

CARBON DIOXIDE/VOLATILE ORGANIC COMPOUND TRANSMITTERS

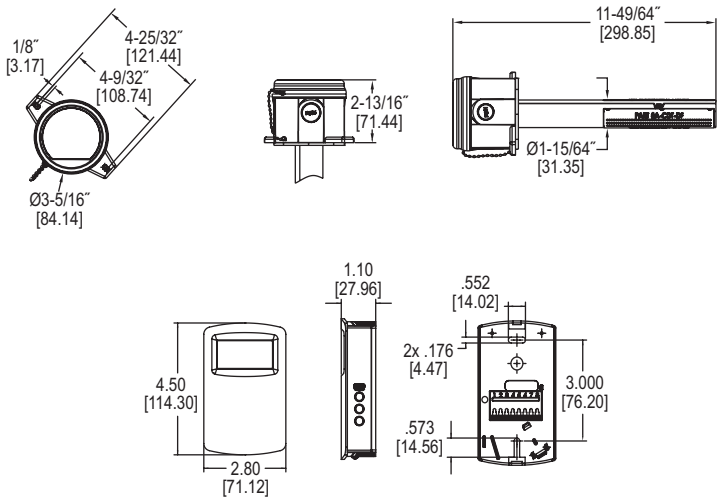
Simultaneously Outputs Both CO₂ / VOC



AIR QUALITY



North American style



The **Series CDTV Carbon Dioxide/Volatile Organic Compound Transmitters** reduce energy cost in buildings by lowering the amount of conditioned air based on the occupancy of the space. By sensing both CO₂ and VOC, the transmitter can detect fumes that may need to be exhausted during lower occupancy periods.

FEATURES/BENEFITS

- Combination VOC and CO₂ outputs reduce labor and material costs
- Single beam dual wavelength NDIR CO₂ sensor allows for use in spaces that may be occupied 24 hours a day
- VOC output is correlated to be equivalent to CO₂ measurements
- Ventilate using ASHRAE's occupancy-based VRP Algorithm

APPLICATIONS

- HVAC applications in hospitals, schools, and commercial buildings
- Demand control ventilation
- Odor control
- Waiting rooms or other spaces that may be occupied 24 hours a day

MODEL CHART							
Example	CDTV	-2	D	4	A	4	-RLY CDTV-2D4A4-RLY
Series	CDTV						Carbon dioxide/VOC transmitter
Range		2 5					0 to 2000 ppm CO ₂ range 0 to 5000 ppm CO ₂ range
Configuration			D N				Duct North American style wall mount
CO ₂ Output				4			4-20 mA / 0 to (5 or 10) VDC
Temperature Output					0 A B C D E F		None 10 KΩ NTC thermistor type III 10 KΩ NTC thermistor type II 3 KΩ NTC thermistor Pt100 Ω RTD Pt1000 Ω RTD 20 KΩ NTC thermistor
VOC Output						4	4-20 mA / 0 to (5 or 10) VDC
Options						RLY FC LCD COC	Relay Factory calibration certificate LCD display (wall only) Certificate of calibration

SPECIFICATIONS	
Range:	CO ₂ : 0 to 2000 or 0 to 5000 ppm (depending on model); VOC: 0 to 2000 ppm CO ₂ equivalent.
Accuracy:	CO ₂ : ±40 ppm ±3% of reading.
Temperature Dependence:	±8 ppm / °C at 1100 ppm.
Non-Linearity:	CO ₂ : 16 ppm.
Pressure Dependence:	CO ₂ : 0.13% of reading per mm of Hg.
Response Time:	CO ₂ : 2 minutes for 99% step change; VOC: 5 minutes.
Temperature Limits:	32 to 122°F (0 to 50°C).
Duct Air Velocity Range:	0-4000 FPM (20.32 m/s).
Power Requirements:	16-35 VDC / 19-28 VAC.
Power Consumption:	Average: 2 watts; Peak: 3.75 watts.
Sensor:	CO ₂ : Single-beam, dual-wavelength NDIR; VOC: MEMS metal oxide semiconductor.
Output:	Current: 0-20 mA, 4-20 mA, 0-10 mA, or 2-10 mA (depending on selection jumper, max 500 Ω); Voltage: 0-10 VDC, 2-10 VDC, 0-5 VDC, or 1-5 VDC (depending on selection jumper, min 500 Ω); Relay: SPST NO 2A @ 30 VDC.
Weight:	5.6 oz (158.8 g).
Enclosure Rating:	Duct mount: NEMA 4X (IP66) for housing only; Wall mount: IP20.
Agency Approvals:	CE.

Carbon Dioxide Transmitters