

CARBON DIOXIDE TRANSMITTERS CDT2000 Duct Series

Multifunctional, duct mount CO₂ transmitters for building automation systems



The CDT2000 Duct series air quality transmitters are engineered for building automation systems in the HVAC/R industry. The CDT2000 Duct series measures carbon dioxide (CO₂), utilizing the industry standard NDIR measurement principle, and temperature (T). Illuminated display ensures easy readability also from a distance. The CDT2000 Duct has a screwless lid and an easily adjustable mounting flange that make the installation of the device easy.

CDT2000 Duct series devices include:

- Separate field configurable output for each measurement parameter (CO₂, T)
- Mounting flange

CDT2000 Duct series device options offer:

- Clear backlit display
- Modbus configuration

The versatility of the CDT2000 series air quality transmitters ensures that the right product for your application is available.



APPLICATIONS

CDT2000 Duct series devices are commonly used to monitor:

- CO₂ levels of incoming and return air in ventilation system

MODEL SUMMARY

Description	CDT2000	
	Model	Product code
Carbon dioxide transmitter, duct mounted	CDT2000 Duct	302.001.001
- with display	CDT2000 Duct-D	302.001.002
- with Modbus configuration and display	CDT-MOD-2000 Duct-D	302.001.006

CARBON DIOXIDE TRANSMITTERS

CDT2000 Duct Series

SPECIFICATIONS

Performance

Measurement ranges:

CO₂: 400–2000 ppm
Temperature: 0...50 °C

Accuracy:

CO₂: ±40 ppm + 2 % of reading
Temperature: <0.5 °C

Technical Specifications

Media compatibility:

Dry air or non-aggressive gases

Measuring units:

ppm and °C

Measuring element:

CO₂: Non-dispersive infrared (NDIR)
Temperature: NTC10K

Environment:

Operating temperature: 0...50 °C
Storage temperature: -20...70 °C
Humidity: 0 to 95 % rH, non condensing

Physical

Dimensions:

Case: 119 x 100 x 44.7 mm
Probe: L=188 mm, d=12 mm

Weight:

150 g

Materials:

Case: ABS
Cover: PC
Probe: ABS

Protection standard:

IP54

Electrical connections:

4 spring loaded terminals
(24 V, GND, CO₂, T)
12–24 AWG (0.2–1.5 mm²)

Electrical

Supply voltage: 24 VAC or VDC ±10 %
Current consumption: max 230 mA (at 24 V) + 10 mA for each voltage output
Output signals for every media:
0/2...5/10 VDC, Load R minimum 1 kΩ

Conformance

Meets requirements for CE marking:
EMC Directive: 2004/108/EC
RoHS Directive: 2002/95/EC
WEEE Directive: 2002/96/EC



How to generate a model?

Example:	Product Series				
CDT2000 Duct-D	CDT2000	Carbon dioxide transmitter, analog configurations			
	CDT-MOD-2000	Carbon dioxide transmitter, Modbus configuration			
		Mounting			
			Wall mount		
	Duct	Duct mount (not available with relay or relative humidity sensor)			
		Relay (only for wall mount model)			
		-1R	With relay		
			Without relay		
		Relative humidity sensor (only for wall mount model)			
		-rH	With relative humidity sensor		
			Without relative humidity sensor		
		Display			
			-D	With Display	
				Without Display	
Model	CDT2000	Duct		-D	