ACCUCAP 901®

Digital Capnography Monitoring

MAINSTREAM
MICROSTREAM

PARSIAN MEDICAL Co.

Mainstream / Microstream Capnography Monitoring

- Continues Monitoring of EtCO2, Respiration Rate and FiCO2
- Real Time CO2 Waveform
- High Accuracy and Stability
- The Most Efficient Capnography System for Neonates
- In Comply with New International Standard, ISO 80601-2-55: 2011

Technical Specification

- Internal Rechargeable Battery with 5 Hours Working Capacity
- ETHERNET Connection Complying HL7 Protocols
- USB Connector
- Unlimited Trend for Several Patients
- 7 inch TFT LCD with CAPACITIVE TOUCH panel
- Capability to Install other Vital Sign Modules
- Auto-Rotate Sensor for Detecting Horizontal or Vertical Positions

ACCUCAP 901® Technical Specification

Electrical Charectherics	
Input Voltage	100-140 VAC, 50-60 Hz
Power Consumption	17VA
Battery Type	Li-Ion
Battery Capacity	2400 mAH
Battery Charge Time	5 Hours
Fuses	250V, 500mA, 5x20mm

Alarms
Audible and Visual Alarms
According to IEC 60601-1-8 :2006
High and Low EtCo2
High and Low Respiration Rate
High FiCo2
Low Battery

Related Accessories
Microstream or Mainstream Sensor
Power Cable
User Manual
Trolley
Wall stand
Extra Fuse

General Specification	
Output Interfaces	USB and Ethernet
Trending Time	Every Second
Display	7" TFT LCD Touch Panel
Network Protocol	ER7
Dimensions (WxHxD)	30x25x10 cm3
Weight	1.5 Kg

LOFLO® CO2 SENSOR – SPECIFICATIONS

Transducer Type	Sidestream CO2Sensor
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
CO2 Measurement Range	0 to 150 mm Hg, 0 to 19.7%, 0 to 20 kPa (at 760 mm Hg) Barometric Pressure supplied by host
Rise Time	Less than 60 ms - Adult Reusable or Single-Patient-Use Airway Adapter Less than 60 ms - Infant Reusable or Single-Patient-Use Airway Adapter
CO2 Resolution	0.1 mm Hg 0 to 69 mm Hg 0.25 mm Hg 70 to 150 mm Hg
CO2 Accuracy	0 – 40 mm Hg ±2 mm Hg 41 – 70 mm Hg ±5% of reading 71–100 mm Hg ±8% of reading 101 – 150 mm Hg ±10% of reading
CO2 Stability	Short Term Drift: Drift over four hours shall not exceed 0.8 mm Hg max. Long Term Drift: Accuracy specification will be maintained over a 120-hour period
CO2 Noise	RMS noise of the sensor shall be less than or equal to 0.25 mm Hg at 5% CO2
Respiration Rate Range	2 to 150 Breaths Per Minute (BPM)
Respiration Rate Accuracy	±1 Breath
Compensations (Host Supplied)	Barometric Pressure 400 mm Hg to 850 mm Hg Operator selectable O2, N2O, 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 eliminates contamination of the internal system
Nasal Sampling Kits for Non-intubated Patients	Adult, pediatric and infant nasal CO2 sampling, nasal CO2 sampling and O2 delivery Adult and pediatric nasal/oral CO2 sampling, nasal/oral CO2 sampling and O2 delivery
On-Airway Adapter KITS for Intubated Patients	Adult/Pediatric with and without dehumidification tubing Pediatric/Infant, low dead space, with and without dehumidification tubing Taper meets ISO 5356-1
Sample Kit Hours of Use	Nasal Cannula (all styles) – up to 12 hours On-Airway Adapter Kits without dehumidification tubing–up to 12 hours On-Airway Adapter Kits with dehumidification tubing–up to 120 hours
Sample Cell Detection	Insertion automatically turns sampling pump on. Removal automatically turns sampling pump off.
Flow Control	Via DP 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)
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 (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
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, ASTM F1456-01 Minimum Performance and Safety Requirements for Capnometers and IEC80601-2-55:2011. Medical Electrical Equipment performance requirements for the basic safety and essential performance of respiratory gas monitors.

CAPNOSTAT© 5 MAINSTREAM CO2 SENSOR - SPECIFICATION

Transducer Type	Mainstream CO2Sensor
Principle of Operation	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 of25°C, full specifications within 2 minutes
CO2 Measurement Range	0 to 150 mm Hg, 0 to 19.7%, 0 to 20 kPa (at 760 mm Hg) Barometric Pressure supplied by host
Rise Time	Less than 60 ms - Adult Reusable or Single-Patient-Use Airway Adapter Less than 60 ms - Infant Reusable or Single-Patient-Use Airway Adapter
CO2 Resolution	0.1 mm Hg 0 to 69 mm Hg 0.25 mm Hg 70 to 150 mm Hg
CO2 Accuracy	0 – 40 mm Hg ±2 mm Hg 41 – 70 mm Hg ±5% of reading 71–100 mm Hg ±8% of reading 101 – 150 mm Hg ±10% of reading
CO2 Stability	Short Term Drift: Drift over four hours shall not exceed 0.8 mm Hg max. Long Term Drift: Accuracy specification will be maintained over a 120-hour period
CO2 Noise	RMS noise of the sensor shall be less than or equal to 0.25 mm Hg at 7.5% CO2
Respiration Rate Range	0 to 150 Breaths Per Minute (BPM)
Respiration Rate Accuracy	±1 Breath
Compensations (Supplied)	Barometric Pressure 400 mm Hg to 850 mm Hg Operator selectable O2, N2O, 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	Single-patient-use or reusable, < 5 cc dead space (adult), <1 cc dead space infant Adapter taper meets ISO 5356-1
Voltage Requirements	+5.0 VDC, 1.125 W Typical, 1.5 W Maximum.
Power Rating	Rated input: 1.1 Watts typical. Steady State Up to 1.5 Watts maximum on power up (warm up)
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)
Shock Impact	EN60068-2-6 Sinusoidal Vibration EN60068-2-27 Shock EN60068-2-64 Random Vibration Able to withstand repeated 6-foot drops onto tiled floor while operating
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, ASTM F1456-01 Minimum Performance and Safety Requirements for Capnometers and IEC 80601-2-55:2011. Medical Electrical Equipment performance requirements for the basic safety and essential performance of respiratory gas monitors.

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