

Product data sheet

CARBON DIOXIDE DETECTOR

The Brannan carbon dioxide detector measures Carbon Dioxide (CO₂), air temperature and humidity. The device helps measure ventilation in enclosed spaces such as classrooms, offices, and hospitality venues, and helps in the fight against the spread of contagious disease such as Covid-19.

People exhale carbon dioxide when they breathe out. If there is a build up of CO₂ in an area it can indicate that ventilation is poor and should be improved.

The device adopts a high-precision non-dispersive infrared CO₂ sensor that detects CO₂ accurately and sensitively.

The product uses a high-capacity rechargeable lithium battery inside, making it ideal to move around a space.

To preserve electricity, the device powers off after 30 minutes of inactivity.

A USB charging cable is provided allowing the user to recharge the device using either a PC or mains plug.

This detector is supplied complete with certificate of calibration.

Product features:

- Measures carbon dioxide, air temperature and humidity
- Powerful tool in the fight against Covid
- Measures ventilation in enclosed spaces such as classrooms and workplaces
- 2.4" TFT colour display
- Checks for carbon dioxide concentrations and displays temperature and relative humidity
- NDIR (non-dispersive infrared) carbon dioxide sensor
- Indoor air quality displayed in ppm with colour coded good, normal and poor indicators
- Supplied complete with calibration certificate

Product specifications:

CO₂ concentration measurement

Range:	0 to 9999ppm
Accuracy:	+/-75ppm / +/-5% of rdg
Resolution:	1ppm

Temperature and humidity detection

Temperature range:	-20 to +70°C
Temperature accuracy:	+/-2°C
Temperature resolution:	0.1°C
Humidity range:	0 to 100%RH
Humidity accuracy:	+/- 3.5%RH (20 to 80%RH) otherwise +/-5%RH
Humidity resolution:	0.1%RH



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Product specifications (continued):

Battery:	1000mAh rechargeable lithium battery
Battery charge:	USB 5V charging
Display:	2.4 in TFT colour display 240mm x 320mm resolution
LCD dimensions:	49mm x 38mm
Operating conditions:	0 to +50°C
Storage conditions:	-10 to +60°C
CE/RoHS/WEEE:	Compliant
Hazard information (SDS):	See brannan.co.uk for information
Product dimensions:	Net: 100mm x 60mm x 48mm Gross: 136mm x 91mm x 60mm
Component weight:	Net: 117.5g USB cable: 22.5g Display box: 88.5g (incl. instructions) Foam box insert: 12g Gross: 240.5g

Description	Barcode	Product No
Carbon dioxide detector	5 011405 389206	38/920/0

Notes:

Carbon dioxide is an odourless, colourless and tasteless gas. While some concentration of CO₂ is natural and expected high concentrations can be both harmful to the environment and also toxic to human beings, and very high levels in the air may cause drowsiness, headaches, nausea and other physical symptoms.

High levels of CO₂ can also indicate poor ventilation in a room. Poor ventilation in turn increases the risk of the spread of viruses such as coronavirus, which is primarily spread through droplets in the air that result from breathing, coughing, sneezing and other respiratory actions. During exhalation, CO₂ is also released into the air. A safe level of CO₂ in the air indicates adequate ventilation which in turn should help reduce the risk of transmission of coronavirus and other respiratory infections. A CO₂ monitor can help measure these levels, and high levels can alert people to take preventative measures and bring the CO₂ levels to a safer range.

Carbon dioxide monitors detect the presence and concentration of CO₂ in the air in parts per million (ppm). Outdoor levels are around 400ppm and indoors a consistent CO₂ value less than 800ppm is likely to indicate that a space is well ventilated. An average of 1500ppm CO₂ concentration over the occupied period in a space is an indicator of poor ventilation. You should take action to improve ventilation where CO₂ readings are consistently higher than 1500ppm. However, where there is continuous talking or singing, or high levels of physical activity (such as dancing, playing sport or exercising), providing ventilation sufficient to keep CO₂ levels below 800ppm is recommended. ie:

- < 800: good ventilation
- 800-1500: acceptable to poor ventilation - action should be taken to improve ventilation
- > 1500: unacceptable ventilation - immediate action recommended

The Brannan CO₂ monitor is ideal for use in schools, nurseries, care homes, hospitals and clinics, hospitality venues, offices...