

### For Continuous Monitoring of CO<sub>2</sub> and H<sub>2</sub>O

Specifically designed for continuous monitoring of CO<sub>2</sub> and H<sub>2</sub>O over a wide range of environmental conditions, the LI-840 is an absolute, non-dispersive, infrared (NDIR) gas analyzer based on a single, interchangeable optical path, and a dual wavelength infrared detection system.



- The only gas analyzer in the world that can measure CO<sub>2</sub> and H<sub>2</sub>O simultaneously using NDIR technology at this price range
- High accuracy due to automatic temperature and pressure compensation
- High stability with low zero and span drift
- CO<sub>2</sub> corrected for band broadening due to presence of water vapor
- Sensitivity to water vapor is < 0.1 ppm CO<sub>2</sub>/ppt H<sub>2</sub>O
- Optical path that can be easily cleaned by the user (cleaning kit included with the LI-840) without requiring factory recalibration
- An optical bench provides CO<sub>2</sub> measurement range of 0-3000 ppm and an H<sub>2</sub>O measurement range of 0- 80 ppt
- < 1 ppm signal noise at 370 ppm for CO<sub>2</sub> and < 0.01 ppt at 10 ppt for H<sub>2</sub>O
- Wide operating temperature range of -20 to +45 °C
- Compact, lightweight design with low power consumption
- Maximum flow rate of 1 liter/minute

#### Specification

LI-840	CO <sub>2</sub>	H <sub>2</sub> O
Measurement Range		0-80 ppt
Accuracy	Better than 1.5% of reading	1.5% of reading
Calibration drift	< 0.15 ppm/ °C	< 0.003 ppt/ °C
Zero Drift	< 0.03%/ °C	< 0.03%/ °C
Span Drift at 370 ppm	< 0.4 ppm/ °C	< 0.009 ppt/ °C
Total Drift at 370 ppm		
RMS Noise at 370ppm with 1 sec Signal Filtering	< 1 ppm	< 0.01 ppt
Sensitivity to Water Vapor	< 0.1 ppm CO <sub>2</sub> / ppt H <sub>2</sub> O	< 0.0001 ppt H <sub>2</sub> O/ppm CO <sub>2</sub>
Supply Operating Range		12-30 VDC
Operating Temperature Range		-20 to 45°C
Source Life		18000 hours
Power requirements		Input voltage 12-30 VDC
Relative Humidity Range		0 to 95% RH, Non-Condensing
Diemnsions		8.75" x 6" x 3" (22.23 x 15.25 x 7.62 cm)
Weight		2.2 lbs (1 kg)