

Sound Level Sensor Featuring LoRaWAN® WS302



Milesight WS302

is a LoRa sound level sensor with integrated microphone. WS302 can not only measure a wide range of noise levels and send various kinds of noise level values via LoRaWAN[®] network, but also supports multiple weighting measurements for different application scenarios. Compliant with Milesight LoRaWAN[®] gateway and Milesight IoT Cloud solution, users can manage all sensor data and trigger other sensors or appliances easily via webpage or mobile App remotely.

WS302 can be widely used in smart buildings, smart cities, schools, heath monitoring, etc.

FEATURES

- Support multiple weighting measurements to suit different scenes: A weighting, C weighting, fast weighting
- Support measuring various kinds of values to judge the sound level accurately: actual value, equivalent continuous value and max value
- Equipped with an LED indicator to indicate threshold alarms
- More than 4 years battery life
- Built-in NFC for easy configuration
- Compliant with standard LoRaWAN® gateways and network servers
- Quick and easy management with Milesight IoT Cloud solution

SPECIFICATIONS

| Wireless Transmission | |
|-----------------------|---|
| Technology | LoRaWAN® |
| Frequency | CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4 |
| Tx Power | 16 dBm (868 MHz)/22 dBm (915 MHz)/19 dBm (470 MHz) |
| Sensitivity | -137 dBm @300bps |
| Mode | OTAA/ABP Class A |
| Measurement | |
| Range | 30 dBA to 120 dBA, 35 dBC to 120 dBC |
| Accuracy | ± 3 dB (0°C to +45°C) |
| Resolution | 0.1 dB |
| Frequency Range | 30 Hz to 8 kHz |
| Frequency Weighting | A and C Weighting (Software Switchable) |
| Time Weighting | Fast Weighting |
| Measurement Unit | SPL Actual, Leq, Lmax |
| Others | |
| Configuration | NFC |
| Button | 1 × Power/Reset Button |
| LED | 1 × Status/Alarm Indicator |

Physical Characteristics

| Power Supply | 2 × 2700 mAh ER14505 Li-SOCl ₂ Replaceable Batteries |
|---------------------------------|---|
| Battery Life* (10 min interval) | Over 4 Years (Fast time weighting disabled) Over 1.5 Years (Fast time weighting enabled) |
| Operating Temperature | -20°C to +60°C |
| Relative Humidity | ≤95% (Non-condensing) |
| Ingress Protection | IP30 |
| Dimension | 68 × 65 × 20.5 mm (2.68 × 2.56 × 0.81 in) |
| Material & Color | PC+ABS, White |
| Installation | On the flat surfaces with screws or 3M tapes |

* Tested under laboratory conditions and for guideline purposes only.

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