DC500 People Counter Datasheet

NB-IoT Version

Version：V1.1

Date：2020-08-24

Changes

V1.1 Modify some part list

V1.0 Initial version

Content

Disclaimer

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Cautions

●The battery is non-rechargeable. Please do not charge it.

●If the battery is out of power, please replace it with a battery of the same specification obtained from CNDingtek

●The battery can not work when temperatures is above 85 ° C.

1 Overview

DC500 is a People Counter, which can be used to count the number of people entering and leaving each place; when the number of people exceeds the limit, it will immediately pass the information to the cloud server through the built-in NB-IoT (narrowband Internet of Things) module. It can be used for people statistics, over limit alarm and other functions. Users can observe status information remotely. The device uses a built-in battery to transmit data through the NB-IoT method, with high real-time performance and low power consumption.

Support B1，B3，B5，B8，B20，B28 frequency etc, Due to the low power consumption algorithm, the internal battery can work for more than 1 years(Every day 50 times upload).

2 Features

■Accurate and timely , real-time monitoring, alarm immediately.

■ Low noise, High sensitivity.

■Low power consumption.

■Multiple application environments.

3 Appliation

It is widely used in security protection, where it is necessary to count and control the number of people entering and exiting, such as supermarkets, shopping malls, museums, stadiums, parks, etc. It can realize monitoring and safety management such as personnel control.

In addition, it can be used in security alarm systems in homes, offices, and factories. When someone is detected, the alarm data can be reported immediately.

4 Specification

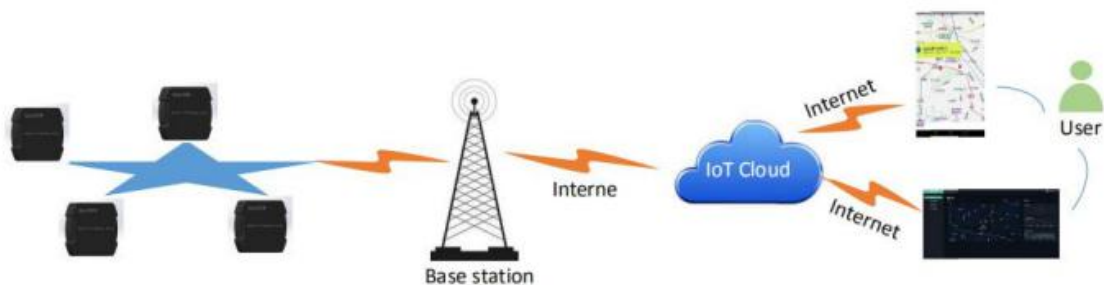|		
Specification	Dimension	80*78*30mm
	Net weight	40g
	Color	Black
	Shell material	ABS
Detector	Theory	PIR
	Delay time	2s
	Angle	120°
	Distance	5meters
Wireless	Wireless	NB-IoT
	Communication module	Quectel,BC35-G
	Frequency	B1，B3，B5，B8，B20，B28 etc
Protocol	Protocol	NB-IoT,TCP
Power	Option I:inner battery	8000mAh 3.6VDC, non-recharged. Every day 50 times upload, battery can work for more than 1 years(depend on NB signal, environment and etc.).
	Option II:external power supply	6-13.8V DC

| Environment | Working Temperature | -20 ~ +60℃ |
| | Storage Temperature | -40 ~ +85℃ |

5 Mechanical Dimensions

(Note: For reference only, actual product updates are frequent without notice)

6 System network diagram

Through the built-in NB-IoT wireless module, it transmits data to the base

station through the NB-IoT network, Then transmits the data to the web server and

application server through the internet . Finally, the user can monitor the number of

people, or alarm status according to the Web or APP, and online monitoring and management.

7 Protocol and API interface

The terminal communication protocol and API interface files are confidential documents and are only available to customers who purchased the device and signed NDA (non-disclosure agreement) documents with CNDingtek and his own company. If you want to integrate with your own system by using a protocol / API interface, please contact our sales team at service@dingtek.com.

8 Installation and Test

8.1 Start up device

The device is not connected to the power supply and the NB card is not installed by default, Before use, please refer to the instruction manual to open the case and install the card. Connect the power supply and start the device. Then start testing according to the instructions.

8.2 Installation

1)With 3M glue, the device can be fixed on the top of door.
2)Use bracket to fix with screws.

9 Package

Accessories name	Specification	Quantity	Note
Device	People counter DC500	1	
TTL	Serial tools	1	Serial tools (at least one per batch of equipment)
Manual		1	
Note: This DC500 detector does not include NB-IoT communication SIM card by default.			