CAPNOSTAT Mainstream CO_2 Sensor - Specifications

TRANSDUCER TYPE	MAINSTREAM CO_2 SENSOR
Sensing Technology	Non-dispersive infrared (NDIR) single beam optics, dual wavelength, no moving parts
Initialization Time	Capnogram, displayed in less than 15 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
Rise Time	Less than 60 ms
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
Measurement Frequency	100 Hz
Respiration Rate Range	1 to 150 Breaths Per Minute (BPM)
Respiration Rate Accuracy	±1 Breaths Per Minute (BPM)
Compensations (Supplied by Host)	Barometric pressure: 400 mmHg to 850 mmHg Operator selectable O_2, N_2O, He and agent compensation
Calibration	No routine user calibration required. An airway adapter zero is required when changing to a different style of airway adapter.
Airway Adapters	Deadspace < 6 cc (Adult/Pediatric), < 1 cc (Infant/Neonatal) Adapter taper meets ISO 5356-1
Combined CO_2/ Flow Accessories	Deadspace < 9 cc (Adult), < 4 cc (Pediatric), < 1 cc (Infant/Neonatal)
Voltage Requirements	5.0 VDC ±5%
Power Rating	Rated input: 1.1 Watts typical, steady state Up to 1.5 Watts maximum on power up (warm up)
Interconnection	Standard - Lemo Redel Style 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 45°C, 10 to 90% RH, non-condensing Storage: -40 to 70°C, <90% RH, non-condensing
Water Resistance	IPX4 – Splash-proof (sensor head only)
Mechanical Environment	IEC TR 60721-4-7 Class 7M3 IEC 60068-2-64 Random Vibration IEC 60068-2-27 Shock IEC 60068-2-31 Free Fall IEC 60601-1 (EN 60601-1) § 15.3 Able to withstand 6-foot drops while operating Cable can withstand a pull of 30 lbs. The cable can withstand 10,000 bend cycles
Data Interface	RS232 compatible, bi-directional, 19200 baud, standard N-8-1
Data Output	CO_2 gas concentration (mmHg), end-tidal CO_2, inspired CO_2, respiratory rate