

# Poet IQ Anesthetic Gas Monitor

*A powerful combination – proprietary CSI vital signs and 5-agent gas analysis technology. Versatile, reliable, and incredibly compact. Designed for anesthesia applications in hospitals and outpatient surgical centers.*

## Model: 8500

### Features

- State-of-the-art non-dispersive infrared (NDIR) technology identifies and measures five anesthetic agent gases: Halothane, Enflurane, Isoflurane, Desflurane, and Sevoflurane.
- Automatic or manual modes.
- Breath-by-breath O<sub>2</sub>, CO<sub>2</sub>, and N<sub>2</sub>O monitoring.
- Gas flow sampled at 100, 150 and 200 ml/min.
- Mixed agent identification.
- Measurement accuracy is not affected by alcohol or ketones.
- Fast warm-up time ensures full accuracy within minutes.
- Auto-calibration.
- Bright, real-time display of numerical values and waveforms provides instant notification of changing patient status.
- Lightweight, portable design provides flexible workspace options.



**CSI's Poet IQ® anesthetic gas monitor, when paired with the Poet Plus® 8100 patient monitor,** provides a unique combination of leading edge vital signs technology and anesthesia gas monitoring in a compact, modular system.

The Poet IQ anesthetic gas monitor automatically identifies and quantifies inspired and expired CO<sub>2</sub>, N<sub>2</sub>O, O<sub>2</sub>, and five anesthetic agents. The system's reliable performance, ease of use, flexible design, and affordable cost make it the ideal monitoring solution for anesthesia applications in hospitals and surgical centers.

# Poet IQ Anesthetic Gas Monitor

## Technical Specifications

### Gas Monitoring

Method:	Sidestream; Non-dispersive infrared (NDIR)
Identified Gases:	Halothane, Enflurane, Isoflurane, Desflurane, Sevoflurane, CO <sub>2</sub> , N <sub>2</sub> O, Oxygen
Concentration Units:	Vol%, Torr, kPa, mmHg
Flow Rates:	100 ml/min, 150 ml/min, 200 ml/min

### Agent Detection

Measurement Range:	Halothane:	0 to 10%	
	Enflurane:	0 to 10%	
	Isoflurane:	0 to 10%	
	Desflurane:	0 to 20%	
	Sevoflurane:	0 to 10%	
	CO <sub>2</sub> :	0 to 12.5%	
	N <sub>2</sub> O:	0 to 99%	
	Oxygen:	0 to 100%	
	Measurement Accuracy:	Agents:	± (0.1% abs. + 4% reading)
		CO <sub>2</sub> :	± 0.2% abs. or 4% of reading
N <sub>2</sub> O:		± (1.5% abs. + 4% of reading)	
Oxygen:		± 3 vol% (for 0-90%),	
		± 4 vol% (for 91-99%)	

Time to Detect Agent:	< 15 seconds @ 200ml/min	
Agent Detection Resolution:	0.1 Volume Percent	
Mixed Gas Threshold:	0.2 vol. % +10% of total concentrations	
Rise Time:	Agents:	450 msec
	CO <sub>2</sub> :	350 msec
	N <sub>2</sub> O:	400 msec
	Oxygen:	600 msec

### Respiration Rate

Range:	1 to 60 breaths/minute
Accuracy:	± 2 breaths/minute or 2% of reading

### System Features

Occlusion Clearing:	Automatic
Auto Zeroing:	Occurs 30 to 60 minutes
	Duration: 3.0 to 7.0 seconds
	Manual user calibration not required.
	Temperature stabilized optical assembly. Auto-calibration; verification recommended once per year.
Warm-up Time:	1 minute to first waveforms; < 20 minutes to full accuracy

### Display

Connects to the Poet Plus 8100 patient monitor.

### System Outputs

System Configuration:	Modular design with bi-directional communication, via cable, to the Poet Plus 8100 patient monitor.
Waveform Output:	Halothane, Enflurane, Isoflurane, Desflurane, Sevoflurane, CO <sub>2</sub> , N <sub>2</sub> O, O <sub>2</sub>
Output Data:	Inspired and end-tidal gas concentrations; continuous real-time gas concentrations; respiratory rate (elapsed time since last breath); agent identification (primary agent and mixed agents); system information (diagnostic status messages)

### Alarms

Alarm Characteristics:	EN 475, Adjustable; with audible and visual indications from the patient monitor.
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### Alarms (cont.)

Alarm Levels:	High, Medium, Low, Informational
Alarm Modes:	Adult/Pediatric/Neonate High and low limit settings for each mode.

### Trends

Memory:	24 hours of stored data in patient monitor
Display:	Tabular, Graphical

### Power Requirements

Voltage:	10 to 28 VDC Receives power from patient monitor.
Power Consumption:	9 watts warm-up, 6 watts operational

### Mechanical

Weight:	2.95 kg. (6.5 lbs.)
Size:	9.6cm (H) x 26.4cm (W) x 20.8cm (D); 3.8" (H) x 10.4" (W) x 8.2" (D)

### Environmental

Operating Temperature:	15° to 35° C; 59° to 95° F
Storage Temperature:	-5° to 50° C; 23° to 122° F
Operating/Storage Humidity:	15% to 95%, noncondensing
Altitude:	-300m to 3000m (-1,000 to 10,000 ft.)
Type of Protection:	Class I Equipment
Degree of Protection:	Type CF, Defibrillator-proof
Protection against ingress:	Ordinary



Quality systems registered to ISO 9001 and CE marking per Annex II, Clause 3 of Council Directive No. 93/42/EEC concerning medical devices.

Specifications subject to change without notice.