LoFlo Sidestream CO_2 Sensor

co$_2$nnect & go

Quick. Easy. Reliable.

Cutting edge CO_2 technology for patients in the ICU, OR, and EMS applications.

LoFlo CO_2 Sensor – Flexible. Compact. Durable.

As a recognized global leader in capnography, Respironics has been providing innovative and cost effective solutions for over 20 years. The LoFlo sensor is the ideal capnography solution for all your CO_2 monitoring requirements. Respironics provides comprehensive technical, clinical, and marketing support to help meet the growing needs of your business.

PRODUCT FEATURES:

- Ideal for non-intubated patients
- Proprietary sample cell protects internal NDIR components from contamination
- Common connector allows easy exchange between mainstream and sidestream monitoring
- Robust and long life pump reduces periodic maintenance
- No calibration required
- Unique accessories & supplies for all patients
- Private label option

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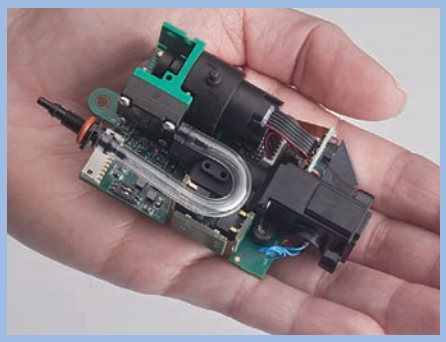
Envisioning tomorrow. Improving today.

Internal or External Application...



Respironics offers the LoFlo engine for internal integration into your monitoring system.

It's your choice!

The LoFlo sensor's small, lightweight package is designed to be shared. It is easily moved from room to room to connect to your device or during transport.

Mounting Options!

Mount the sensor to a bed rail, IV pole, or leave as part of the system cabling.

Complete OEM solutions

The LoFlo sensor is just one of the many solutions we offer to our OEM customers. Respironics customizes innovative products along with providing comprehensive technical, clinical, and marketing support to help meet the growing needs of your business.

LoFlo CO_2 Sensor – Specifications

TRANSDUCER TYPE	SIDESTREAM CO_2 SENSOR
Sample Flow Rate	50 mL/minute ±10 mL/minute
Principle of Operation	Non-dispersive infrared (NDIR) single beam optics, dual wavelength, no moving parts
Initialization Time	Capnogram, displayed in less than 20 seconds, at an ambient temperature of 25°C, full specifications within 2 minutes
CO_2 Measurement Range	0 to 150 mmHg, 0 to 19.7%, 0 to 20 kPa
CO_2 Resolution	0.1 mmHg (0 to 69 mmHg) 0.25 mmHg (70 to 150 mmHg)
CO_2 Accuracy	0 – 40 mmHg ±2 mmHg 41 – 70 mmHg ±5% of reading 71 – 100 mmHg ±8% of reading 101 – 150 mmHg ±10% of reading Above 80 BPM ±12% of reading
CO_2 Stability	Short term drift: Drift over four hours shall not exceed 0.8 mmHg maximum Long term drift: Accuracy specification will be maintained over a 120-hour period
CO_2 Noise	RMS noise of the sensor is less than or equal to 0.25 mmHg at 5% CO_2
Sampling Frequency	100 Hz
Respiration Rate Range	0 to 150 Breaths Per Minute (BPM)
Respiration Rate Accuracy	±1 breath
Compensations (Supplied by Host)	Barometric pressure: 400 mmHg to 800 mmHg Operator selectable O_2, N_2O, HE and agent compensation
Calibration	No routine user calibration required
Sample Cell/Filter	Proprietary single patient use sample cell and inline filter are integrated with the sample line which effectively eliminates contamination of the internal system
Nasal Sampling Kits for Non-intubated Patients	Nasal CO_2 or CO_2 with O_2 delivery (Adult, Pediatric, Infant-Neonatal) Nasal/Oral CO_2 or CO_2 with O_2 delivery (Adult, Pediatric)
Airway Adapter Kits for Intubated Patients	Adult/Pediatric with and without dehumidification tubing Pediatric/Infant, low deadspace, with and without dehumidification tubing Taper meets ISO 5356-1
Sample Kit Hours of Use	Nasal and Oral/Nasal Cannulas without nafion – up to 12 hours Nasal and Oral/Nasal Cannulas with nafion – up to 120 hours Airway Adapter Kits without nafion – up to 12 hours Airway Adapter Kits with nafion – up to 120 hours
Sample Cell Detection	Insertion automatically turns sampling pump on. Removal automatically turns sampling pump off
Flow Control	Via ΔP measurement across a capillary tube
Scavenging Port	Yes
Voltage Requirements	5.0 VDC ±5%
Power Rating	Rated input: Less than 1.3 Watts typical Steady state less than 2.0 Watts maximum on power up (warm up)
Interconnection	Standard – Lemo Redel 8-pin plastic LoFlo and CAPNOSTAT are interchangeable with the host monitor Common connector allows easy exchange between mainstream and sidestream monitoring
Temperature and Humidity	Operating: 0° to 40°C, 10 to 90% RH, non-condensing Storage: -40° to 70°C, <90% RH, non-condensing
Water Resistance	IPX4 – Splash-proof (When sample cell is inserted in sample cell receptacle)
Shock Impact	IEC TR 60721-4-7 Class 7M3 (designed to withstand environments subject to significant vibrations or high shock levels) EN60068-2-27 shock EN60068-2-64 random vibration
Data Interface	RS232, bi-directional, 19200 baud, standard N-8-1
Data Output	CO_2 gas concentration (mmHg), end-tidal CO_2, inspired CO_2, respiratory rate Gas and barometric pressure compensated when supplied by host
Regulatory	Designed to meet IEC 60601-1-2, EN55011 – CISPIR 11 Class B (Radiated and Conductive Emissions), IEC 61000-4-2 Electrostatic Discharge Immunity, IEC 61000-4-3 Radiated Immunity Designed to comply with 93/42/EEC (MDD CE Marking), FDA Standards, ISO21647, and Medical Electrical Equipment performance requirements for the basic safety and essential performance of respiratory gas monitors

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For more information, visit http://oem.respironics.com
or call the OEM team at 1.800.243.3444, Option 3 or 203.697.6488