

LoFlo Sidestream CO_2 Module

LoFlo Sidestream CO_2 Module – Specifications

TRANSDUCER TYPE	SIDESTREAM CO_2 MODULE	
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 0.25 mmHg	0 to 69 mmHg 70 to 150 mmHg
CO_2 Accuracy	0 – 40 mmHg 41 – 70 mmHg 71 – 100 mmHg 101 – 150 mmHg	±2 mmHg ±5% of reading ±8% of reading ±10% of reading
CO_2 Stability	Above 80 BPM ±12% of reading 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 with 5% CO_2	
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	1 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) Adult/Pediatric with and without dehumidification tubing Pediatric/Infant, low deadspace, with and without dehumidification tubing Taper meets ISO 5356-1	
Airway Adapter Kits for Intubated Patients	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 Kit Hours of Use		
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		

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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) IEC TR 60721-4-7 Class 7M3
Mechanical Environment	IEC 60068-2-64 Random Vibration (Refer IEC 62366-1 (EN 62366-1)§ 4.1.1) IEC 60068-2-27 Shock IEC 60068-2-31 With a operational drop of 3ft IEC 60601-1 (EN 60601-1) §15.3.4.1 IEC 60601-1 (EN 60601-1) 15.3.2 IEC 60601-1 (EN 60601-1) 15.3.3 Cable can withstand a pull of 30 lbs Cable can withstand 10,000 bend cycles
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