User Manual

United Automotive Electronic Systems Co., Ltd.(UAES)

Remote Key Entry

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1 Product identification

Product designation: KEY FOB

Type designation: RKE2.0

Customer: SGMW

2 General product description

2.1 Main function and properties of the product

The KEY FOB is based on nxp PCF7961 which is a single chip solution for applications combining vehicle immobilization and Keyless Entry functions

When serving Keyless Entry functions, the device is powered from an external battery, CR2032. The on-chip UHF transmitter requires no external components to operate at 434MHz except for the reference crystal and 434MHz loop antenna matching circuitry. Entering buttons of KEY FOB can realize Keyless Entry functions such as unlocking doors of car, unlocking trunk.

When serving vehicle immobilization, an external coil has to be connected to the device. Providing contactless communication with the base station as well as to derive the device power supply from the magneti field, generated by a corresponding base station. No additional battery supply is needed. Vehicle immobilization is used as a situation battery of KEY FOB is empty .Drivers make KEY FOB near to base station to realize engine starting.

KEY FOB includes a 434MHz PCB loop antenna and it's output power is lower than 10mW.The on-chip UHF transmitter works at ASK modulation

2.2 Intended use

Entering buttons by customer can realize corresponding functions, such as unlocking car doors. When battery of KEY FOB is empty, drivers should make sure KEY FOB near to base station to realize engine starting.

2.3 Safety and warning notes

A. Product (such as cell phones, laptops, etc.) with similar radio frequency may affect key functions. Using the product, please stay away from radio equipment.

B. Lithium-ion cell(CR2032) is essential. Make sure temperature is suitable(-20~60℃). Stand away from fire. Disassemble battery is forbidden.

3 Technical data with measured variables and measuring conditions

3.1 Climate characteristics

Temperature characteristics:

The working and storage temperature is different according to the different installation locations. For the product, the working temperature is from -20ºC to 60 ºC, and the storage temperature is from -40°C to 85°C(without battery).

3.2 Lifetime

NA

FCC Regulations

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.

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