

iGasis 1

Gas Detector



Gas



Temperature



Humidity



SAFE, RELIABLE, WATERPROOF, FAST DETECTION

The iGasis1 is the latest gas detection product, compatible with various sensors including electrochemical, catalytic combustion, and non-dispersive infrared sensors. It can be configured to detect one selected gas such as oxygen (O₂), carbon monoxide (CO), carbon dioxide (CO₂), methane (CH₄), or hydrogen sulfide (H₂S). It can also measure environmental indicators such as temperature and humidity. With an IP65 protection rating, it is ideal for monitoring in harsh environments like outdoor spaces, factories, or underground pipelines.

In terms of communication, it offers RS485 digital interface, 4-20mA current output, and three dry contact outputs for linking with ventilation systems or alarm systems. When harmful gas levels reach critical limits, it automatically activates warning signals or connects to ventilation systems to bring in fresh air, improving the environment quickly.

The iGasis1 also supports optional WiFi functionality for easy IoT control.

Procut Features

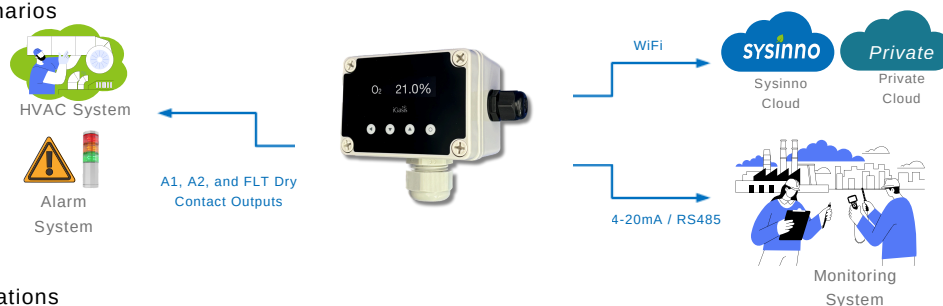
- Compact design, wall mountable, easy to install
- IP65 protection rating
- Third-party certified, professional structure, real-time gas detection
- Modular sensors with local calibration and replacement
- RS485, 4-20mA, and WiFi communication options, multiple transmission modes
- Alarm dry contact output, adjustable alarm threshold
- Optional WiFi for easy data storage and cloud upload
- 2.23-inch screen for real-time detection display

Specification

Measurement Index	operating rage	Resolution	Accuracy (*)	Detection Method	Response time (T90)	Warmup time
Temperature	-40~125 °C	0.1 °C	±0.5°C	MEMS	30 sec	60 sec
Humidity	0~100% RH	1% RH	± 5% RH	MEMS	30 sec	60 sec
O2	0~25% Vol	0.1% Vol	±2% FS	Electrochemical	15 sec	300 sec
CH4	0~100% LEL	1% LEL	±2%LEL or ±5% of reading	Catalytic Combustion	10 sec	300 sec
CO	0~1,000 ppm	1 ppm	± 5ppm±5% of reading	Electrochemical	15 sec	300 sec
H2S	0~200 ppm	0.1 ppm	±2ppm or ±5% of reading	Electrochemical	30 sec	300 sec
CO2	0~2% Vol	0.001% Vol	±2% FS	NDIR	120 sec	60 sec

(*) Testing conditions at 25°C environment

Application Scenarios



System Specifications

Operating Environment	-10°C to 50°C, below 90% RH
Storage Temperature	-20°C to 70°C, below 90% RH
Screen	2.23" OLED
Sampling Method	Diffusion
Analog Output	4~20mA (3-wire or 4-wire)
Digital Interface	RS485 or WiFi (optional)
Communication Protocol	RS485 (Modbus-RTU) / WiFi (Modbus-TCP, HTTP, MQTT) (optional)
Alarm Output (optional)	A1, A2, and FLT Dry Contact Outputs (240VAC 0.5A)
Alarm Adjustment (optional)	A1, A2, and Adjustable Threshold
Memory Capacity (optional)	Built-in 7500 data records
Operating Functions	Four-button physical buttons, WiFi HTML Web (optional)

Calibration Function	Zero, Full Scale, and 2-Point Calibration
Installation Method	Wall mount or pole mount
Power Distribution	DC 12-24V, 0.5A
Wire Specification	AWG12-AWG24
Wire Entry Diameter	13~18mm
Power Consumption	Maximum 5W
Safety Standards	CE / FCC / NCC / BSMI
Protection Rating	IP65
Enclosure Material	ABS
Dimensions	110mm (L) x 80mm (W) x 70mm (H)
Weight	TBD

Model Name

iGasis1 -XX -XXXX

Factor Interface

Factor:

T	=	Temperature
R	=	Humidity
X	=	O2
L	=	CH4
O	=	CO
S	=	H2S
C	=	CO2

Interface:

R	=	RS485
A	=	4~20mA
W	=	WiFi
D	=	Dry Contact

Model Description

iGasis1

