



The **Criticare Poet IQ2 8500Q** agent gas monitor measures real-time concentrations of anesthetic agent gases. The device measures gases using a sidestream method. The primary module measures concentrations of CO<sub>2</sub>, N<sub>2</sub>O, and five halogenated anesthetic agents. The IQ2 8500Q monitor can also measure oxygen concentrations using a galvanic cell. It comes standard with a color TFT screen with three waveform display.

## Features

- Integrated CO<sub>2</sub>/agent detector.
- Measures carbon dioxide, nitrous oxide, and five halogenated anesthetic agents.
- Uses proprietary High IQ technology to identify and quantify agent gases.
- No moving parts.
- Reduced size.
- Reliable.



## Specifications

### Dimensions

**Height:** 6.5" (16.5 cm)  
**Width:** 11" (27.9 cm)  
**Depth:** 12" (30.4 cm)  
**Weight:** 13 lbs (5.9 kg)

### Pneumatics

**Method:** Sidestream; non-dispersive infrared  
**Sample Line:** For use with 8 feet, PVC or PE  
**Occlusion Clearing:** Automatic, as needed  
**Sound Pressure of Pneumatics:** Automatic, as needed  
**Units (CO<sub>2</sub>):** mmHg; Percent; kPa; Torr  
**Units (O<sub>2</sub>, N<sub>2</sub>O, Agents):** Volume Percent  
**Calibration:** Auto-calibrating, Manual Calibration  
**Flow Rate:** 100 ml/min, 150ml/min, or 200ml/min, User Selectable

### Display

**Screen:** 5.5" active color TFT display area (*internal display*)  
**Resolution:** Internal Screen, 320 x 240 pixels External video output, 640 x 480 pixels  
**Waveforms:** 3, maximum  
**Waveform Display Gain:** 0.5x, 1x, 2x, 4x user selectable  
**Waveform Sweep Speed:** 6.25, 12.5, 25 or 50 mm/sec, selectable

### Controls

**Keys:** 7; membrane-activated  
**Rotary knob:** Push and rotate; 24 steps/turn

### Outputs

**Com Ports:** Digital DB9 (COM 1); Mini-DIN8 (COM 2)  
**Analog Output:** mini-DIN8, Selectable waveform output  
**Video Port:** Serial VGA Compatible  
**Waveforms available:** O<sub>2</sub>, CO<sub>2</sub>, Agent, and N<sub>2</sub>O

### Startup Times

**To Respiration and Waveforms:** 1 minute ( $\pm 5$  seconds)  
**To ET CO<sub>2</sub> Waveforms:** 1 minute ( $\pm 5$  seconds)  
**To Agent Concentrations:** <5 minutes, partial accuracy; 20 minutes full

### Respiratory Rate

**Numeric Output:** Yes  
**Source:** Capnogram  
**Range:** 1-100 breaths per minute  
**Accuracy:**  $\pm 2$  breaths per minute



## Specifications Continued

### N2O Compensation

**Range:** 0 to 99 vol%

**Resolution:** 1%

**Accuracy:**  $\pm(1.5\% \text{ abs} + 4\% \text{ rel})$  for breath rates up to 60 breaths/minute

**Identification Threshold:** 5% (for single and mixed agents)

**Response Time:** 2.5 seconds

**Rise Time:** (10-90%) 400 milliseconds

**Display:** Numerical Inspired N2O, Expired N2O, N2O Waveform

### Oxygen Monitoring (O2)

**Display:** Inspired O2, expired O2 Numerical values, Waveform

**Method:** Oxidation-reduction galvanic cell

**Range:** 0-100%

**Resolution:** 1%

**Accuracy:**  $\pm 3 \text{ vol}\%$  (0-90%),  $\pm 4 \text{ vol}\%$  (91-99%) for breath rates up to 60 breaths/minute

**System Response Time:** 1.5 seconds

**Rise Time:** (10-90%) 600 milliseconds @ 150 ml/min

### CO2

**Range:** 0 to 99 mmHg, 0 to 12.5%, 0 to 12.5 kPa, 0 to 99 Torr

**Display:** Inspired CO2, Expired CO2 (End-Tidal) Numerical values, capnogram, and breath by breath ET/CO2 bar graph.

**Waveform Scale:** Selectable, percent only 0 to 3.13, 6.25, 12.5 or 25%

**Resolution:** 1 mmHg, 0.1%, 0.1 kPa, 1.0Torr

**Accuracy:**  $\pm 2 \%$  or 4% of reading for breath rates up to 60 breaths/minute

**Flow Rate:** 100, 150, 200 ml/min, user selectable

### Halogenated Agents

**Resolution:** 0.1 Volume Percent

#### Range

Halothane; 0 to 10.0 vol. %

Isoflurane; 0 to 10.0 vol. %

Enflurane; 0 to 10.0 vol. %

Desflurane; 0 to 20.0 vol. %

Sevoflurane; 0 to 10.0 vol. %

**Accuracy (Single Agent):**  $\pm (0.1\% \text{ abs.} + 4\% \text{ of reading})$  for breath rates up to 60 breaths/minute

**Identification Time for Single Agent:** <15 seconds @ 200 ml/min

