

# DC500 People Counter\_User's Manual

## \_NB-IoT Version



**V1.1**

**Date: 2021-07-16**

## Changed

**V1.1** Modify hardware picture;

**V1.0** Initial version;

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## 1 Overview

These documents are helpful to understand the DC500 People Counter's following:

- DC500 sensor parameter setting by default
- DC500 sensor function description
- Hardware Interface
- Install SIM card
- Connect power
- Reboot DC500 sensor by magnet
- Protocol
- FAQ

## 2 DC500 Parameters

DC500 Default Parameters:

Parameters	Default configuration	Description
Heartbeat interval	24hours	Sensor will report at the 24 hour interval, and report the reading of the moment.
People count alarm threshold	500	When the number of people exceeds the set threshold, data will be reported. For example, we set the threshold to 500 people, when counting = 500, then it will report this data, then When counting =1000, then report the data again.
Battery alarm threshold	20%	When the percentage of the battery is less than 20%, the battery is considered to be battery lower.

## 3 DC500 Sensor Function Description

### 3.1 People counter

DC500 people counter can count the number of passing people, and report the alarm status when it reaches the limited number of people.

### 3.2 Reporting rule

#### 1) People counting limit alarm

User can set one people limit threshold. When the number of people exceeds the set threshold, data will be reported.

For example, we set the threshold to 500 people, when counting = 500, then it will report this data, then When counting =1000, then report the data again.

#### 2) Heartbeat data

Report current data at specific intervals, such as 24hours.

## 4 DC500 Hardware interface

The detailed of power interface , device parameter configuration interface are given here, as shown in figure4.1.

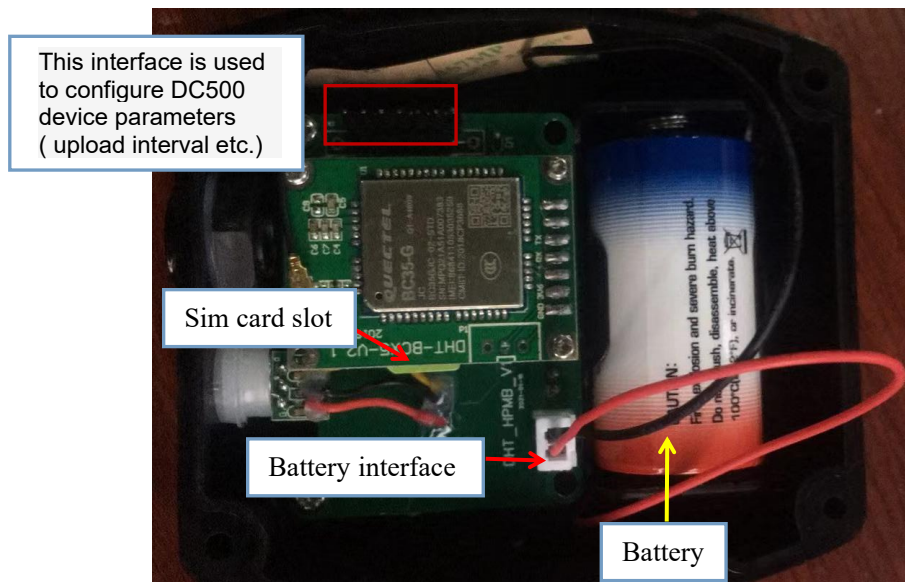


Figure 4.1 Hardware interface

## 5 Install Simcard

**NB-IoT Sim card:** MICRO card; the frequency band of the card used needs to be the

same as the device frequency band.

### Insert NB card:

Sensor use self-elastic card slot, please find the card slot and insert the NB card (If you want to change or remove the card, please press the card and it will pop up automatically.).

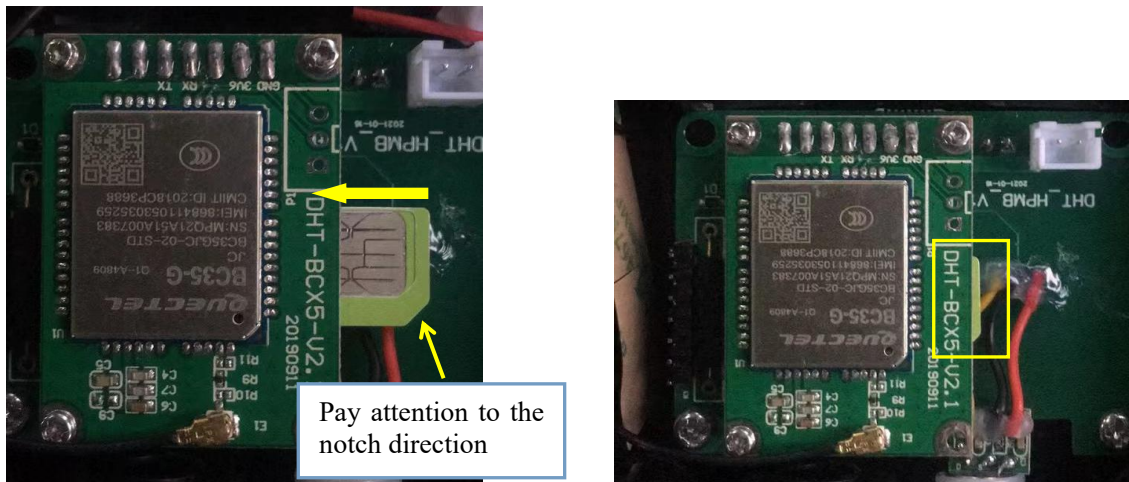


Figure5.1 Install sim card

## 6 Connect to Power

Please connect the battery, as following picture:

### Note:

- 1 If you connect the power, but not reporting, please try to restart sensor by magnet.
- 2 If you need to restart sensor, please use magnet. DONOT unplug/plug battery frequently.



Figure 6.1 Connect battery

## 7 Reboot Sensor by Magnet

Magnet:

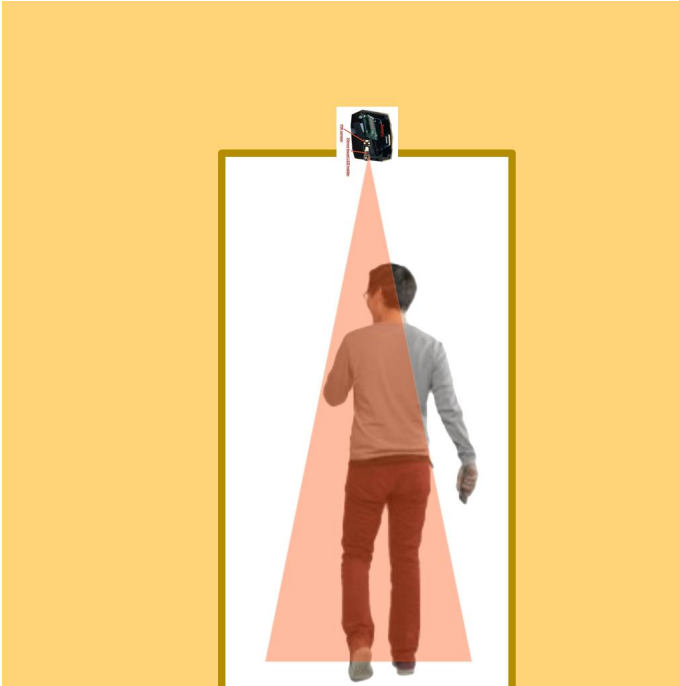


Move the magnet along the arrow on the picture, and then remove the magnet to restart the device.



## 8 Installation

Installed on top of the door. Use glue or other brackets to fix the device.

**Note:**

- 1 It is recommended to install on one-way doors, such as entering or leaving. If it is a two-way door, it can enter and leave, it will cause double counting. For example, if the same person enters and leaves, it will be counted twice.
- 2 Avoid two or more people passing at the same time.

## 9 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 CN Dingtkek and his own Company. Please contact our sales team [service@dingtek.com](mailto:service@dingtek.com) if you want to integrate the protocol with your own system.

## 10 FAQ

### Q1 Why can not I see the device data?

A1:no battery connected;

Considering shipping rules, some is not connected for battery. So user should open cover and connect battery with the PCB board. For some version with magnetic part outside, please remove the magnetic part, then the battery will power on the sensor.



A2: Because frequently unplug/plug battery; Try to reboot the device with a magnet;

A3:APN error; Please configure correct APN.

A4: The sim card don't support NB-IoT network;

A5: No signal covered;