



LORAWAN
Wireless Gas Transmitter
RN320 Manual



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About This Manual

This document contains instructions for usage and installation of the RADIONODE® RN320 . Product specifications and certain features herein may be subject to change without prior notice. Figures used in this manual are for explanatory purposes only, and may differ from your system depending on installation conditions. Software screenshots may change after software updates

Intellectual Property Rights

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Notational Conventions



Failure to follow instructions marked with "Warning" may result in slight injury to the user.



Failure to follow instructions marked with "Caution" may result in equipment damage or malfunction.



Additional helpful information is marked with "Note".

Introduction

RN320 Wireless gas transmitter is designed to measure temperature, humidity and CO2 gas and transmit them to the cloud system via lorawan. LORAWAN have different RF frequency for each countries.

CH1 CO2

CH2 TEMP

CH3 RH

Warning

This products have LORAWAN wireless protocol. user should have LORAWAN gateway (receiver). Without lorawan gateway, this product could not work properly.

Major Features

RN320's Major features

*LORAWAN is used for sending temp,RH and CO2 gas information.

*Radionode365 is dedicated cloud service for RN320 wireless gas transmitter

*This product is using C type 3.6V battery

*Sensor part can be replaceable easily

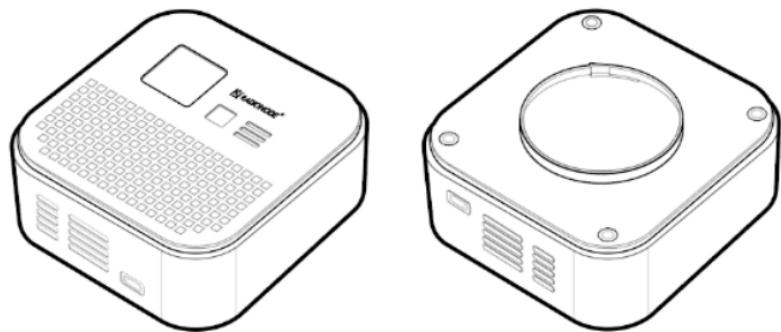
RF Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.

This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

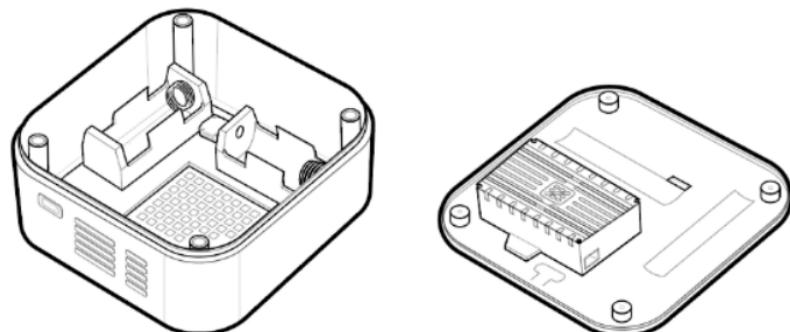
Exterior

Dimensions 115mm x 115 mm x 50 mm



1.Display 2.Front Button, 3.Status LED, 4.Bracket Connector

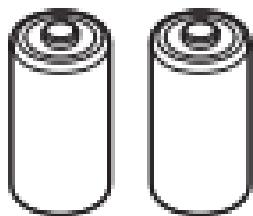
Interior



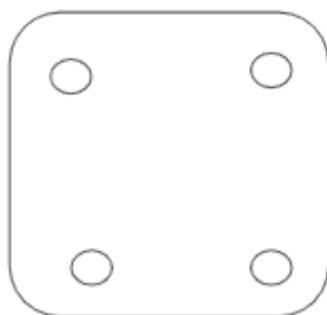
1.Battery holder , 2.Gas Sensor , 3. Back Cover

Accessory

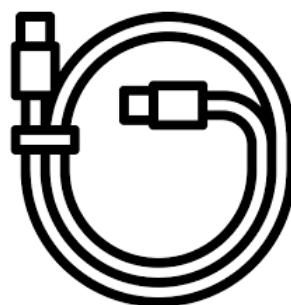
C Type 3.6V



Bracket



USB Cable



Please Use same battery that is included in the box. Otherwise malfunction may be occurred.

Specification

RN320 wireless gas transmitter

CO2 sensor : 0 ~ 2000 ppm

temp. sensor : -40 ~ 80 °C

RH sensor : 0 ~ 95% RH

battery : 3.6V C Type Battery X 2 (parallel)

Wireless : LORAWAN

FCC : 902.3 MHz ~ 914.9 MHz(125 kHz Bandwidth)

903 MHz ~ 914.2 MHz(500 kHz Bandwidth)

CE : 863.1 MHz ~ 869.9 MHz(125KHz Bandwidth)

863.2 MHz ~ 869.85 MHz(250KHz Bandwidth)

Dimension : 115 X 115 X 50 mm

Operation : -20°C ~ 60°C

USB Type : USB C TYPE

(USB C port is only for Installer or Engineer. It is not used for normal operation.)

Display : E PAPER

IP Rate : None

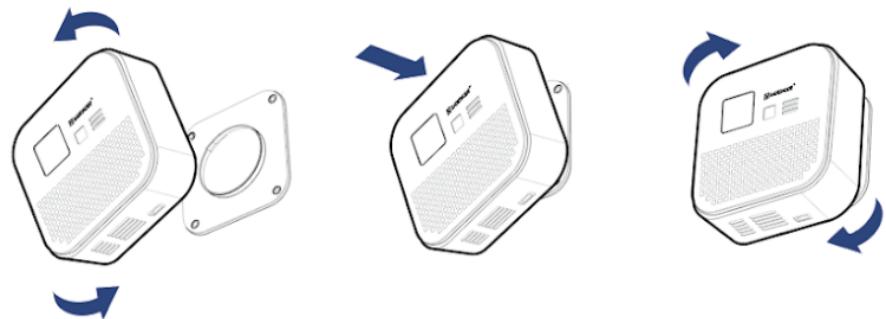


Installation

Once you put the battery. RN320 device will turned on. there is no power switch on the device

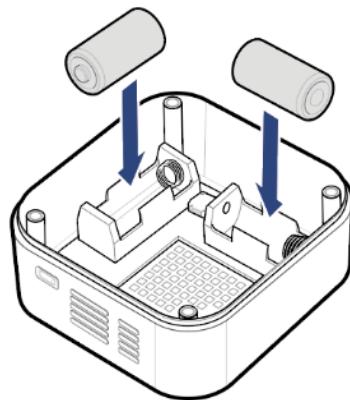
Bracket

Attach the bracket on the wall firstly. turn RN320 15 degrees to the left and put it on the bracket. and then turn RN320 15 degrees to the right to fix it tight



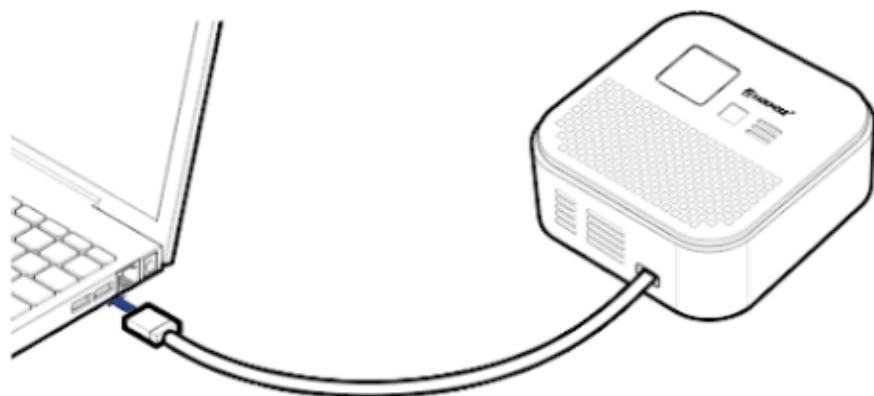
Battery

two C type 3.6V battery is used for normal operation. please be aware that RN320 has no power switch. When pulling out the battery , this products would be working properly using internal super capacitor .



Setup

In order to setup this products. connection PC (mobile) and RN320 via USB cable is required.



Buttons

Front button click change the display contents

Zero calibration mode can be accessed pressing front button during 10 second

LED

RED : Initial Wireless Accessing, Warning gas level detected.

GREEN : safe environment

BLUE : Periodic measurement and RF transmission.

Customer Service Information

Manufacturer Contact Information

DEKIST Co., Ltd. provides repair service and replacement parts for RADIONODE products. To request customer service, contact us via one of the following methods.

- Tel: +(82) 1566-4359
- Fax: +(82) 31-8039-4400
- E-mail: master@dekist.com

Warranty

Repairs are provided free of charge for product failure under normal operating conditions within one year of the product installation date.

Limit of Liability

Warranty repairs are not provided in the event of:

- Failure caused by unapproved installation methods;
- Failure caused by user negligence;
- Failure caused after alteration, disassembly, or repair of the product by a person unauthorized by DEKIST;
- Failure caused by corrosion, falling, submersion, or other improper storage methods;
- Failure caused by natural disaster or other unforeseen circumstances, such as storms, floods, earthquakes, lightning, or abnormal voltage;
- Service requested for actions that the user can take, such as replacing consumables;
- Alteration of the software through decompilation or the like

Certifications

FCC Class B Digital Device

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

 Changes or modifications not expressly approved by the manufacturer responsible for compliance could void the user's authority to operate the equipment.

KC

This equipment has passed conformity testing for use in work environments, and is likely to cause interference when used in a household environment.

DEKIST
Embedded Web Service

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