

# DG202 Personal Human Tracking

## Datasheet\_NB-IoT



**V1.0**

**Date: 2021-8-25**

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## Changed

V1.0 Initial version.

## Disclaimer

**CNDingtek** ® keep own his best the solved manual should be accurate and very close to the configuration, protocol and installation process. The CNDingtek reserved all the rights to modify the hard ware software and specification, color, guide and package and other all about the devices of CNDingtek products.

Due to the manually photos of the products and printing reasons the photos in this documents maybe different from the real released products. Please use the released product as final reference.

## 1 Overview

DG202 terminal is a personal GPS tracker which is mainly designed for outdoor worker and smart student ID card. DG202 terminal is built through the NB-IoT module. it transmit the status via NB-IoT sim card to base station, then via internet network to network server to application server. Finally user can monitor its position remotely.

It is optional for different frequency, such as B1, B3, B5, B8 B20, and B28 etc.

As it is with algorithm of low power consumption, the internal battery can work for more than 10 days at standby time.

It can be widely used in positioning applications such as personal and low-speed moving vehicles.

## 2 Features

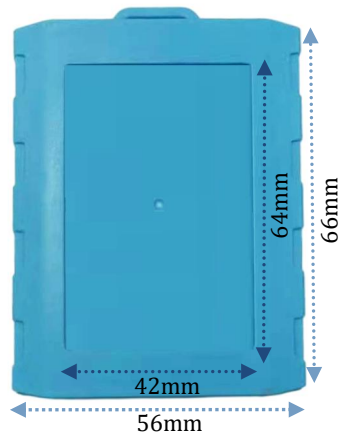
- Precise positioning  
High sensitivity, faster positioning speed, accurate position without drifting.
- Track record  
Provide accurate positioning information, and automatically adjust the upload interval according to the moving speed of the DG202 device.
- Long standby  
Long standby time for more than 10 days.
- NB-IoT wireless  
Data reporting through advanced NB-IoT low-power IoT technology
- Protection level  
The DG202 product has IP68 level of waterproof and dustproof ability, and it is resistant to daily splashing and rain, and can be used in outdoor worker scenes.

## 3 Specification

<b>Overview</b>	LED	Two LEDs; Red/Green color every LED
	Wearing	Lanyard wear
	Battery	1500mah/3.7V lithium battery
	Charger port	Pogo Pin
	Adapter	DC5V/1A
	Sleep current	≤50uA

	Standby time	10days
	Color	Blue
	Size	66x86x12.5mm
	Weight	40g
	Protection level	IP68
	Operating Temperature	-20°C~+75°C
<b>Wireless</b>	Wireless	NB-IOT
	Band	B1/B3/B5/B8/B20/B28 etc.
<b>GPS</b>	GPS	GPS; low power tracking function
	Accuracy	<2.5 meters (CEP50)
	Capture sensitivity	-148dBm
	Tracking sensitivity	-162dBm
	Time to first positioning	32s

## 4 Mechanical Size



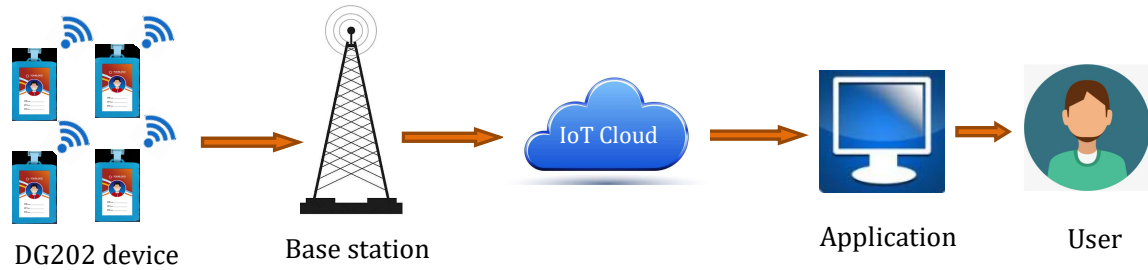
Outer casing size: 66x86x12.5mm.

Personnel info size: 64\*42mm.

(Notes: only for reference, real product update frequently without notification.)

## 6 Software Platform

## 6.1 Network Diagram

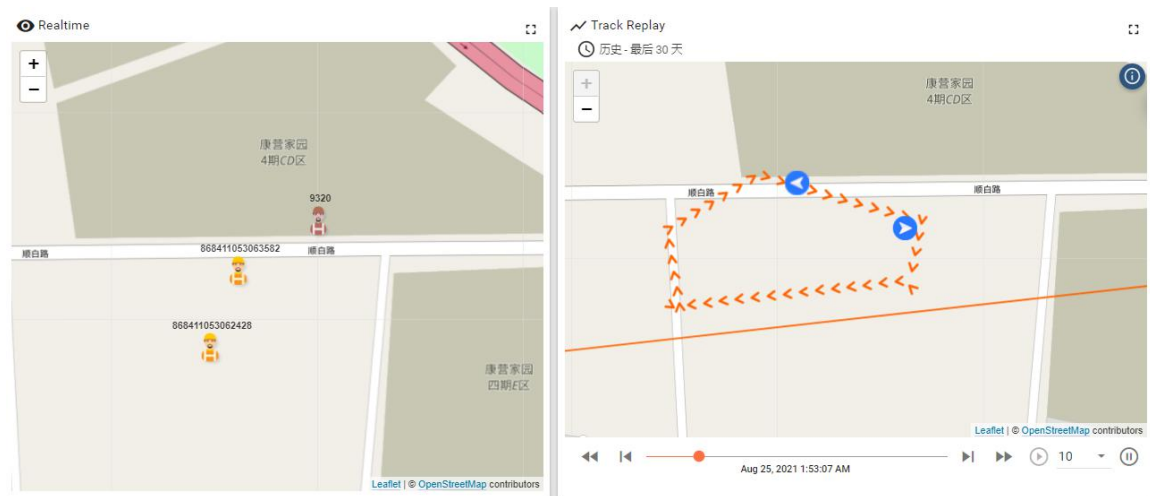


DG202 Personal Human Tracking is built through the NB-IoT module. It transmits the status via NB-IoT sim card to base station, then via internet network to network server to application server. Finally user can monitor the status remotely.

## 6.2 Application Software

With the application software user can monitor its location, tracking and history data.

If you use a server for yourself, skip this item.



## 7 Protocol

Support LWM2M and TCP protocol, which is optional.

The communication protocol is confidential and is only open for customer who has purchased the device. Please contact our sales team [service@dingtek.com](mailto:service@dingtek.com) if you want to integrate the protocol with your own system.

## 8 Package

Packing list:

No.	Item	Quantity	Remarks
1	DG202 sensor	1	Personal Human Tracking
2	Charging Cable	1	
3	Lanyard	1	
4	TTL tool	1	Debug tool; Only 1unit per batch



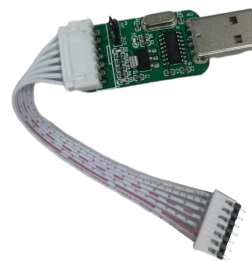
DG202 sensor



Lanyard



Charging Cable



TTL tool