

CAPNOMED.CO.

You do life, We do more.

CE 0123



- **Designer & Manufacturer**
- **ETCO2 Tech & Product**
- **Human & Veterinary**
- **Sensor & Monitor**

MEMO™ ETCO2 SENSOR



Human Version

Measurement

EtCO₂

RR

CE 0123

› Rapid Measurement

It is ready to measure within 5 seconds; with End-tidal CO₂ value shown after the first breath and Respiratory rate value shown after the second breath, then updating every breath thereafter.

› Reliability

It is built with NDIR infrared mainstream technology inside and performs a functional self check each time it is powered on.

› Easy to Use

Simply switch on, then connect to an ET-tube or breathing circuit and start measuring.

› Rugged Design

It has a rugged, shock resistant and water resistant design to provide the user with a reliable monitor for emergency situation.

› Airway Adapter

It quickly and directly connects to endotracheal tubes, face masks or laryngeal masks via the airway adapter which are designed to make connection so simple and straight forward. We have two type airway adapter--disposable airway adapter (adult or neonatal) and reusable airway adapter(adult or neonatal).

Performance

RANGES

CO ₂	0-99 mmHg 0-9.9 kPa 0-10%
RR	3-150 bpm

ACCURACY (STANDARD CONDITIONS)

CO ₂	0-40 mmHg ±2 mmHg; 41-99 mmHg ±6% of reading 0-5.3 kPa ±0.3 kPa; 5.4-9.9 kPa ±6% of reading
RR	±1 bpm

BATTERIES

Type	Two AAA Alkaline or Lithium
Battery life	6 hours (Alkaline) 10 hours (Lithium)

ENVIRONMENTAL

Operating temperature	0 to 40 °C (32 to 104 °F)
Operating atmospheric pressure	70-120 kPa
Operating humidity	10-95% RH, non-condensing
Storage temperature	-20 to 70 °C (-4 to 158 °F)
Storage atmospheric pressure	50-120 kPa

PHYSICAL CHARACTERISTICS

Dimensions	1.7 x 1.7 x 2 in (4.4 x 4.5 x 5.2 cm)
Weight	2.3 oz (66 g) (with Alkaline batteries)

OTHERS

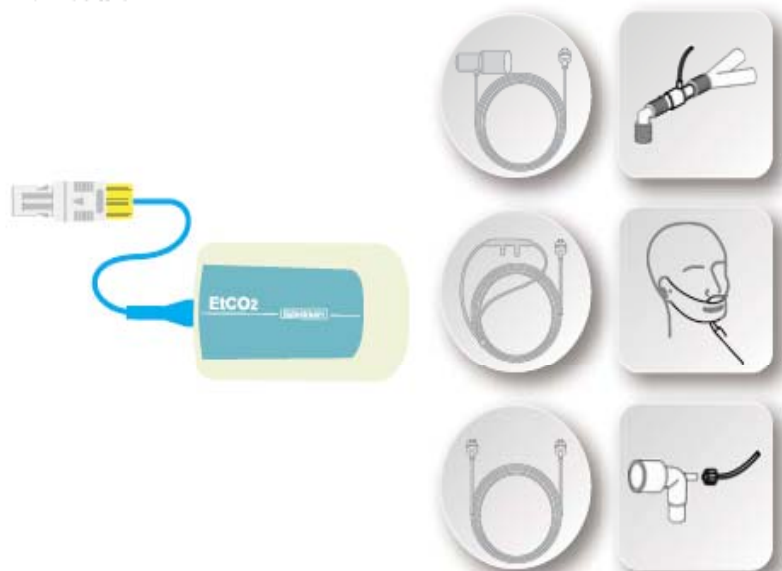
Display parameter	EtCO ₂ , RR, Capnogram
CO ₂ unit	mmHg, kPa, % (selectable)
Data output	Bluetooth (optional)
Resistance	IP33



EtCO2 Mainstream & Sidestream Sensor which was R&D independently by CAPNOMED MEDICAL CO.,LTD are the ideal capnography solution for all your CO2 monitor requirement---patient monitor,ventilator,anesthesia machine. It is applicable for OR,ICU,EMC and veterinary monitoring.

COMPATIBLE WITH	PIN	CONECTOR
RESPIRONICS		
PHASE IN		
HAMILTON		
PHILIPS		
ZOLL		
MINDRAY		

• Connecting **Sidestream** Sensor with tube



• Connecting **Mainstream** Sensor with tube



SPECIFICATIONS

Project	Specifications
Sample Flow Rate	Range: 50 - 150 ml/min; Accuracy: $\pm 20\%$; default: 75ml/min.
Principle of Operation	Non-dispersive infrared, dual wavelength, no moving parts.
Initialization Time	Capnogram displayed in less than 4 seconds, At an ambient temperature of 25°C, full specifications within 2 minutes.
CO ₂ Measurement Range	0 - 114 mmHg; 0 - 15 %; 0 - 15.2 kPa.
CO ₂ Response Time	Includes transport time and rise time. Less than 2 seconds, at 150ml/min sampling flow. Less than 3 seconds, at 100ml/min sampling flow. Less than 4 seconds, at 50ml/min sampling flow.
CO ₂ Resolution	0.2mmHg @ 0-59 mmHg; 0.5 mmHg @ 60-114mmHg.
CO ₂ Accuracy	0 - 40mmHg ± 2 mmHg. 41 - 70mmHg $\pm 5\%$ of reading. 71 - 100 mmHg $\pm 8\%$ of reading. 101 - 114 mmHg $\pm 10\%$ of reading. Above 80 breaths per minute $\pm 12\%$ of reading. * Note: Gas temperature at 25°C.
CO ₂ Stability	Short Term Drift: Drift over three hours shall not exceed 1 mmHg maximum. Long Term Drift: Accuracy specification will be maintained over a six hour period.
CO ₂ Noise	RMS noise of the sensor shall be less than or equal to 0.5mmHg at 5% CO ₂ .
Sampling Rate	100Hz.
Respiration Rate Range	2 to 150 breaths per minute.
Respiration Rate Accuracy	± 1 breath.
Calibration	No routine user calibration required.
ETCO ₂ Calculation	Method: Peak of the expired CO ₂ waveform.
Inspired CO ₂ Measurement	Method: lowest reading of the CO ₂ waveform in the previous 20 seconds.
Temperature	Operating: 0 to 40°C; Storage: -40 to 70°C; Transport: -40 to 70°C.
Humidity	Operating: 10 to 90% RH, non-condensing; Storage: 10 to 90% RH, non-condensing. Transport: 10 to 90% RH, non-condensing.
Atmospheric Pressure	Operating: 400-800 mmHg; Storage: 400-800 mmHg; Transport: 400-800 mmHg.
Water Resistance	IPX4 - Splash-proof - Sensor only.
Voltage Requirements	5VDC $\pm 5\%$; Ripple not to exceed 100.0 mV.
Power Rating	<1.2W Typical; <2.0 W Warm-up.
Sensor Weight	<250g.
Sensor Size	Deep*Wide*High: 102*62*38mm.
Cable Length	75cm.

ACCESSORIES

01 Airway Adapter disposable/ reusable adult/infant



02 Nasal Cannula Respironics Phasein Oridion



Supply all kinds of sampling line which can compatible different brands EtCO₂ Sensor.