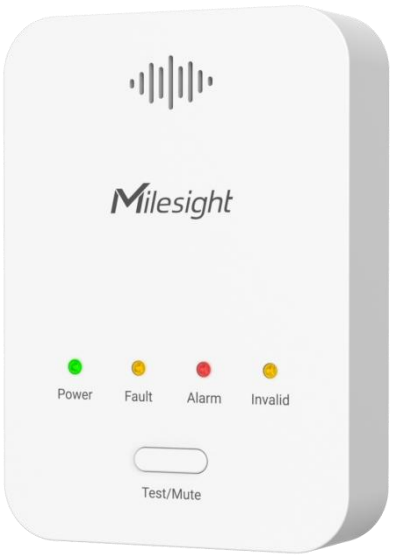
Residential Gas Detector

Featuring LoRaWAN®

GS101



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)

