# Residential Gas Detector

## Featuring LoRaWAN®

# GS101

**Milesight**

GS101 is a LoRaWAN® residential gas detector to detect the natural gas leak and send alarms. When the concentration caused by gas leak reaches the preset threshold, the detector will trigger both LED light alarm and buzzer sound alarm, it also supports controlling outputs to close the gas valve and open the vent fans to prevent potential accidents.

Apart from local alarms, GS101 can also report the normal status of the device and alarm messages remotely by the use of LoRaWAN® technology. Integrating with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can monitor all the sensor data and control the device remotely and visually.

## ◆ Features

➢ Built-in semiconductor gas detection sensor with 5-year-long life expectancy and no calibration needed

➢ High sensitivity gas leak detection and support 8% LEL alarm threshold

➢ Equipped with buzzer and light indicators to indicate the device powered, faulty, alarmed, and invalid status

➢ Equipped with a test button to test the device's normal or abnormal status

➢ Equipped with outputs for controlling external appliances such as gas valves and vent fans,

reducing potential accidents

- ➤ Store 800 historical records locally in 7 types and unable to reset
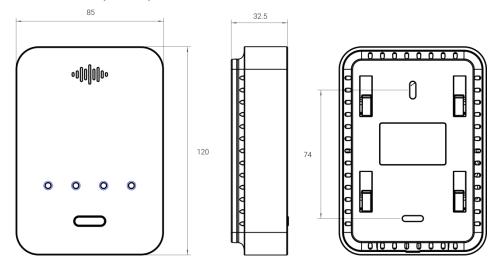- ➤ Built-in NFC for easy configuration
- ➤ Compatible with standard LoRaWAN® gateways and network servers
- ➤ Quick and easy management with Milesight IoT Cloud solution

## ◆ 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 | -137dBm @300bps |
| Mode | OTAA/ABP Class C |
| **Measurement and Alarms** | |
| Detecting Gas | Methane ($CH_4$) |
| Detection Principle | Semiconductor Sensor |
| Warm-up Time | About 180s |
| Alarm Level | 8% LEL |
| Alarm Type | Sound, Light |
| Alarm Volume | 85 dBA @1 Meter |
| Working Life | 5 Years (In Clear Air) |
| **Others** | |
| Output Signal | 1 × Relay Output: normally open, max 250 VAC/10A, 1 × Solenoid Valve Output: 12V, 100ms Pulse Output |
| Button | 1 × Test/Mute/Reset/Reboot Button |
| LED Indicators | 1 × Power (Green), 1 × Fault (Yellow), 1 × Alarm (Red), 1 × Invalid (Yellow) |
| Configuration | Mobile App via NFC |
| Historical Records Storage | Alarm Records, Alarm Dismissed Records, Device Fault Records, Device Fault Recovered Records, Device Power On Records, Device Power Off Records, Device Invalid Records |
| **Physical Characteristics** | |
| Power Connector | DC Jack Connector |
| Power Supply | 12VDC, 1A |

| Operating Temperature | -10°C to +55°C |
|---|---|
| Relative Humidity | 0% to 95% (non-condensing) |
| Ingress Protection | IP30 |
| Dimension | 120 × 85 × 32.5 mm (4.72 × 3.35 × 1.28 in) |
| Material & Color | PC+ABS (Flame Retardant), White |
| Installation | Wall Mounting |

## ◆ Dimensions(mm)

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