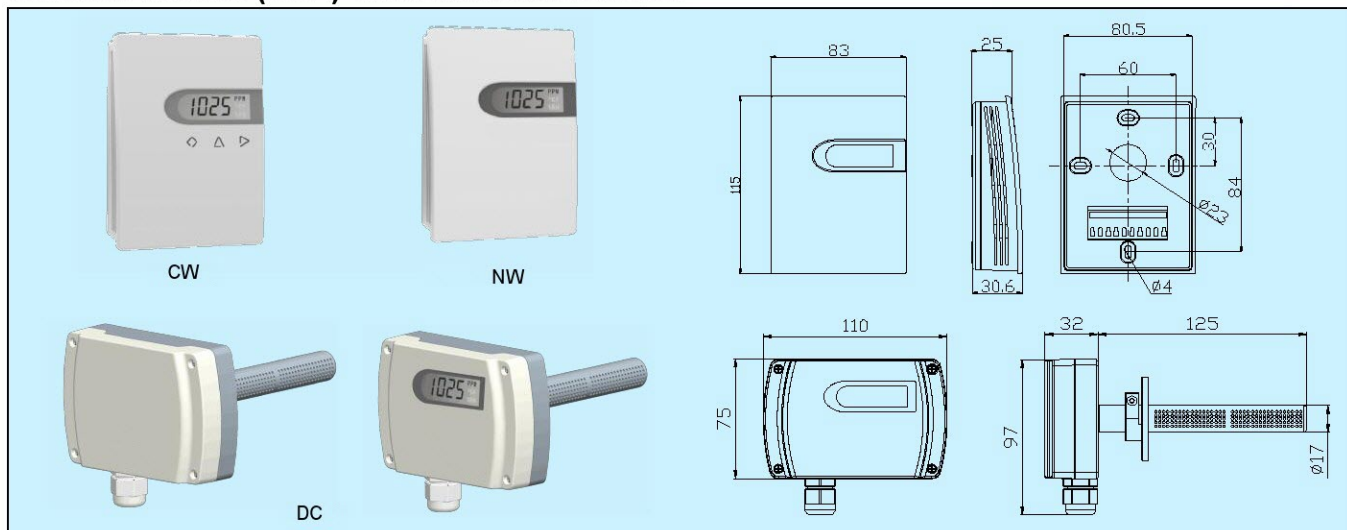


Carbon Dioxide (CO₂) Transmitter/Controller



Applications & Features

- This series transmitters/controllers are designed for monitoring & controlling indoor air quality (CO₂ concentration)
- NW / CW is suitable for wall mount and DC is suitable for duct mount. DC uses a patented probe structure for excellent sampling performance
- High performance NDIR digital sensor and circuit, ensure precise measurement and temperature compensation
- Stable, reliable and fast response
- 15 years sensor life without maintenance
- Digital technology applied, over voltage and reverse polarity protection, high reliability and anti-interference capability
- All electrical terminals are on the inside bottom, avoid any possible destroy to PCB when wiring (for NW / CW)
- Multiple outputs selection
- LCD & function keys can set various parameters, calibrate and adjust output, so the product can be a stand alone controller (for CW)

Specifications for NW & DC

Sensor: NDIR sensor, with ABC algorithm*

Sampling Method: diffusion

Accuracy: see models

Response time: <120s (30cc/min, low airflow)

Drift: <±10ppm/year

Range: 0~2000ppm (measurement range 400~2000 ppm)

Output: 4~20mA, 0~10V, RS485/Modbus

Load resistance: ≤500Ω (Current output), ≥2kΩ (Voltage output)

Power supply: 16~28VAC/16~35VDC

Display: Optional LCD, with unit display

Display resolution: 1ppm

Working environment: 0~50°C, 0~85%RH (Non-cond.)

Temp. Compensation: NW0 / DC0: 10~40°C

NW1 / DC1: 0~50°C

Storage temperature: -20~60°C

Housing: ABS+PC (NW), fireproof ABS/PC (DC)

Protection: IP30 (NW), housing IP65/probe IP30 (DC)

Weight: 135g (NW), 230g (DC)

Approval: CE

***ABC algorithm:** Automatic Baseline Correction, it constantly keeps track of the sensor's lowest reading over a few days interval and slowly corrects for any long term drift detected as compared to the expected fresh air value of 400 ppm CO₂.

Models for NW & DC

Model	NW DC			Room CO ₂ Transmitter Duct mount CO ₂ Transmitter
Accuracy		0 1		50 ppm + 5% reading 40 ppm + 3% reading
Output		1 8		4~20mA/0~10VDC RS485/Modbus
Display			0 1	N/A LCD

Specifications for CW

Sensor: NDIR sensor, with ABC algorithm

Sampling Method: diffusion

Accuracy: see models

Temp. Compensation: CW0: 10~40°C; CW1: 0~50°C

Response time: <120s (30cc/min, low airflow)

Drift: <±10ppm/year

Range: 0~2000 ppm (measure range 400~2000ppm)

Output: 2× SPST, 3A-30VDC/250VAC

Communication: optional RS485/Modbus

Power supply: 16~28VAC/16~35VDC

Display and keys: with LCD Display and 3 touch keys, see more details on LCD & Keys operation

Display resolution: 1ppm

Working environment: 0~50°C, 0~85%RH (Non-cond.)

Storage temperature: -20~60°C

Housing: ABS+PC

Protection: IP30

Weight: 135g

Approval: CE

Models for CW

Model	CW			Room CO ₂ Controller
Accuracy		0 1		50 ppm + 5% reading 40 ppm + 3% reading
Communication			0 1	N/A RS485/Modbus