



## Temp/RH Transmitter via LoRaWAN

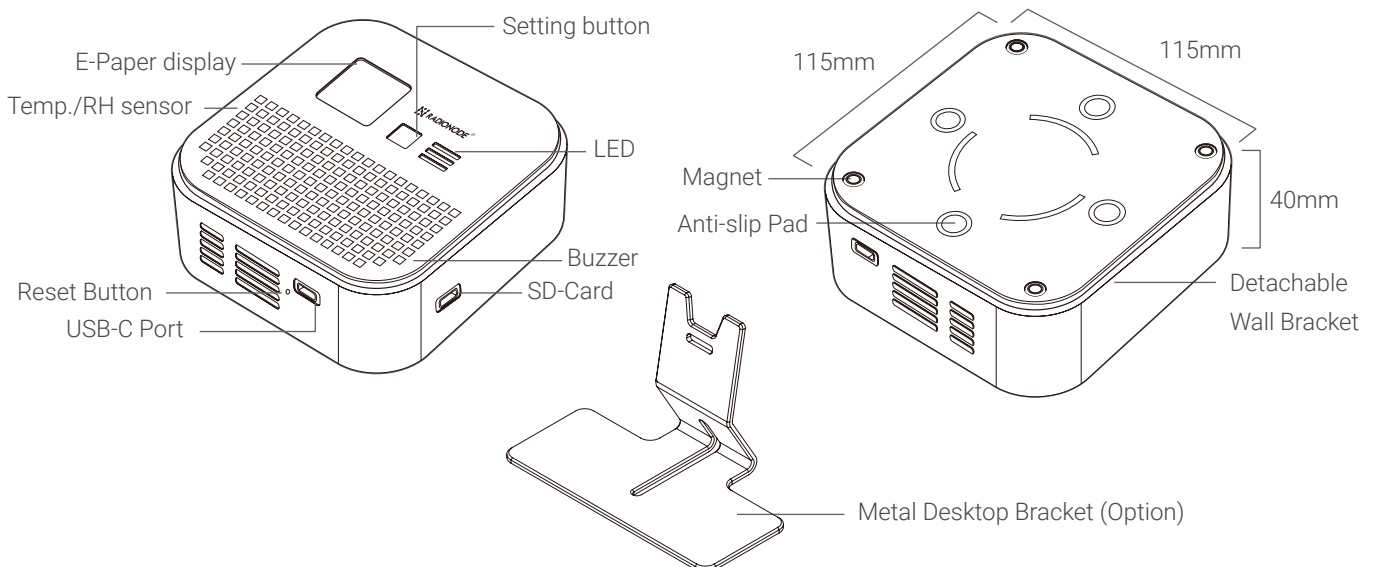
# RN320-BTH

- Long Range Wireless / LoRaWAN<sup>®</sup>
- High Accuracy Temperature & Humidity Sensor
- E-Paper Display
- Loud Buzzer 97dBA
- 3 Color LED Indicator (Best, Moderate, Bad)
- Long Battery Life (17000mAh)
- MicroSD Card supported
- Easy Installation with Magnet and Wall Bracket



Radionode RN320 series is battery operated wireless environmental sensor. It is professionally designed for our valuable customer to have E-paper display, microSD card, loud buzzer, three color LED and unbelievable battery capacity. Using LoRaWAN<sup>®</sup> technology, Radionode customers can easily set up wide range sensor network in a short time. The user can intuitively check the current status of sensor using the three color LED and ePaper Display. Also, the loud buzzer is the easiest and most useful feature to quickly alert nearby users of danger. The RN320 model has a retransmission function, so it does not drop measurement samples. You can easily register your product to the Radionode365 service by scanning the QR code on the surface of the product once. With Radionode365, you can utilize all aspects of remote monitoring, even in areas with poor radio conditions. Plus, you can keep all your data permanently by using the built-in microSD card. This RN320-BTH model has an embedded high accurate temperature and humidity sensor. With 17000mAh battery, RN320-BTH can be operated up to 10 years.

### Hardware



### Certificate



### Contact Information

- [www.radionode365.com](http://www.radionode365.com)
- [master@dekist.com](mailto:master@dekist.com)



## Temp/RH Transmitter via LoRaWAN

### RN320-BTH Specifications

Wireless Telecommunications	<ul style="list-style-type: none"> <li>• LoRaWAN<sup>®</sup> V1.0.3 ,OTAA/ABP ClassA</li> <li>• CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923</li> <li>TX : 20dBm</li> <li>Sensitivity : -137 dBm @ 300 bps</li> </ul>
Internal Temp/RH sensor	<ul style="list-style-type: none"> <li>• CH1: Temp (-40 ~ 80°C)</li> <li>• CH2: RH (5 ~ 95%RH)</li> </ul>
Accuracy (Repeatability)	<ul style="list-style-type: none"> <li>• Temp.Accuracy : <math>\pm 0.2</math> °C(0.07°C)</li> <li>• R.H. Accuracy : <math>\pm 1.8</math> %RH(0.15%RH)</li> </ul>
Resolution	<ul style="list-style-type: none"> <li>• Temp. Resolution : 0.1 °C</li> <li>• R.H. Resolution : 0.1 %RH</li> </ul>
Operating Condition	-20 ~ 80 °C / 5 ~ 95% (Non condensing )
Material	PC, PS
Buzzer	97dBA @10cm
Display	<ul style="list-style-type: none"> <li>• Electronic ink display, 200x200 Pixel 1.54 Inch</li> <li>• Operating condition : 2~50°C (Display off is recommended below 0°C)</li> </ul>
LED Status	<ul style="list-style-type: none"> <li>• GREEN : Normal</li> <li>• RED : Alert</li> </ul> *Configurable Parameter
External Memory	Option (16GB microSD, permanent logging)
Battery	3.6V Li-SOCL2 X 2EA (16000mAh) <ul style="list-style-type: none"> <li>• Eco mode : 10 Years @ 10Mins (-55~85°C)</li> <li>• Normal mode : 5 Years @ 10Mins (-55~85°C)</li> </ul>
USB Port	Configuration Port
Button	<ul style="list-style-type: none"> <li>• Menu BUTTON</li> <li>• Reset button(Below)</li> </ul>
Installation Types	<ul style="list-style-type: none"> <li>• Magnet &amp; Screw for wall mount (Option)</li> <li>• Desktop bracket for Table mount (Optional accessory)</li> </ul>
Weight	352 g (with Battery)

\*Do not install this product close to the floor for accurate measurement.

### Basic Requirements

- LoRaWAN Gateway :  
Radionode LoRaWAN gateway or Others

### Application

- Agricultural greenhouse
- Building management
- Medicine and medical goods storage sites
- Semiconductor production lines

### Product Components

- RN320 Temp./RH Wireless Transmitter
- C-Type Battery (2EA)
- Wall Bracket (1EA)
- USB C cable

### LoRaWAN Payload Decoder

- [github.com/radionode/RN300-Series-LoraWAN](https://github.com/radionode/RN300-Series-LoraWAN)