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_2, CO_2, and N_2O 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_2, N_2O, O_2, 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.

CSI CRITICARE SYSTEMS, INC.

Poet IQ Anesthetic Gas Monitor

Technical Specifications

Gas Monitoring

Method:	Sidestream; Non-dispersive infrared (NDIR)
Identified Gases:	Halothane, Enflurane, Isoflurane, Desflurane, Sevoflurane, CO_2, N_2O, 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_2:	0 to 12.5%
	N_2O:	0 to 99%
	Oxygen:	0 to 100%
Measurement Accuracy:	Agents:	± (0.1% abs. + 4% reading)
	CO_2:	± 0.2% abs. or 4% of reading
	N_2O:	± (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_2:	350 msec
	N_2O:	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_2, N_2O, O_2
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.

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

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