Overview

Precision Loggers™ CO$_2$ Logger uses a next-generation miniature sensor to measure and record carbon dioxide concentration in air. High indoor carbon dioxide levels can indicate poor air quality and ventilation, which may negatively impact humans' cognitive power and increase the concentration of airborne diseases. Fully wireless, the logger communicates using Bluetooth® Low Energy (BLE) technology and recharges inductively.

General Specifications

Dimensions:	116 mm × 42 mm × 15 mm
Weight:	100 grams (approx.)
Battery:	2 000 mAh rechargeable lithium polymer
Charging System:	Wireless
Communication:	Bluetooth® 5
Mounting:	Magnetic
Clock Accuracy:	± 2 seconds per day
Sampling Methods:	Continuous or stop when full
Operating Temperature Range:	-10 °C to 60 °C
Computer Hardware Requirements:	Bluetooth LE adapter
Computer Software Requirements:	Precision Loggers application
Operating System Software Compatibility:	macOS and Windows. More support under development
Memory Size:	8 000 to 32 000 readings
Number of Channels:	1 to 4
Extra Channel Types:	Temperature, relative humidity, and barometric pressure
Approximate Logging Time on Full Battery:	1 month (5 minute interval)

Applications

◊ Measuring indoor air quality
◊ Troubleshooting, commissioning, and balancing HVAC systems
◊ Monitoring automobiles, aircraft, other modes of transportation

Sensor Specifications

Media:	Air, non-condensing
Measurement Accuracy:	± (50 ppm ± 5% of reading) (400 ppm to 2000 ppm)
Sensor Resolution:	18-bit
Maximum Non-Condensing Humidity Exposure:	95% RH
CO$_2$ Reading Range:	40 000 ppm