NB-IoT Distance Detection sensor

DDS75-NB

OVERVIEW:

The Dragino DDS75-NB is a NB-IoT Distance Detection Sensor for Internet of Things solution. It is used to measure the distance between the sensor and a flat object. The distance detection sensor is a module that uses ultrasonic sensing technology for distance measurement, and temperature compensation is performed internally to improve the reliability of data. The DDS75-NB can be applied to scenarios such as horizontal distance measurement, liquid level measurement, parking management system, object proximity and presence detection, intelligent trash can management system, robot obstacle avoidance, automatic control, sewer, bottom water level monitoring, etc.

It detects the distance between the measured object and the sensor, and and send IoT platform via NB-IoT network.

DDS75-NB supports different uplink methods including MQTT, MQTTs, UDP & TCP for different application requirement, and support uplinks to various IoT Servers.

DDS75-NB supports BLE configure and wireless OTA update which make user easy to use.

DDS75-NB is powered by 8500mAh Li-SOCl2 battery, it is designed for long-term use up to several years.

DDS75-NB has optional built-in SIM card and default IoT server connection version. Which makes it works with simple configuration.

Features:

- NB-IoT Bands: B1/B2/B3/B4/B5/B8/B12/B13/ B17/B18/B19/B20/B25/B28/B66/B70/B85 @H-FDD
- Ultra-low power consumption
- Distance Detection by Ultrasonic technology
- Flat object range 280mm - 7500mm
- Accuracy: ±(1cm+S*0.3%) (S: Distance)
- Multiply Sampling and one uplink

- Support BLE remote configure and update firmware
- Uplink on periodically
- Downlink to change configure
- IP66 Waterproof Enclosure
- 8500mAh Battery for long term use
- Nano SIM card slot for NB-IoT SIM

Specifications:

Common DC Characteristics:
- Supply Voltage: 2.5v ~ 3.6v
- Operating Temperature: -40 ~ 85°C

NB-IoT Spec :
- NB-IoT Module: BC660K-GL
- Support Bands: B1/B2/B3/B4/B5/B8 /B12/B13/B17/B18/B19/B20/B25/B28 /B66/B70/B85 @H-FDD

Battery:
- Li/SOCl2 un-chargeable battery
- Capacity: 8500mAh
- Self-Discharge: <1% / Year @ 25°C
- Max continuously current: 130mA
- Max boost current: 2A, 1 second

Power Consumption:
- STOP Mode: 10uA @ 3.3v
- Max transmit power: 350mA@3.3v

Order Info: DDS75-NB-XX

XX:
- GE: General version (Exclude SIM card)
- 1D: with 1NCE* 10 years 500MB SIM card and Pre-configure to DataCake server