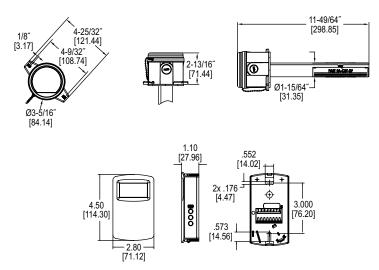
Dwyer

CARBON DIOXIDE/VOLATILE ORGANIC COMPOUND TRANSMITTERS Simultaneously Outputs Both CO2 / VOC









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.

BENEFITS/FEATURES

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

SPECIFICATIONS

Range: CO2: 0 to 2000 or 0 to 5000 PPM (depending on model); VOC: 0 to 2000

PPM CO₂ equivalent.

Accuracy: CO2: ±40 PPM ±3% of reading.

Temperature Dependence: ±8 PPM / °C at 1100 PPM.

Non-Linearity: CO2: 16 PPM.

Pressure Dependence: CO₂: 0.13% of reading per mm of Hg.

Response Time: CO2: 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: CO2: Single-beam, dual-wavelength NDIR; VOC: MEMS metal oxide

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. Enclosure Rating: Duct mount: NEMA 4X (IP66) for housing only; Wall mount:

Weight: 5.6 oz (158.8 g).

Compliance: CE.