



SprintIR™ Wide Range CO2 Sensor

The SprintIR™ carbon dioxide sensor is the fastest (20hz), most accurate low CO2 sensor on the market today. A breakthrough in NDIR technology, the SprintIR™ uses advanced solid state Indium Antimonide LED's and detectors to offer a robust sensor with no moving parts, no heated filaments and low power requirements. The sensor comes in 2 versions - 20%, or 100% - both capable of the same high-speed CO2 measurement. This makes the SprintIR™ especially useful in biological applications.

Features

- Real time sensing
- Low power consumption – 35mW
- High poison resistance & long term stability
- Various voltages available from 3.2v to 5v

Benefits

- Wide range of applications
- Low cost High accuracy
- Good immunity to other gases & humidity
- Low power consumption, suitable for portable applications

CO2 Sensor

Measurement Range	0-20% and 0-100% CO2
Sensing Method	non-dispersive infrared (NDIR) absorption Gold-plated optics (patent applied for) Patented solid-state source and detector
Sampling Method	Diffusion (Sampling cover available)
Accuracy	± 70 ppm ± 5% of measured value
Measurement Noise	< 10% of reading with no digital filtering
Non-Linearity	< 1% of FS
Pressure Dependence.....	0.1% of reading per mbar in normal atmospheric conditions

General Performance

Operating Temperature Range	0 °C to 50 °C (standard), -25 °C to 55 °C (extended range)
Storage Temperature Range	-30 to +70 °C
Operating Humidity Range	0 to 95% RH (non-condensing)
Operating Pressure Range	950 mbar to 10 bar
Warm-up Time	≤ 2 seconds initial reading, ≤ 1 minute operational

Electrical/Mechanical

Power Input.....	3.2 to 5 volt DC (3.3V recommended).
Peak Current	100 mA
Average Current	< 15mA
Power Consumption	35 mW
Dimensions	22.6mm x 40.0mm x 25.0mm

UART Serial com port

Protocol	Serial
Hardware interface	4-pin: Power, Ground, Tx, Rx

Models

GC-0018 (0-100%)
GC-0017 (0-20%)

A SDK with powered USB interface to our data logging software is available for this sensor.

Visit www.co2meter.com for more information.