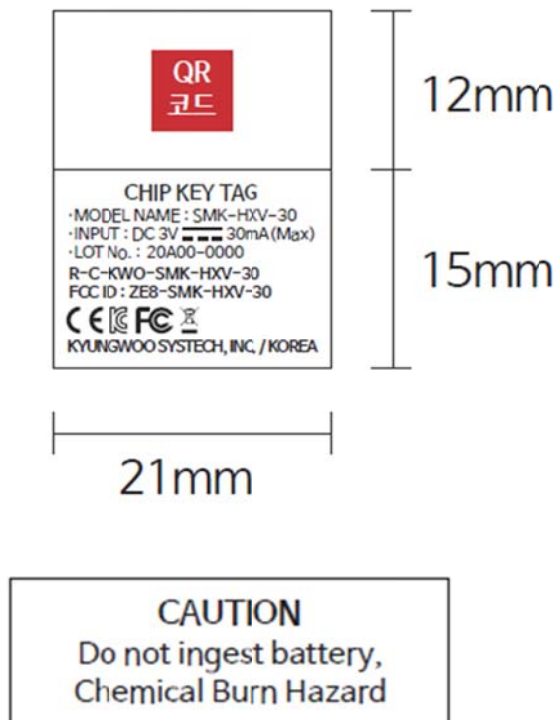
### 1) External Appearance



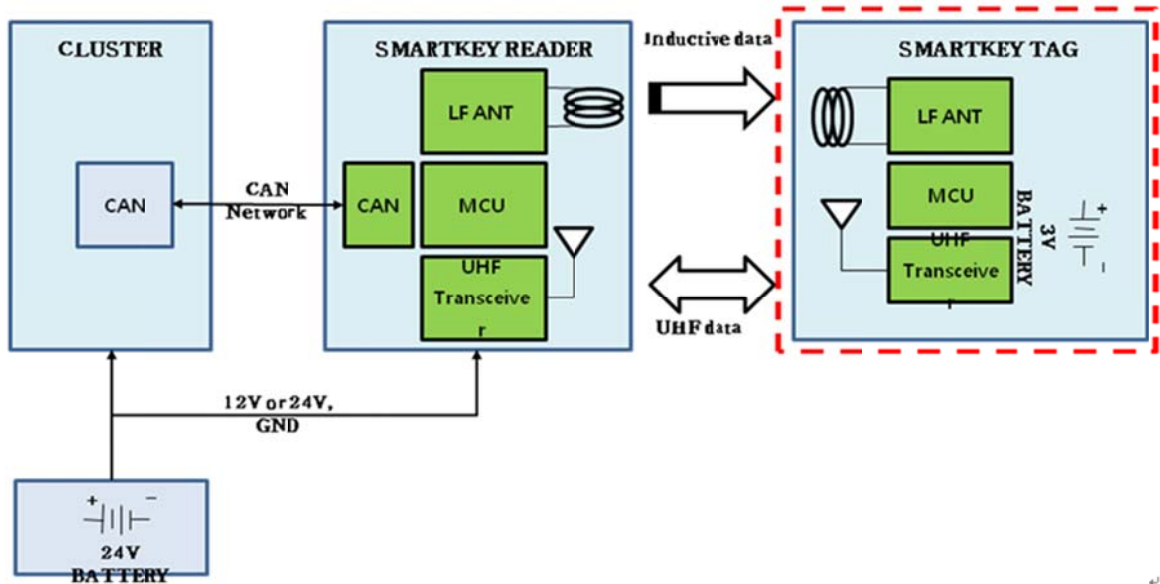
2) Dimension



3) Certification LABEL location



#### 4) Block Diagram



### 4. Specification

#### 4.1. Operating Specification

- Must wake up the remote control by providing electricity with RFID 125 KHz.
- Must be operating with CR2032 battery.
- Must be able to transfer password-secured signals.
- Must be able to use Single channels with band of 433MHz.

#### 4.2. Power Specification

- 3 V d.c. (CR 2032 Lithium Battery)
- Notice : Inserting opposite polarity of battery may cause explosion or damage to product (Please match battery polarity with battery holder)

#### 4.3. General Specification





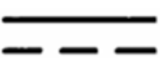
- Storage Temperature:  $-20^{\circ}\text{C} \sim 70^{\circ}\text{C}$
- Operating Temperature:  $-10^{\circ}\text{C} \sim 60^{\circ}\text{C}$
- Water-Proof Specification: IP54 (Living Water-Proof)
- Material of Device : PC (Material: 3025N1, Flame Class : V0, Manufacturer : SAMYANG)
- PCB Material :

object/part No.	manufacturer/ trademark	Layer /Thickness	Flame Class	UL No.	mark(s) of conformity <sup>1)</sup>
SMK TAG B/D PCB	JM ELECTRONICS CO LTD	2Layer /0.8T	V-0	E117655	

## 4.4 RF Specification

	Item	Specification
Wireless Data Communication System	Frequency	433MHz (Single Channel)
	RF Power	Under 1 mW
	Modulation Method	GFSK
	Tested Temperature	-10 ~ +60℃
Magnetic Induction System	Frequency	125KHz (Single Channel)
	RF Power	Receive Only
	Modulation Method	ASK

## 4.5. Product label Explanation of graphic symbols used

Symbol	Description
	Korea Certification Marking
	Communaute Europeenne Marking
	Electrical waste and electronics equipment
	Federal Communication Commision Marking
	Direct current

**5. Postal address:**

Kyungwoo Systech, Inc. Office: +82-2-985-8085

#401, Daeryung Post Tower 5, 68, Digital-ro 9, Geumcheon-gu, Seoul, South Korea

E-mail: [Webmaster@kyungwoo.com](mailto:Webmaster@kyungwoo.com)

This product contains a coin / button cell battery. If the coin / button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

Keep new and used batteries away from children.

If the battery compartment does not close securely, stop using the product and keep it away from children.

If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

**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.

Caution: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**RED Compliance Statement**

This product is CE marked according to the provision of the RED (2014/53/EU). Hereby Kyungwoo Systech, Inc. declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU