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Patent Search

Invention Title: APPLICATION OF NB-IOT IN LOW POWER RADIO FREQUENCY IDENTIFICATION
 Publication Number: 17/2020
 Publication Date: 24/04/2020
 Publication Type: INA
 Application Number: 202041008872
 Application Filing Date: 02/03/2020
 Priority Number:
 Priority Country:
 Priority Date:
 Field Of Invention: COMMUNICATION
 Classification (IPC): H04W 52/02
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Abstract:

The invention is applicable to the technical field of the NB-IOT (Network B-Internet of Things) and provides a low-power consumption RFID (radio frequency identification) reader based on the NB-IOT Internet of Things, which includes a housing, a radio frequency card reader, a supporting block, an LED lamp, a display screen, and a card. Sle bumps, limit strips and charging interfaces, NB-IOT modules, microprocessors, temperature and humidity sensors, alarm modules, lithium batteries, charging interfaces a power management chips. Set lithium battery, power indicator, microcontroller and NB-IOT module, so that low-power communication can be performed through NB-IOT module, and power is provided by lithium battery, which is more portable, and can be charged and powered by the charging interface. By setting a temperature and humidity sensor and an alarm module, the temperature of the environment can be detected by the temperature and humidity sensor, and when the temperature or humidity is too an alarm is issued to reduce the impact on the life of the card reader.




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Complete Specification

APPLICATION OF NB-IoT IN LOW POWER RADIO FREQUENCY

IDENTIFICATION

FIELD OF THE INVENTION

The invention relates to the technical field of the NB-IOT (Network B-Internet of Things) and provides a low-power consumption RFID (radio frequency identification) card reader based on the NB-IOT.

BACKGROUND OF THE INVENTION

NB-IoT is an emerging technology in the IoT field. It supports the cellular data connection of low-power devices in the wide area network. It is also called low-power wide area network (LPWAN). NB-IoT supports efficient connection of devices with long standby time and high network connection requirements. It is said that the battery life of NB-IoT devices can be improved by at least 10 years, while also providing very comprehensive indoor cellular data connection coverage. The RFID principle is a non-contact data communication between the reader and the tag to achieve the purpose of identifying the target. The application of RFID is very wide.

The existing RFID card readers have certain defects in use. The existing RFID card readers are generally powered by an external power supply, which is not conducive to the mobile use of the card readers. The working range is small, and the practicality is low. RFID card readers cannot detect the use environment, and the service life is easily affected.

OBJECTIVE OF THE INVENTION

An objective of the present invention is to provide RFID card readers beneficial to the mobile use of the card readers.

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Page last updated on: 26/06/2019




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