

D0300 Smart Parking Lock

_NB-IoT Datasheet



Version: V1.0

Date: 2020-11-06

Version

V1.0 Initial version

Confidential

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Disclaimer

CNDingtek® Keep own best to solved the manuals should be accurate very close to the configuration, protocol operation and installation. But **CNDingtek**® reserves the right to modify the hardware, software, color, specification, guide, package and etc without further notice.

Due to the manually photos of products and after its printing reasons, the photos in this document maybe different from the real released product, please use the released product as the final reference.

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Cautions

There are multiple versions of this product. For the battery version, please note the following:

- 1 The battery is a rechargeable battery. If the battery is low, please charge it in time;
- 2 Batteries cannot be operated in a temperature higher than 55 °C.

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1 Overview

D0300 Smart Parking Lock is specially designed for parking space sharing control, which can remotely control locking and unlocking. In addition, it can also detect the occupancy status of the parking space, which can be automatically locked when the vehicle leaves. When the vehicles that have reserved this parking space is driven near the parking space, it will automatically unlocked (this function requires platform support).

Through the built-in wireless communication module (NB-IoT), the Smart Parking Lock can interact with cloud applications.

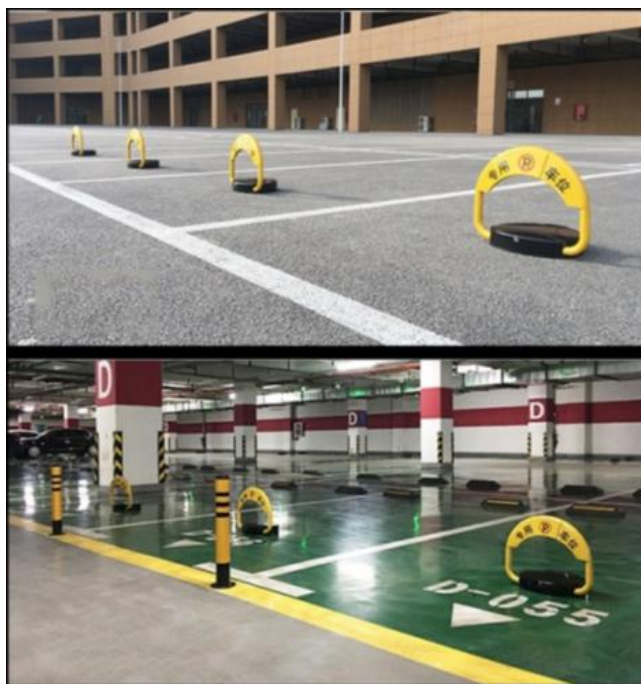
The device can be widely used in smart city projects. The product supports multiple frequency bands such as B1, B3, B5, B8, B20, B28, etc., and is suitable for China, Hong Kong, Macau, Europe, Oceania, the United States and other countries and regions.

2 Features

- Support low-power wireless NB-IoT communication mode;
- Ultrasonic parking space detection technology, accuracy rate is over 99%;
- IP65 Ingress Protection level;
- Combined with parking sharing applications to realize parking space sharing, reservation, and settlement.

3 Application

- Open-air parking lot
- Indoor parking lot



4 Specification

| | | |
|----------------------|----------------|---|
| Overview | Dimension | 44*43*8cm; Lifting height 43cm; Dropping height 7cm |
| | Net weight | 8.5kg |
| | Color | Black+Yellow |
| | Shell Material | Alloy steel |
| Wireless mode | Wireless | NB-IoT(LWM2M protocol) |
| | Frequency | B1、 B3、 B5、 B8、 B20、 B28 |
| Detector | Principle | Ultrasonic |
| Controller | MCU | STM32, 32bit ARM® core controller |

| | | |
|--------------------|-----------------------|--|
| Power | Internal battery | Rechargeable lead-acid battery, 5Ah@6V |
| | Battery Life | About 1 month (on /off lock 4 times a day) |
| | Current consumption | Action current <500mA, data upload peak current <1000mA, quiescent current <100uA. |
| Environment | Operating Temperature | -20 ~+55°C |
| | Working humidity | 5~95% |
| | Storage Temperature | -40 ~ +70°C |
| | Protection level | IP65 |

5 Mechanical Dimensions



(Note: For reference only, please prevail in kind)

44*43*8cm; Lifting height 43cm, dropping height 7cm

6 Network Diagram

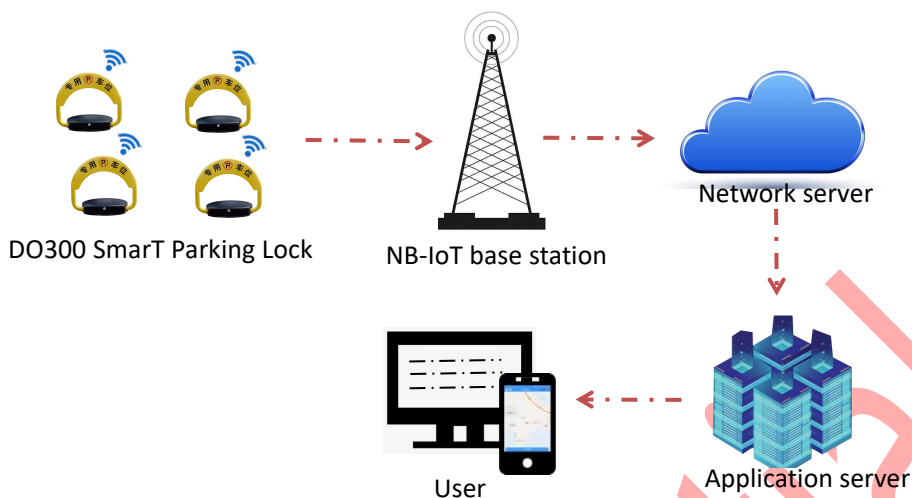


Figure7.1 Network Diagram

Through the built-in NB-IoT wireless module, it transmits data to the NB-IoT network base station, and then transmit the data to network server and application server through the Internet. Finally, the user can monitor the status of the parking space in real time and appointment, unlocking and other functions through the application platform and mobile phone APP.

7 Application

The network/application platform can be developed by the user or use our platform. With this platform, you can monitor vehicle status in real time. And through the platform.

Customized versions are available for different user situations. For custom software, please contact our sales team at service@dingtek.com.

8 Protocol

The communication protocol is confidential is only open for customer who has purchase the device and sign the NDA(non-disclosure agreement) file with CNDingtek.

Please contact our sales team service@dingtek.com if you want to integrate the protocol with your own system.

9 Package

| Accessories | | | |
|-------------|-------------------------|----------|------------------|
| S/N | Item | Quantity | Remark |
| 1 | DO300Smart Parking Lock | 1 | |
| 2 | Expansion screw | 3 | For installation |
| 3 | Manual | 1 | |
| 4 | Charger | 1 | |

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