

Room CO₂/VOC/Temperature/RH



Energy &
Atmosphere



Indoor
Environmental
Quality



QPA2060D Q Series
Room Carbon Dioxide & Temperature Sensor.

Description

The QPA Series Room Carbon Dioxide Sensors monitor and transmit changes in CO₂ to the building control systems. No calibration of the CO₂ sensor is necessary — these microprocessor-based units consist of a non-dispersive infrared CO₂ sensor that experiences less than 1% drift per year for the first two years of operation and negligible drift thereafter. All variants for CO₂ and combination versions with Temperature or VOC deliver 0 to 10 Volt or 0 to 5 Volt (field selectable) proportional signals to the controller.

Features

- LCD display option
- Various models:
CO₂
CO₂/VOC
CO₂/Temp
CO₂/Temp/RH
- Built-in test function for troubleshooting
- Jumper selectable °C/°F units for temp models w/display
- **No Logo** versions available
- QPA2080 and QPA2080D include multiple resistance temperature elements

Applications

These units are especially suited for applications where precise, stable CO₂ sensing is required.

E-35

Sensors

QPA Series Specifications

General

Installation..... 18 AWG cable length shared in conduit with other sensor wiring 750 ft. (229 m) max

Connections Screw terminals

Dimensions 3.94" H x 3.54" W x 1.65" D
(100 mm x 90 mm x 42 mm)

Voltage Requirement..... 13.5 to 35 Vdc

Housing Protection Class..... NEMA 1 (all types)

CO₂ Element

Operating Range..... 0 - 2000 ppm

Accuracy at Room Temperature ≈ 73°F (20°C) +2% mV

Operating Temperature -23 to +113°F (-5 to +45°C)

Temperature Effect..... Less than 0.1% per degree C

Sensing Element..... NDIR CO₂ sensing module

Output Signal 0 to 10 Vdc, 0-100% Linear, Proportional

Polarity Protection..... Yes

Permissible Air Velocity in the Room <26.2 ft./s

Temperature Element (for Combination CO₂/T unit only)

Operating Temperature 23 to 113°F (-5 to 45°C)

Time Constant <1 minute

Accuracy ±0.8K

Output Signal 0-10 volts

Calibration None Required

Humidity Element

Measuring Range..... 0 to 100% RH

Accuracy ±5% RH

QPA Series Product Ordering

Application	Description	Part No.
CO2	0 to 5 V or 0 to 10 V	QPA2000
CO2 and VOC	0 to 5 V or 0 to 10 V	QPA2002
CO2 and VOC	0 to 5 V or 0 to 10 V, with Display	QPA2002D
CO2 and Temp (Active)	0 to 5 V or 0 to 10 V	QPA2060
CO2 and Temp (Active)	0 to 5 V or 0 to 10 V, with Display	QPA2060D
CO2, Temp and RH (Active)	0 to 5 V or 0 to 10 V	QPA2062
CO2, Temp and RH (Active)	0 to 5 V or 0 to 10 V, with Display	QPA2062D
CO2 and Temp (Passive)*	0 to 5 V or 0 to 10 V T (Selectable R)	QPA2080
CO2 and Temp (Passive)*	0 to 5 V or 0 to 10 V, T (Selectable R) with Display	QPA2080D

*Units include interchangeable resistance elements for LG-Ni1000, Pt1000, Pt100, and NTC 10K Ohm.

E-36

Sensors

Accessories & Service Kits

E-51