

Datasheet: USB CO2 Probe Data Logger



The K-30 Probe is a low cost, infrared and maintenance-free transmitter module that can monitor CO2 concentrations via USB from an attached PC running Windows.

The Probe is designed for students, teachers and indoor greenhouse growers who need a rugged and easy-to-use CO₂ meter and data logger.

CO2 Measurement

Measurement Range	0-1% (10,000 ppm), 0-30%, 0-100%
Sensing Method	Non-dispersive infrared (NDIR) with ABC automatic background calibration algorithm
Sampling Method	Diffusion

<p><i>CM-0039</i> <i>1% CO₂ Sensor</i></p> <p><i>CM-0040</i> <i>30% CO₂ Sensor</i></p> <p><i>CM-0041</i> <i>100% CO₂ Sensor</i></p>

General Performance

Operating Temperature Range	0 to 50 °C
Storage Temperature Range	-30 to +70 °C
Operating Humidity Range	0 to 95% RH (non-condensing)
Accuracy	< 3% of measured value
Sensor Life Expectancy	> 15 years
Maintenance Interval	No maintenance required
Self-Diagnostics	Complete function check of the sensor module
Warm-up Time	≤ 1 min
Conformance with the standards.....	Emission: EN61000-6-3:2001 Immunity: EN61000-6-2:2001 RoHS directive 2002/95/EG
Operating Environment	Non-humid residential, commercial, industrial spaces. Use CM-0173 Hydrophobic Filter Kit for humid or dusty environments.

Electrical/Mechanical

Power Input.....	Powered by 5-volt USB. May require additional power if multiple USB devices are connected.
Current Consumption	40 mA average < 150 mA peak current (averaged during IR lamp ON, 120 msec) < 300 mA peak power (during IR lamp start-up, the first 50 msec)
Dimensions	3.15 x 2.36 x 1.18 inches (Length x Width x approximate Height)

Free GasLab® Software Features

- Read and record CO2 levels on PC
- Stand-alone application
- Libraries for Microsoft Visual Studio Standard or Express Edition
- Exports data in .CSV format
- Data can be posted directly to a URL for integration into web applications

Gaslab® must be downloaded and installed before plugging the probe into your computer.