

VDU1510 Datasheet

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1. Product description

VDU1510 is a identification card which can be used in a TDOA system. It integrated a ultra Wide band IC DW1000 to achieve high precision of 10cm in a indoor location system. The CPU of that card is NRF52832, which can get a good communication with the mobile phone by Bluetooth. On the other hand, the SOS button can get a perfect use for a nursing home.



Figure1-1VD1501

2. Electronic parameters

parameters	Value
Refresh frequency of moving	1Hz
Refresh frequency of static	0.2Hz
Power consumption	Standby mode 20uA
	Transmit mode less than 20mA
Average precision(no shelter)	10cm
Work time for a single charge	Average a month
Location distance	Less than 30 metres (from anchor to card)
Battery capacity	550mAh
Working temperature	-20~60°C
Product size	L=85±0.5 , W=54±0.5, h=7.5±0.5 (mm)

UWB parameter	
Frequency range	3244MHz---6999MHz
Channel	500MHz Channel 1, 2, 3 and 5
Protocol standard	IEEE 802.15.4-2011 UW
BLE parameter	Closed by default If the customer want to use this function they need to apply for a special firmware.
Protocol	Support BLE5.0.
Frequency	2400MHz---2483.5MHz
Charger Parameter	
Adapter for charging	Output DC 5V /2A
Charging current	Less than 500mA

Table 2-1 Electronic parameters

3 Instructions

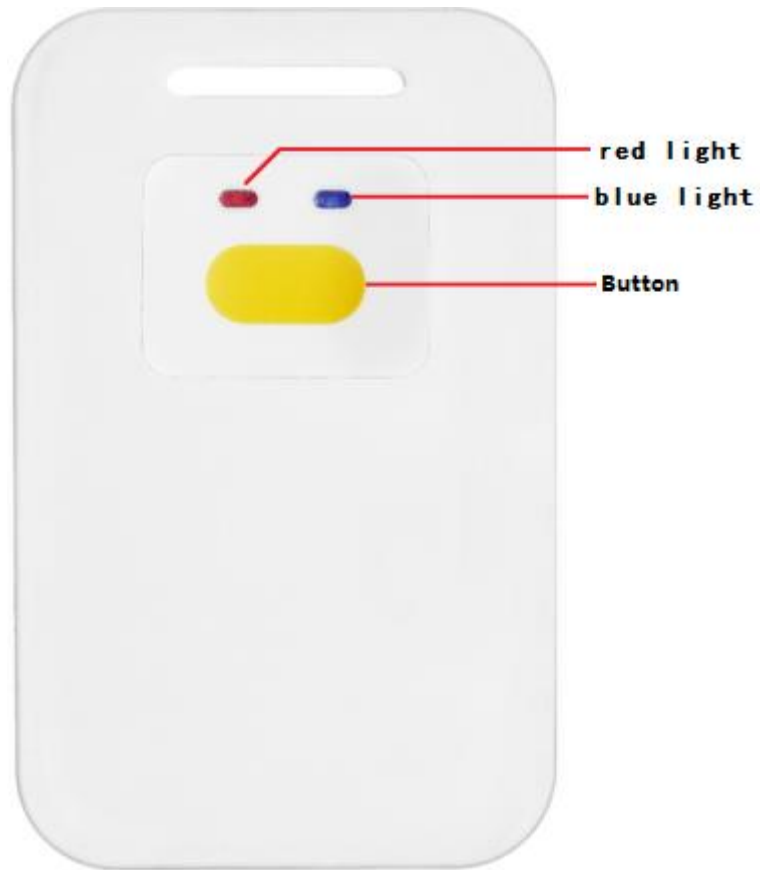


Figure3-1 VDU1510 TOP View



Figure3-2 VDU1510 Bottom View

3.1 Power up

Press the button until the blue light lights up, then release it. After the blue light turns off, the card will be on working.

3.2 Emergency call

When the work card is on working mode, pressing the button will send an alarm message to the backend.

3.3 Power off

When the card is working, to power off this card, you need to press the button for three times. Especially, the first and second press should be in a short time (less than 1 second), and the last must be a long press until the red light turns on, then release the button, the red light turns off and you can power off the card successfully.

3.4 Card charging

Firstly, You need to prepare a power adapter to get 5V DC output. Secondly, Connect to the card charging interface with the charge line that offered with the card. If the card is in charging, the red light will blink per second, if the battery is charged fully the blue light will light up continuously. Removing the charge line, the blue light will turn off.



Figure 3-3 card charging

4. Contact information

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