RSA-DCAA/ RSA-DCD& RSA-DCAC Carbon Dioxide (CO2) Transmitter/Controller



Applications & Features

- This series transmitters/controllers are designed for monitoring & controlling indoor air quality(CO₂concentration)
- RSA-DCAA/RSA-DCAC is suitable for wall mount and CDD is suitable for duct mount. RSA-DCD 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 RSA-DCAA/RSA-DCAC)
- Multiple outputs selection
- LCD & function keys can set various parameters, calibrate and adjust output, so the product can be a stand alone controller(for RSA-DCAC)

Specifications for RSA-DCAA & 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/16~35VDC Display: Optional LCD, with unit display

Display resolution: 1ppm

Working environment: 0~50°C, 0~85%RH (Non-cond.)
Temp. Compensation: RSA-DCAA0/CDD0:10~40°C
RSA-DCAA1/CDD1:0~50°C

Storage temperature: -20~60°C

Housing: ABS+PC (RSA-DCAA), fireproof ABS/PC (CDD) **Protection:** IP30 (RSA-DCAA), housing IP65/probe IP30(CDD) **Weight:** 135g(RSA-DCAA), 230g(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 RSA-DCAA & RSA-DCD

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

Specifications for RSA-DCAC

Sensor: NDIR sensor, with ABC algorithm

Sampling Method: diffusion

Accuracy: see models

Temp. Compensation: RSA-DCAC 0:10~40°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		50 ppm + 5% reading
		1		40 ppm + 3% reading
Commu			0	N/A
nication			1	RS485/Modbus