

CD-W00-x0-1 Series

# Wall Mount CO<sub>2</sub> Transmitters

## Description

Johnson Controls offers carbon dioxide (CO<sub>2</sub>) transmitters for measuring and transmitting CO<sub>2</sub> levels, ranging from 0 to 2,000 parts per million (ppm), within Heating, Ventilating, and Air Conditioning (HVAC) CO<sub>2</sub> applications. Specific HVAC CO<sub>2</sub> applications include Demand Control Ventilation (DCV), fresh air and Indoor Air Quality (IAQ), and rooftop air handling Economizer controls systems.

## Features

- DCV strategies — offer potential for 10 to 70% energy savings
- Vaisala CARBOCAP® single-beam, dual-wavelength design — provides superior performance compared to other technologies
- CARBOCAP silicon, micro-machined construction — provides reliable CO<sub>2</sub> measurement in room environments
- offers 5 years of reliable calibration
- stable infrared reference — compensates for light-source drift

## Applications

This compact wall-mounted device produces 0 to 10 V and 4 to 20 mA signals. It is designed to work:

- in stand-alone mode
- as part of any integrated Building Automation System (BAS)

The CO<sub>2</sub> transmitter is easy to install, offers a full 3-year warranty, and requires no maintenance or field calibration.

## Repair Information

If the CD-W00-x0-1 Series Wall Mount CO<sub>2</sub> Transmitters fail to operate within their specifications, replace the units. For a replacement CO<sub>2</sub> transmitter, contact the nearest Johnson Controls® representative. Refer to the *CD-W00-x0-1 Series Wall Mount CO<sub>2</sub> Transmitters Product Bulletin (LIT-12011187)* for important product application information.



**CD-W00-00-1  
 Wall Mount CO<sub>2</sub> Transmitter  
 with Logo**

## Selection Chart

Code Number	Description
CD-W00-00-1	Wall Mount CO <sub>2</sub> Transmitter with Logo
CD-W00-N0-1	Wall Mount CO <sub>2</sub> Transmitter without Logo

## Accessories

Code Number	Description
ACC-DWCLIP-0	Drywall Spring-Clip Mounting Kit
Y65T31-0	Multiple Primary Transformer, 40 VA, 120/208/240 V Primary, 24 V Class 2 Secondary with Screw Terminals: Foot Mounting or 4 x 4 in. (100 x 100 mm) Plate

## Technical Specifications

CD-W00-00-1 and CD-W00-N0-1 Wall Mount CO <sub>2</sub> Transmitters		
Measuring Range	0 to 2,000 ppm CO <sub>2</sub>	
Accuracy at 77°F (25°C)	±[50 ppm + 3.0% of reading] (includes calibration uncertainty, repeatability, and non-linearity). All accuracy specifications reflect the testing of the transmitter using high-grade certified gases. The transmitter is intended for an altitude range of 0 to 2,000 ft (0 to 600 m) above sea level without compensation.	
Temperature Dependence of Output	-0.35% of reading/°C, typical (may vary between individual units)	
Long-Term Stability	<5.0% of Full Scale/5 Years	
Response Time (0 to 63%)	1 Minute	
Operating Temperature Range	23 to 113°F (-5 to 45°C)	
Storage Temperature Range	-4 to 158°F (-20 to 70°C)	
Humidity Range	0 to 85% RH (noncondensing), 85°F (29°C) maximum dew point	
Transmitter CO <sub>2</sub> Output Signal	4 to 20 mA or 0 to 10 VDC; Maximum Output Current: 25 mA; Maximum Output Voltage: 12.5 V	
Resolution of Analog Outputs	2.5 ppm CO <sub>2</sub>	
Recommended External Load	Current Output: Maximum 500 ohms Load Resistance; Voltage Output: Minimum 1,000 ohms Load Resistance	
Power Supply Range	20 to 30 VAC (18 to 30 VDC), Class 2	
Power Consumption	<2.0 W Average, excluding current output consumption	
Current Consumption	150 mA peak (70 mA average)	
Warm-Up Time	<1 Minute; <10 Minutes for Full Specification	
Dimensions (H x W x D)	4-23/32 x 3-5/32 x 1-7/32 in. (120 x 80 x 31 mm)	
Shipping Weight	0.26 lb (117 g)	
Compliance	United States	UL Listed, File E27734, CCN XAPX, UL 873, Temperature Indicating and Regulating Equipment, FCC Compliant to CFR 47, Part 15, Subpart B, Class A
	Canada	UL Listed, File E27734, CCN XAPX7, CAN/CSA C22.2 No. 24, Temperature Indicating and Regulating Equipment. Industry Canada Compliant, ICES-003
	Europe	CE Mark – Johnson Controls, Inc., declares that the Wall Mount CO <sub>2</sub> Transmitters are in compliance with the essential requirements and other relevant provisions of the EMC Directive 2004/108/EC.

The performance specifications are nominal and conform to acceptable industry standards. For applications at conditions beyond these specifications, consult the local Johnson Controls office. Johnson Controls, Inc. shall not be liable for damages resulting from misapplication or misuse of its products. © 2012 Johnson Controls, Inc. [www.johnsoncontrols.com](http://www.johnsoncontrols.com)