

ETCO2 module Side Stream Model NM-C300 Specifications

Transducer Type	Sidestream CO2 Sensor
Sample Rate	50 ML/min. \pm 10 ML/min.
Principle of Operation	Non-dispersive infrared (NDIR) single beam optics, dual wavelength, no moving parts
Initialization Time	Capnogram displayed in less than 10 seconds, at an ambient temperature of 25°C, full specifications within 1 minute
CO2 Measurement Range	0 to 150 mm Hg, 0 to 19.7%, 0 to 20 kPa (at 760 mm Hg). Barometric Pressure supplied by module itself
CO2 Resolution	0.1 mm Hg 0 to 49 mm Hg 0.2 mm Hg 50 to 150 mm Hg
CO2 Accuracy	0 – 40 mm Hg \pm 2 mm Hg 41 – 70 mm Hg \pm 5% of reading 71 – 100 mm Hg \pm 8% of reading 101 – 150 mm Hg \pm 10% of reading Above 80 BPM \pm 12% of reading
CO2 Stability	Drift over any hours shall not exceed 0.5 mm Hg max.
CO2 Noise	RMS noise of the sensor shall be less than or equal to 0.25 mm Hg at 5% CO2
Respiratory Rate Range	2 to 180 Breaths Per Minute (BPM)
Respiratory Rate Accuracy	\pm 1 breath
Compensations	Barometric Pressure 400 mm Hg to 800 mm Hg can be compensated by module automatically
Calibration	No routine user calibration required, but module can be calibrated by user
Sample line	Single patient use sample line and inline drier line which eliminates water vapor of gas

Nasal Sampling Kits for Non-intubated Patients	Adult, pediatric and infant nasal CO2 sampling
On-Airway Adapter KITS for Intubated Patients	Adult, pediatric and infant sampling line with T-fitting
Sample Kit Hours of Use	Nasal Cannula and connecting sampling line – up to 12 hours, for single patient T-fitting (on-Airway Adapter) – can be disinfected repeatedly Drier sampling line – up to 120 hours
Flow Control	Via P measurement across a capillary tube
Scavenging Port	Yes
Voltage Requirements	5.0 VDC \pm 5%
Power Rating	Rated input: Less than 0.5 Watts typical. Steady State Less than 1.1 Watts maximum on Offset Calibration or sampling line occluded.
Interconnection	Standard – Lemo Redel 8-pin plastic Material PSU Sensor Plug: PAB.M0.8GL.AC39GZ Band Relief: GMA.1B.030.DJ Host Receptacle: PKB.M0.8GL.LJ Note: Pin out: 1 VA 5.0V 2 Shield Shield 3 DGND Digital return 4 VA 5.0V 5 TxD Serial data from LoFlo 6 RxD Serial data from Host 7 AGND Analog return 8 NC
Temperature and Humidity	Operating:0° to 50°C, 10 to 90% RH, non-condensing

	Storage: -40° to 60°C, <90% RH, non-condensing
Water Resistance	IPX4 – Splash-proof (When sample line is inserted in gas-in connector)
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	CO2 gas concentration (mm Hg), End-tidal CO2, Inspired CO2, Respiratory Rate Gas and barometric pressure.
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, Minimum Performance and Safety Requirements for Capnometers and ISO21647. Medical Electrical Equipment performance requirements for the basic safety and essential performance of respiratory gas monitors.