



24  
WARRANTY  
MONTHS



## WLRC-S52

CE FC



### Wireless H<sub>2</sub>S (Hydrogen Sulfide) Sensor

The WLRC-S52 is a wireless sensor that detects Hydrogen Sulfide (H<sub>2</sub>S) concentration in air. The body and the Hydrogen Sulfide sensor are connected through the 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:

- Hydrogen Sulfide (H<sub>2</sub>S) concentration detection in the air
- Oil and Gas industry
- Wastewater treatment industries
- Farms with manure storage pits or landfills
- Pig farm
- Chemical plant
- Sewers and septic tanks
- Exploration drilling channel

#### Schematic Diagram:



Hydrogen Sulfide (H<sub>2</sub>S) concentration in the air



## Technical Specifications

### Electrical characteristics

Power Supply	DC 12V adapter power supply
Operating Current	≤ 60mA (external sensor)

\* Specific electrical characteristics will vary depending on the power supply voltage

### Hydrogen Sulfide (H<sub>2</sub>S) sensor parameters

Power supply	+ 10V - +24 VDC
Hydrogen sulfide measurement range	0- 100 ppm
Hydrogen sulfide measurement method	Electrochemical sensors
Hydrogen sulfide repeatability	≤± 3 % of reading (@25°C)
Detectable lower accuracy	≤ 2% maximum range
Response Time	≤ 30 seconds
Hydrogen sulfide resolution	< 0.1ppm
Service Life	In the air > 2 years
Communication port	RS485

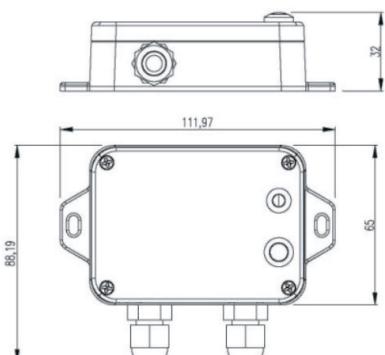
### Radio frequency characteristics

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	LoRa: 0.3kbps ~ 50kbps FSK: 1.2kbps ~ 300kbps
Modulation System Mode	LoRa/FSK (Note: choose one of them)
Available Frequency	EU863-870, US902-928, Configured before shipment

### Physical characteristics

Main unit size	Main part: 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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