



## WLRC-S50



### Wireless NO (Nitric Oxide) Sensor

The WLRC-S50 is a wireless sensor that detects the nitric oxide content in ambient air. WLRC-S50 can detect the concentration of nitric oxide in the air. The main unit and nitric oxide sensor are connected via RS485 interface, and the detected data is transmitted to other devices through the wireless network. The data transmission is based on the LoRa™ communication platform.

#### Features:

- Super Long Range Signal Penetration
- 12V DC adapter power supply
- Easy Installation
- RS485 communication
- Improved interference immunity
- Interactive WatchNET IoT platform with dashboard, search and notification settings



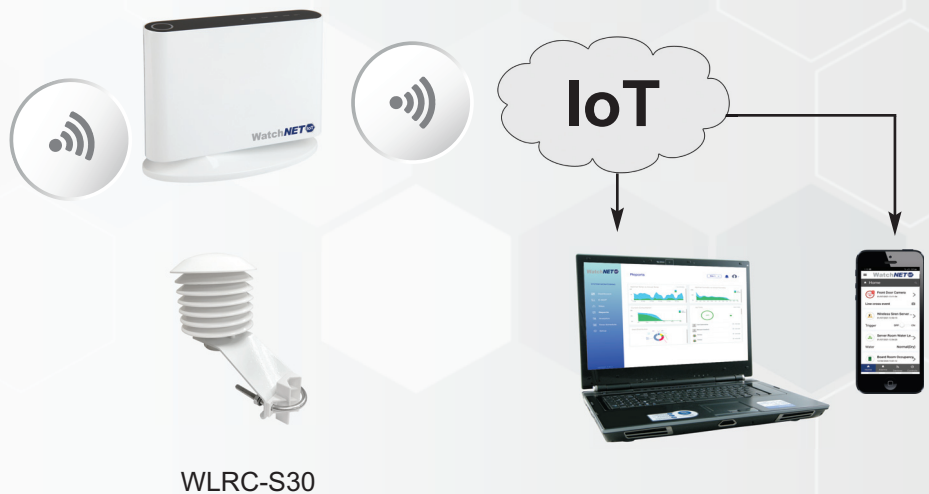
#### Applications:

- NO (Nitric Oxide) concentration detection
- Industrial sites, petroleum and petrochemical plants, chemical plants, smelters, indoor air quality inspection, environment monitoring (atmospheric monitoring), tobacco companies, etc.

#### Schematic Diagram:



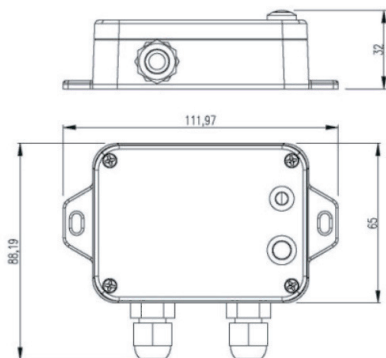
Green agriculture field



## Technical Specifications

Electrical	
Power Supply	DC 12V adapter power supply
Working Current	50mA (external sensor)
* Specific electrical characteristics will vary depending on the power supply voltage	
NO sensor parameters	
Power supply	+ 9V - +24 VDC
Nitric Oxide measurement range	0 - 2000ppm
Nitric Oxide measurement method	Electrochemical sensors
Nitric Oxide measurement accuracy	<± reading 2 % (@25°C)
Nitric Oxide measurement resolution	< 1 ppm
Response Time	< 60s
Service life	In the air > 2 years
Radio frequency characteristics	
Frequency range	863MHz-928MHz    470MHz-510MHz
Power Output	19 dBm ±1dBm
Receiving sensitivity	-136dBm (LoRa, Spreading Factor=12, Bit Rate=293bps) -121dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps)
Antenna Type	Built-in antenna
Communication Range	Up to 500m/0.310miles, the actual transmission distance depends on the environment
Data Transfer Rate	0.3kbps~50kbps
Spread Technique	LoRa/FSK (Note: choose one of them)
Available Frequency	EU863-870, US902-928, Configured before shipment
Physical characteristics	
Main unit size	L: 112 mm x W: 88.19 mm x H: 32 mm / 4.41" x 3.47" x 1.26"
Ambient temperature range	-20°C ~ 55°C / -4°F ~ 131°F
Protection class	Main Part IP65
Main unit weight	160g / 0.353lb
Environment Humidity Range	<90%RH (No condensation)
Storage Temperature	-40°C ~ 85°C / -40°F ~ 185°F

## Dimensions



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