

## [Features]

- Multiple Sensing Options: Supports optional sensors such as temperature & humidity, CO, TVOC, O<sub>2</sub>, NH<sub>3</sub>, H<sub>2</sub>S, NO<sub>2</sub>, SO<sub>2</sub>, depending on application needs.
- Flexible Sampling Modes: Supports both active air-pump sampling and passive external air intake to suit various environments.
- Optional Dehumidification Design: Built-in heating plate for chamber heating and dehumidification to reduce measurement errors in high-humidity environments.
- Real-time Monitoring & Reporting: Provides stable and fast data output, suitable for long-term online monitoring.
- Multiple Communication Interfaces: Standard RS-485 communication; Bluetooth is also available as an option.
- High-Reliability Design: Withstands harsh construction sites, chemical plants, and high-humidity environments while maintaining long-term stability.
- Modular Structure: Easy for replacement, maintenance, and upgrades, reducing long-term servicing costs.
- Separated Sensor Chamber & PCB Design: Enhances PCB durability.
- Overall IP67 Protection: Suitable for various harsh environments.



[Application] Scrubber towers, chemical adsorption towers, duct gas monitoring, and industrial environments requiring active sampling.

## [Optional Code]

DGD-Code 1-Code 2-Code 3-Code 4

| Code 1 | Sensors<br>(Multi-selection) | Code 2 | Sampling Mode                           | Code 3 | Dehumidify Function                           | Code 4 | Wireless<br>Transmission   |
|--------|------------------------------|--------|-----------------------------------------|--------|-----------------------------------------------|--------|----------------------------|
| TR     | Temp/RH                      | N      | Passive Air<br>Intake                   | N      | Non-Heated<br>Dehumidification                | N      | RS-485                     |
| CO     | CO                           |        |                                         |        |                                               |        |                            |
| O2     | O2                           |        |                                         |        |                                               |        |                            |
| NH3    | NH3                          |        |                                         |        |                                               |        |                            |
| H2S    | H2S                          |        |                                         |        |                                               |        |                            |
| NO2    | NO2                          | PUMP   | Active Air<br>Intake / Pump<br>Sampling | H      | PTC Heating Plate<br>with<br>Dehumidification | BT     | Bluetooth<br>Communication |
| SO2    | SO2                          |        |                                         |        |                                               |        |                            |
| CH4    | CH4                          |        |                                         |        |                                               |        |                            |
| PID    | Photoionization PID          |        |                                         |        |                                               |        |                            |
| LEL    | Explosion lower limit        |        |                                         |        |                                               |        |                            |

※Dehumidification option requires a separate JNC Cloud Box (CB).

## [Equipment Specifications]

|                       |                                                      |                          |                |
|-----------------------|------------------------------------------------------|--------------------------|----------------|
| Power Supply          | ◆DC Input : 9 ~ 24V<br>◆Power Consumption : 1.8W     | Enclosure Dimensions(mm) | 220x170x110 mm |
| Enclosure Material    | ABS                                                  | Waterproof Rating        | IP67           |
| Operating Environment | -10°C to 50°C, 0~100% RH (non-condensing)            |                          |                |
| Communication Method  | RS-485 Modbus RTU (Bluetooth Communication Optional) |                          |                |

## [Sensor Specifications]

| Item Detection Principle      | Range      | T90    | Operating Temperature | Resolution | Accuracy            | Environmental Stabilization Time |
|-------------------------------|------------|--------|-----------------------|------------|---------------------|----------------------------------|
| Temp<br>(Resistive)           | -40~125 °C | <60 S  | -20~60°C              | 0.1°C      | ±0.4°C              | 10min                            |
| RH<br>(Capacitive)            | 0~100 %    | <60 S  | -20~60°C              | 0.1%       | ±3%                 | 10min                            |
| CO<br>(Electrochemical)       | 0~100ppm   | <180 S | 0°C~50°C              | 0.1ppm     | ±5ppm               | 10min                            |
| O2<br>(Electrochemical)       | 0 ~ 30 %   | <60S   | -10°C~55°C            | 0.05%      | ±1% of Reading      | 5min                             |
| NH3<br>(Electrochemical)      | 0-100 ppm  | <60S   | -10~50°C              | 0.01ppm    | ±2%                 | 5min                             |
| H2S<br>(Electrochemical)      | 0~100 ppm  | <60S   | -10~50°C              | 0.01ppm    | ±2%                 | 5min                             |
| NO2<br>(Electrochemical)      | 0-20 ppm   | <60S   | -0~50°C               | 0.01ppm    | ±2%                 | 5min                             |
| SO2<br>(Electrochemical)      | 0-20 ppm   | <60S   | -0~50°C               | 0.01ppm    | ±2%                 | 5min                             |
| CH4<br>(Semiconductor)        | 0-100ppm   | <90S   | 0°C~40°C              | 0.1ppm     | ±10%                | 10min                            |
| PID100<br>(Photoionization)   | 0-100 ppm  | ≤5S    | -10~60°C              | 25ppb      | ±2% (Repeatability) | ≤60 sec                          |
| LEL<br>(Catalytic combustion) | 0~100 %    | ≤30S   | -20~55°C              | 0.1 %      | ±2 %                | 10min                            |