RADIONODE
The most innovated datalogger

RN630-KFG

✓ Long Range Wireless / LoraWAN ®

✓ Portable Gas Detectors and Analysers

✓ CO, O2, H2S, CO2, density Support

✓ 3.9cm(1.54") OLED Display

✓ Loud Buzzer >85dB
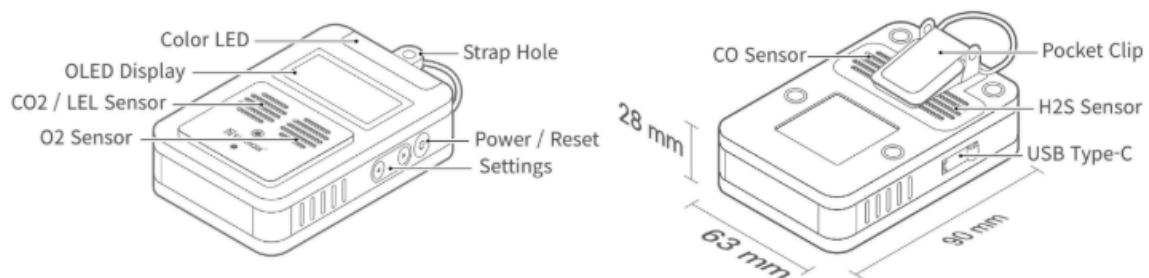
✓ Long Battery Life (>40Hr)

Radionode RN630-KFG is a battery-operated wireless environmental sensor.

It is professionally designed for our valuable customers, featuring an OLED display, a loud buzzer, and an RGB LED.

Using LoRaWAN® technology, users can easily set up a wide-range sensor network in a short time. Users can intuitively check the current status of the surrounding air using the RGB LED and OLED Display. For Safety, RN630-KFG is equipped with a loud buzzer, Bright White Strobe LED and Vibration motor to quickly alert nearby users in danger. The RN630-KFG has a retransmission function, so it does not drop measurement samples. You can easily register your product to the Radionode365 cloud service by scanning the QR code on the display of the sensor. With Radionode365, you can utilize all aspects of remote monitoring, even in areas with poor radio conditions. RN630-KFG features an embedded high-performance sensor. With a 8.51Wh battery, the RN630-KFG can operate for up to 60 hours continuously.

Hardware

CAUTION!

- For safety, ensure the battery has sufficient charge before each use.
- Don`t expose the sensor to extreme gas density, heat, humidity or atmospheric pressure which can cause sensor readings to be unreliable, shortens lifespan.

RN630-KFG Specification

Wireless connectivity	• LoraWAN ® V1.0.3 ,OTAA/ABP ClassA • KR920 / IN865 / RU864 / EU868 / US915 / AU915 / AS923-1/2/3/4 • Tx power : 14dBm • Sensitivity : -137 dBm @ 300 bps	LED	Status		LED Color	LED Pattern
			Gas level in safe range		Green	Continuous
			Gas level reached warn level		Red	Continuous
			Gas level reached alarm level		Red + White Flash	Blinking
			Event occurred (various)		Blue	Blinking
Connectivity	USB Type-C Data / Power	Alarm	CO > 30 ppm O2 > 18%, < 23.5% H2S > 10 ppm CO2 > 15000 ppm			
Display	OLED display, 160x80 Pixel 39mm 1.54"	Sound	> 85dB@TBD			
Operating condition	-20 ~ 60 °C / 5 ~ 95% (Non condensing)	Charging	USB Type-C 5V, < 5W			
KFG Payload channel Info	CH1 : CO (0~1,000ppm) CH2 : CO2 (400~150,000ppm) CH3 : O2 (0~25%) CH4 : H2S (0~100ppm) CH5 : Temperature (-40~125℃) CH6 : Humidity (0~100%) CH7 : SOS/ManDown (0,1,2,3) CH8 : Feels like temperature (-40~125℃)	features	Bump Test Zero Calibration Hold Data retransmission LoRa P2P mode Feels like temperature mode			
Sensing Accuracy	O2: ±2% of measured value CO: ±2% of measured value H2S: ±2% of measured value CO2: ±50ppm+5% of measured value Temperature: ±0.2℃ of measured value Humidity: ±1.8% of measured value	Battery	Continuous operation over 40 hour with Rechargeable 8.51Wh Li-ion Battery			
Emergency Distress Signal	Man Down (Movement detection) SOS (User triggered)	Buttons	OK(Power ON) UP DOWN			
Protection rating	IP65					
Weight	175g					

Dimensions

strap hole : 10mm

~ 25.7 mm

~ 96.9 mm

~ 64.2 mm

LoRaWAN Payload Decoder
•github.com/radionode/RN300-Series-LoraWAN

Basic Requirements

•LoRaWAN Gateway :

 Radionode LoraWAN gateway or Others

Application

• Construction site

• Storage Tank, Silo

• Manhole, Chemical Tank

• Various confined spaces

Product Components

Model	Component
RN630-KFG	● RN630-KFG (1EA) ● Calibration Certificate ● Clip

Contact Information

● www.radionode365.com

● master@dekist.com

v1.01