



B14-101-CO₂

CO₂ Monitor

The CO₂ monitors are designed to measure carbon dioxide in harsh and humid environments. The ABS plastic housing is dustproof and waterproof to IP65 standards with a choice of several measurement ranges; up to 20% of CO₂. The patented sensor has unique reference measurements capabilities. Its critical parts are made of silicon; giving the sensor outstanding stability over both time and temperature. By lengthening the calibration intervals, the user saves both time and money. The CO₂ monitor's probes are interchangeable and can be removed and reattached or replaced at any time without the need for calibration and adjustment. The probes can be attached directly to the CO₂ monitor body or, when used with a cable, installed remotely into hard-to-reach places or areas with dangerously high levels of CO₂. This CO₂ monitor is recommended to be used with the universal transmitter node B14-x00 or B16-x00 for Wi-Fi data logging.

B14-101-CO₂ Product Specifications

Compatibility	Available with Universal B14-0x00 Wi-Fi transmitter
Response Time	< 30 seconds (63%)
Warranty	1 year warranty
Mounting	Designed to fit on a 0.44 mm chamber tube. Maximum incubator's tube length: 118.25mm. Separate mounting plates, attach to wall, lock-in transmitter body
Measurement Range	0-20% CO ₂
Housing Material	ABS plastic
Response Time	20 seconds (63%)
Waterproof Rated	IP65 - protects against dust and spray water
Output	0-20mA, 4-20mA (compatible with B14-x00 Universal Transmitter) 0-10V (Compatible with B16-x00 Universal Transmitter)
Accuracy	+/- 1.5%° of range +/- 2% of reading
Ambient Operating Range	-4°F to 140°F (-20°C to 60°C)
Cable Length	6.5 ft (2m) probe
Power Supply	100 to 240 VAC, 50 to 60 Hz
Dimensions	4.7" x 1.25" x 4.7" (120 mm x 31.8 mm 120 mm) body
Weight	280g max

Repeatability at 0-8 %CO ₂ 8-12 %CO ₂ 12-20 %CO ₂	+/- 0.1 %CO ₂ +/- 0.2 %CO ₂ +/- 0.4 %CO ₂
Non-linearity at 0-20 %CO ₂	+/- 0.1 %CO ₂
Calibration uncertainty at 5 %CO ₂	+/- 0.1 %CO ₂
Temperature dependence with compensation at 3 - 12 %CO ₂ , 20 - 60°C without compensation (typical)	+/- 0.1 %CO ₂ +/- 0.4 % of reading / °C
Pressure dependence with compensation at 3 - 12 %CO ₂ , 700 - 1100 hPa without compensation (typical)	+/- 0.015 % of reading / hPa +/- 0.05 % of reading / hPa
Humidity dependence with compensation at 0 - 20 %CO ₂ , 0 - 100 %RH without compensation (typical)	+/- 0.9 % of reading (at 37 °C) +/- 0.05 % of reading / %RH
O ₂ dependence with compensation at 0 - 20 %CO ₂ , 0 - 90 %O ₂ without compensation (typical)	+/- 0.6 % of reading +/- 0.06 % of reading / %O ₂