

OVERVIEW

Easy to integrate, our capnography technology is available in inexpensive and reliable mainstream or sidestream versions for manufacturers of patient monitors, anesthesia machines and ventilators.

CapnoSET is an excellent plug and play alternative module for your CO2 gas analysis needs.







Features

- Real-time and continuous measurement of EtCO2, InsCO2, Respiratory Rate
- Supports monitoring patients with high respiration rates, up to 150 rpm
- Sensitive CO₂ detection, can detect minimum 0.1 vol% CO₂ change
- High accuracy of Mainstream CO, measurement
- Sensor software and Hardware status
- Short rise-up time (< 90ms)
- · Capnogram data

- Wide range of gas measurement(0-20%)
- Compact and lightweight design (less than 35grs)
- Plug and play, easy to integrate for OEM manufacturers.
- Smart temperature control algorithm to prevent water condensation
- Simple interfacing with RS232 serial interface, output on DB9 connector
- Automatic barometric pressure, temperature and anaesthetic gases compensation

Specifications

General

Principal of Operation: Non-dispersive Infrared (NDIR) single beam optics, dual wavelenght, no moving parts.

Mechanical Robustness: Compliant with the requirements of ISO 80601-2-55:2011 (Shock and Vibration).

Weight: ≤ 35g

Dimension: 43 x 32 x 26 mm Power Supply: 5V DC ±5%

Warm-up Power Consumption : $\leq 2.5W$ Typical Power Consumption: $\leq 1.5W$

Interface: RS-232 serial interface at 19200bps, Connection via DB9 connector.

Environment

Operating Temperature : $10^{\circ}\text{C} \sim 40 \,^{\circ}\text{C} \, (50^{\circ}\text{F} \sim 104^{\circ}\text{F})$ Storage Temperature : $-20^{\circ}\text{C} \sim 70^{\circ}\text{C} \, (4^{\circ}\text{F} \sim 158^{\circ}\text{F})$

Humity: 15% ~ 95%, non condensing

Pressure : 400 ~ 1200 hPa

Performances

Measurements: EtCO2, InsCO2, RR and real-time CO2

Automatic Compensation: Atmospheric pressure, temperature and anesthetic gases.

Warm-up Time: about 30s

Rise Time: ≤ 90ms

Sample Frequency: 25Hz

Total System Response Time: ≤ 1s

Measurements:

- CO, Range 0 ~ 20 vol%
- CO₂ Resolution 0.1 vol%
- CO₂ Accuracy:

0 ~ 12%: ±(0.2vol%+2% of reading) 12 ~ 20%: ±(0.2vol%+6% of reading)

AwRR Range: 0 ~ 150rpm AwRR Resolution: 1rpm

AwRR Accuracy: 0 ~ 70rpm, ±2rpm, otherwise undetermined.

Breath Detection: Adaptive threshhold, minimum 1 vol% change in CO₂

concentration.

Airway Adapters

For Adults & Pediatric Less than 5ml deadspace ET Tubes>4.0mm Disposable.



For Neonate
Less than 1ml deadspace.
ET Tubes≤ 4.0mm
Disposable



Part # SGMC-DN

Part # SGMC-DA