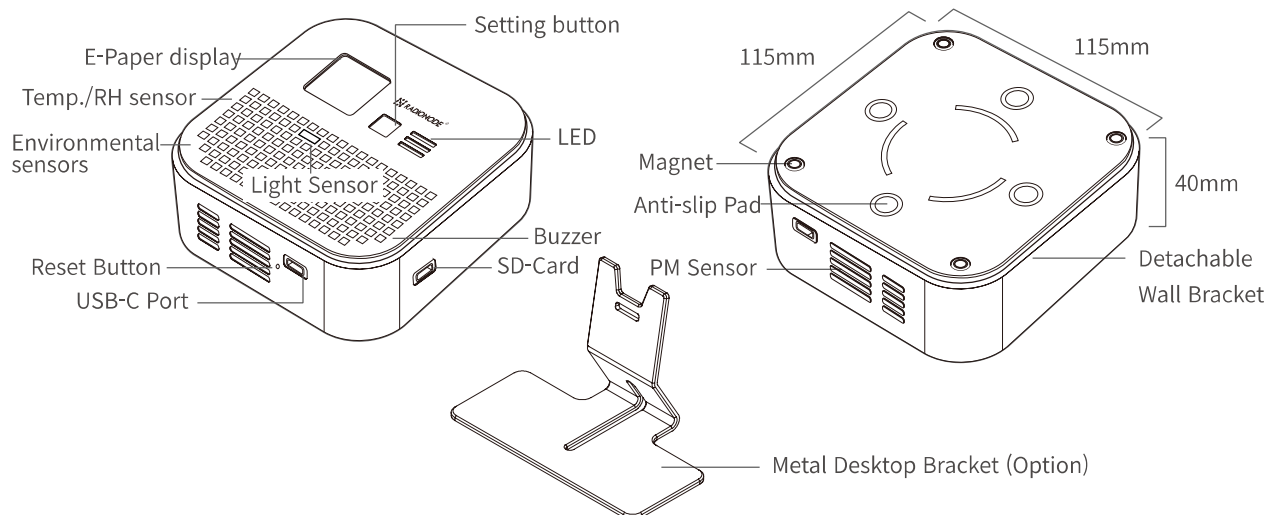# RN320-PMT

- Long Range Wireless / LoraWAN ®
- High Performance IAQ 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 ® 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 RN 320-PMT model has an embedded high performance IAQ sensor With 17000mAh battery, RN320-PMT can be operated up to 6 year.

Hardware

Certificate

Contact Information

- www.radionode365.com
- master@dekist.com

RN320-PMT Specifications

Wireless Telecommunications	• LoraWAN ® V1.0.3 ,OTAA/ABP ClassA • CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923 TX：20dBm Sensitivity：-137 dBm @ 300 bps
Internal sensor	1：PM2.5 (ug/m3)　　5：CO2 (ppm) 2：PM10 (ug/m3)　　6：CO (ppm) 3：LIGHT(lux)　　　7：TEMP (°C) 4：HCHO (ug/m3)　　8：RH (%)
Supported Range	• Particulate Matter：0 ~ 1,000 ug/m3 • Light：0 ~ 140,000 lux • Formaldehyde：0 ~ 1,960 ug/m3 • CO2：400 ~ 10,000 ppm • CO：0 ~ 1,000 ppm • TEMP：-20 ~ 50 °C (-4 ~ 122°F) • RH：1 ~ 99 %
Resolution	• Particulate Matter：±10% • Light：0.0005 lux • Formaldehyde：≤0.01ppm • CO2：±(50 ppm + 5% of reading) • CO：0.5PPM • Temp：0.1 °C • R.H.：0.1 %RH
Operating Condition	-20 ~ 80 °C / 5 ~ 95% (Non condensing)
Material	PC, PS
Buzzer	97dBA @10cm
Display	• Electronic ink display, 200x200 Pixel 1.54 Inch • Operating condition：2~50°C (Display off is recommended below 0°C) • 3 Display Type Support.
LED Status	• GREEN ：Good • ORANGE ：Moderate • RED ：Bad *Configurable Parameter
External Memory	Option (16GB microSD, permanent logging)
Battery	3.6V Li-SOCL2 X 2EA (17000mAh)
USB Port	Configuration Port
Button	• Menu BUTTON • Reset button(Baelow)
Installation Types	Magnet & Screw for wall mount (Option) Desktop bracket for Table mount (Optional accessory)

*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 IAQ Wireless Transmitter
• C-Type Battery (2EA)
• Wall Bracket (1EA)
• USB C cable

LoRaWAN Payload Decoder

• github.com/radionode/RN300-Series-LoraWAN

Cautions

- Avoid exposure to organic solvents, coatings, medicine, oil, and high-concentration gases.
- Prevent excessive impact or vibration.
Warm up the module for at least 5 minutes before initial use.
- Do not use the module in systems related to human safety.
- Avoid using the module in environments with strong air convection.
- Do not expose the module to high-concentration organic compounds.