



Applications & Features

- This series transmitters/controllers are designed for monitoring & controlling indoor air quality(CO₂ concentration)
- CDWN/CDWC is suitable for wall mount and CDD is suitable for duct mount. CDD 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 CDWN/CDWC)
- Multiple outputs selection
- LCD & function keys can set various parameters, calibrate and adjust output, so the product can be a stand alone controller(for CDWC)

Specifications for CDWN & CDD

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/18~35VDC
Display: Optional LCD, with unit display
Display resolution: 1ppm
Working environment: 0~50°C, 0~85%RH (Non-cond.)
Temp. Compensation: CDWN0/CDD0:10~40°C
 CDWN1/CDD1:0~50°C
Storage temperature: -20~60°C
Housing: ABS+PC (CDWN), fireproof ABS+PC (CDD)
Protection: IP30 (CDWN), housing IP65/probe IP30(CDD)
Weight: 135g(CDWN), 240g(CDD)
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 CDWN & CDD

Model	CDWN	CDD		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 CDWC

Sensor: NDIR sensor, with ABC algorithm
Sampling Method: diffusion
Accuracy: see models
Temp. Compensation: CDWC0:10~40°C; CDWC1:0~50°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 CDWC

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