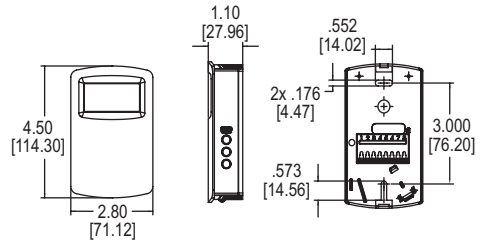
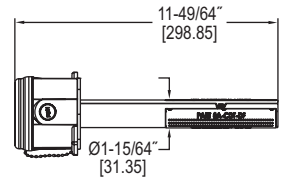
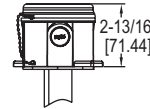
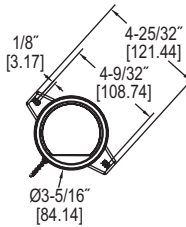


# CARBON DIOXIDE/VOLATILE ORGANIC COMPOUND TRANSMITTER

Simultaneously Outputs Both CO<sub>2</sub> / VOC



North American Style



The **SERIES CDTV** Carbon Dioxide/Volatile Organic Compound (VOC) Transmitter reduces energy cost in buildings by lowering the amount of conditioned air based on the occupancy of the space. By sensing both CO<sub>2</sub> and VOC, the transmitter can detect fumes that may need to be exhausted during lower occupancy periods.

**FEATURES/BENEFITS**

- Combination VOC and CO<sub>2</sub> outputs reduce labor and material costs
- Single beam dual wavelength NDIR CO<sub>2</sub> sensor allows for use in spaces that may be occupied 24 hours a day
- VOC output is correlated to be equivalent to CO<sub>2</sub> measurements
- Ventilate using ASHRE'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	A	4	-RLY	CDTV-2D4A4-RLY
Series	CDTV						Carbon dioxide/VOC transmitter
Range		2					0 to 2000 ppm CO <sub>2</sub> range
		5					0 to 5000 ppm CO <sub>2</sub> range
Configuration			D				Duct
			N				North American style wall mount
CO <sub>2</sub> Output				4			4 to 20 mA / 0 to (5 or 10) VDC
Temperature Output					0		None
					A		10 KΩ NTC thermistor type III
					B		10 KΩ NTC thermistor type II
					C		3 KΩ NTC thermistor
					D		Pt100 Ω RTD
					E		Pt1000 Ω RTD
					F		20 KΩ NTC thermistor
VOC Output						4	4 to 20 mA / 0 to (5 or 10) VDC
Options						RLY	Relay
						FC	Factory calibration certificate
						LCD	LCD display (wall only)
						COC	Certificate of calibration

**SPECIFICATIONS**

**Range:** CO<sub>2</sub>: 0 to 2000 or 0 to 5000 ppm (depending on model); VOC: 0 to 2000 ppm CO<sub>2</sub> equivalent.  
**Accuracy:** CO<sub>2</sub>: ±40 ppm ±3% of reading.  
**Temperature Dependence:** ±8 ppm / °C at 1100 ppm.  
**Non-Linearity:** CO<sub>2</sub>: 16 ppm.  
**Pressure Dependence:** CO<sub>2</sub>: 0.13% of reading per mm of Hg.  
**Response Time:** CO<sub>2</sub>: 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 to 35 VDC / 19 to 28 VAC.  
**Power Consumption:** Average: 2 watts; Peak: 3.75 watts.  
**Sensor:** CO<sub>2</sub>: Single-beam, dual-wavelength NDIR; VOC: MEMS metal oxide semiconductor.  
**Output:** Current: 0 to 20 mA, 4 to 20 mA, 0 to 10 mA, or 2 to 10 mA (depending on selection jumper, max 500 Ω); Voltage: 0 to 10 VDC, 2 to 10 VDC, 0 to 5 VDC, or 1 to 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.