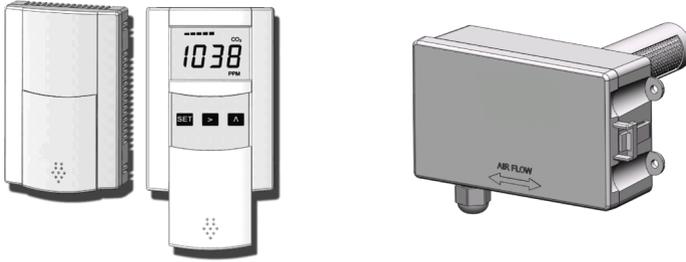


# Carbon Dioxide Transmitter/Controller

## GE-375 Series



### Application

GE-375W and GE-375D series carbon dioxide transmitters/controllers are designed for monitoring and controlling environment of industry and commercial buildings. They can be used in working house, clean room, laboratory, machine room, office, airport, parking lot, station and museum, etc. where air quality control is necessary. GE-375W series is suitable for wall mount installing while GE-375D series is suitable for duct mount installing.

### Feature

- High performance NDIR digital sensor and circuit, ensure precise measurement and temperature compensation
- Stable and reliable
- 15 years sensor life without maintenance
- Fast response
- Light and state of art housing, easy installation and wiring
- Multiple output selection
- The MMI can set parameters and calibrate output, so that the product becomes a stand alone controller

**Optional LCD display:** LCD display panel can be ordered and installed in field separately (GE-375W). See details on MMI product.

**Optional MMI operation panel:** Including LCD, integrated with function keys, can be ordered and installed in field separately (GE-375W). See details on MMI product.

### Specifications

|                            |   |
|----------------------------|---|
| <b>Sensor</b>              | NDIR sensor, with ABC algorithm (Automatic Baseline Correction) |
| <b>Sampling Method</b>     | diffusion   |
| <b>Accuracy</b>            | in models selection   |
| <b>Response time</b>       | <10s (30cc/min, low airflow)                                    |
| <b>Drift</b>               | <±10ppm/year  |
| <b>Range</b>               | 0~2000ppm or others(0~5000ppm)                                  |
| <b>Output</b>              | 4~20mA,0~10V,RS485/Modbus                                       |
| <b>Relay</b>               | 2xSPST, 1A/30VDC,0.5A/125VAC                                    |
| <b>Power supply</b>        | 18~30VAC/DC   |
| <b>Load resistance</b>     | ≤600Ω (Current output)<br>≥2000Ω (Voltage output)               |
| <b>Display</b>             | LCD Display (GE-375W optional)                                  |
| <b>Display resolution</b>  | 1ppm  |
| <b>Working environment</b> | 0~50℃,<br>0~95%RH(Non-condensing)                               |
| <b>Storage temperature</b> | -20~80℃   |
| <b>Housing material</b>    | fireproof ABS   |
| <b>Protection</b>          | IP30 (GE-375W), IP65 (GE-375D)                                  |

## Models

| Code    | Specifications                                    |
|---------|---|
| GE-375W | Wall mount CO <sub>2</sub> Transmitter/Controller |
| GE-375D | Duct mount CO <sub>2</sub> Transmitter/Controller |

| Code | Accuracy                                    |
|------|---|
| 0    | 75 ppm or 10% reading, whichever is greater |

| Code | Output                          |
|------|---------------------------------|
| 1    | 4~20mA & 0~10VDC                |
| B    | 4~20mA & 0~10VDC & RS485/Modbus |

| Code | Range     |
|------|-----------|
| 0    | 0~2000ppm |

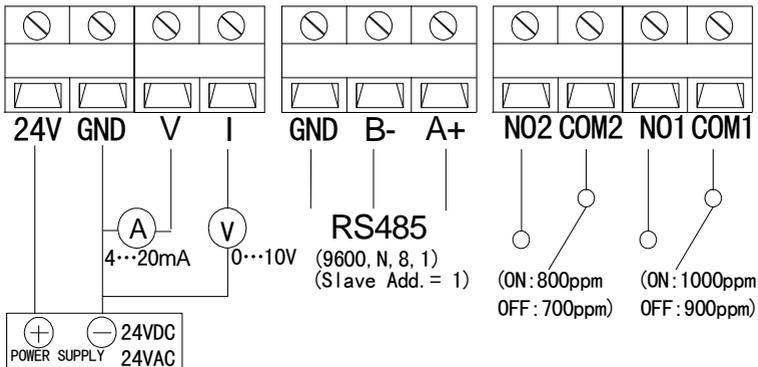
| Code | Relay output |
|------|--------------|
| 0    | No           |
| 1    | 2xSPST       |

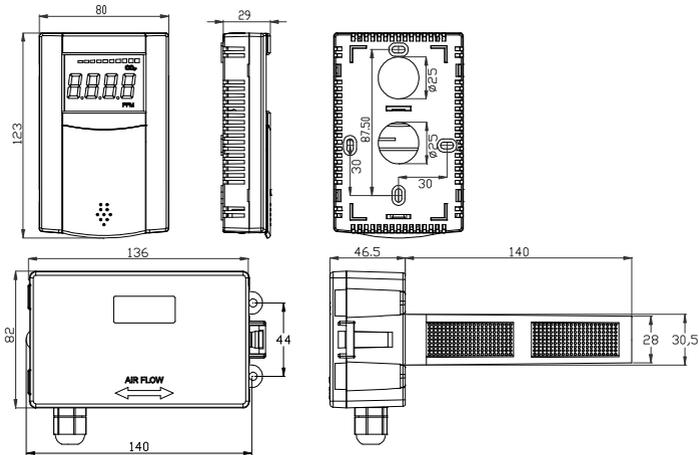
| Code | LCD&MMI |
|------|---------|
| 0    | No      |
| 1    | LCD     |
| 2    | MMI     |

## Connection

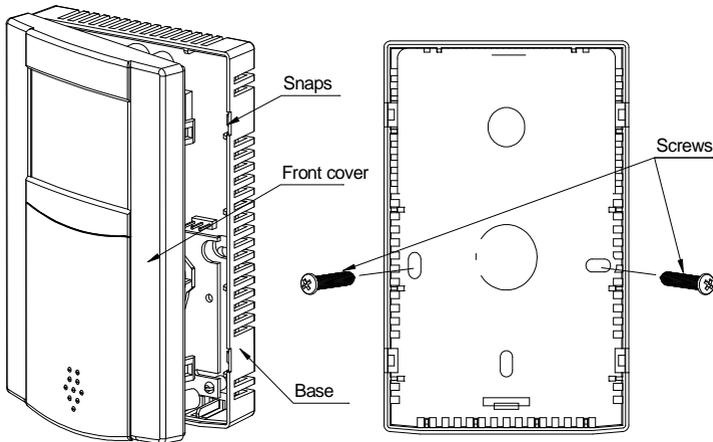
Different models have different electrical terminals. Please wire specific model according to the wiring diagram inside the front cover.



## Dimension(mm)

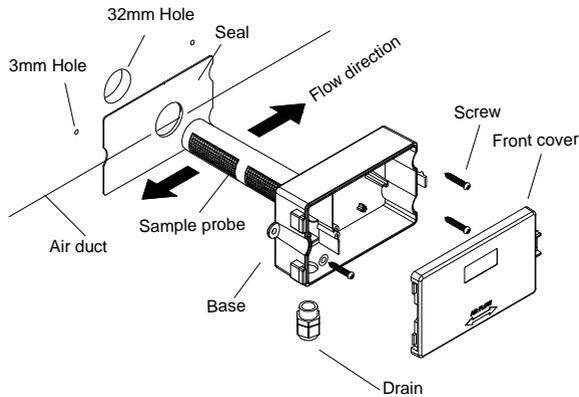


## Wall mount installation



- It should be installed vertically on the wall. The installation site should be far away from heater, cooler, fan, humidifier, dehumidifier, etc.
- Use a screwdriver, insert into one of the snaps and turn a little, the front cover opens.
- Feed the cable into the housing. Install the base on the electrical box (usually it was installed in the wall) with supplied 2 pcs of M4\*25 screws.
- Finish electrical connection according to the wiring diagram inside the front cover. And restore the front cover.

## Duct mount installation



Duct mount installation

- Make sure the air flow direction in the duct is the same as shown on the front cover.
- Mount the housing. Drill a hole with  $\varnothing 32$  mm diameter for the sample probe and three holes with  $\varnothing 3$  mm for the screws in the air duct. Then insert the sample probe into the hole with the seal on and install the housing base completely with the three screws.
- Electrical wiring. Open the front cover. Install the PG9 drain on the base and feed the cable through into the base. Finish wiring according to the diagram. Restore the front cover.
- Since there may be a pressure difference, it is necessary to avoid environment air being sucked into the housing due to negative pressure. Make sure the seal of the front cover, the drain and the cable feed through are completely air-tight. So the only entry of the sensing air is from the sample probe. Meanwhile the housing protection rate can meet up to IP 65.

## Attention

- The product is not suitable for high  $\text{SO}_2$  concentration environment.
- In normal application environment, sensor would reach to the accuracy stated in product specifications after three weeks continuing working.
- It should be power OFF during installing and wiring. When using 24VAC, it is strongly recommended to power the unit with independent transformer. If sharing a 24VAC transformer with other equipments such as controllers, transmitters or actuators, please make sure the terminals 24V and GND are connected correctly. Otherwise, it will perhaps reduce serious damages.

## Warranty

- It has limited warranty for eighteen (18) months after the production date.
- It does not extend to any unit that has been subjected to misuse or accident.
- It is, in any event, strictly limited to the replacement or repair of the product itself.