

EMMA™ Technical Specifications:

General

Measurement Principle: Non-dispersive IR absorption
 Warm Up: In operation and full accuracy within 5 seconds
 Calibration: No routine calibration required
 Certifications: CE Marked according to the 93/42/EEC MDD
 Dimensions: 52 x 39 x 39 mm
 Weight: 60 grams with batteries
 Shock Resistant: Withstands repeated 1 m drops

Environment

Operating: -5 to 40 °C (23 to 104 °F)
 Storage: -30 to 70 °C (-22 to 158 °F)
 Humidity: 10 95 % non-condensing
 Atmospheric Pressure: 70 - 120 kPa
 Automatic barometric pressure compensation

Controls

Power: ON key
 Self test: Automatic check at power on
 Alarm silence: 2 min alarm silence key
 EtCO₂ Alarms: Up/down key to set alarms

Respiratory Rate

Range: 0 - 150 breaths/min
 Accuracy: ± 1 BPM
 or ± 6% REL during std conditions
 Breath detection: Adaptive threshold
 minimum 0.1 mmHg CO₂ change

EMMA™ Airway Adapter

Adult: >3kg+ 7cc dead space
 Paediatric: <3kg 1cc dead space

Displays

EtCO₂: LED numeric display
 Respiratory Rate: LED numeric display
 Momentary CO₂: 14 segment LED bar graph
 Battery status: LED indicator
 Alarm status: LED indicator

Power Requirements

Batteries: Two (2) AAA Cell alkaline batteries
 Battery life time: 8 hours normal use

CO₂

Range: 0 - 9.9 kPa (0-99 mmHg)
 Accuracy: ± 0.3 kPa (± 2 mmHg)
 ± 6% REL during std conditions
 Rise time: ≤ 60 ms

Standards

General: EN 60601-1:1990 type BF
 Respiratory Gas: EN ISO 21647:2004
 Moisture protection: IEC 60529:1989 class IPX1
 Transport: prEN1789:2004

EMMA™ Alarm Functions & Ordering Codes

| Alarm | Alarm Priority | EMMA™ Monitor | EMMA Airway Adapter |
|------------------------|----------------|----------------------|---|
| Check Adapter | Advisory | ✓ | EMMA™ Disposable Airway Adapters are individually packaged and supplied in boxes containing 150 adapters or 25 adapters for Adults or boxes of 60 adapters or 10 adapters for Paediatric. |
| No Adapter | Advisory | ✓ | |
| No Breath | Caution | ✓ | |
| EtCO ₂ Low | Caution | ✓ | |
| EtCO ₂ High | Caution | ✓ | |
| EMMA™ Ordering codes: | | 605100 (kPa) | Adult - 100621 (adapters) |
| | | 605102 (mmHg) | Paediatric - 100661 (adapters) |



EMMA™
 Emergency Capnometer



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EMMA™ Emergency Capnometer

EMMA Emergency Capnometer provides rapid patient application, proof of intubation and short term CO₂ monitoring of adults, children and infants in emergency transport, emergency care and intensive care. It measures end-tidal CO₂ and respiratory rate.

EMMA provides unsurpassed mobility compared to traditional sidestream monitoring due to its compact size, lack of cables, tubing, connectors or filters.

EMMA is self contained and can be directly connected to an endotracheal tube, laryngeal mask or facial mask via the Disposable Airway adapter which prevents cross infection ensuring utmost patient to patient hygiene.

EMMA has no warm up time and has full accuracy as soon as switched on and EMMA displays ETCO₂ values after only one breath and is updated every breath. Respiratory rate will be displayed after two breaths and updated every breath.

Both ETCO₂ and respiratory rate are visualized on LED numeric displays. A large, easy to read, 14 segment bar graph gives immediate visual feedback for ETCO₂ concentrations, breathing activity or alarm situations. EMMA is available with a comprehensive alarm system with both visual and audible alarms for apnea, adapter clogging and high and low end-tidal values.

EMMA has a rugged, shock-proof and water resistant design (IEC60529:1989 Class IPX1) which provides the user with absolute portability coupled with reliable monitoring for any emergency situation. EMMA has also been designed in accordance with prEN 1789:2004 [EN864] standard for Road Ambulances.

EMMA Emergency Capnometer displays ETCO₂ in partial pressure units (kPa or mmHg) and fully compensates the displayed value for the actual barometric pressure and is proven for use on Air ambulance and helicopters.

Unlike Sidestream devices EMMA does not require regular calibration therefore lowers the cost of ownership.

EMMA is a fully quantitative Capnometer and the accuracy of all measurement values are according to ISO 21647 standard for respiratory gas monitors.



Disposable Airway Adapter



EMMA™ Monitor

Hospitals & Intensive Care
Doctors & Nursing Staff
Accident & Emergency
Fire & Rescue Services
Armed Forces Medical
(NATO approved)
Ambulance Teams
First Responders
Paramedics

Key features of EMMA™

- Mainstream Capnometer
- Rapid Application
- Truly Portable (60 grams)
- Compact (52 x 39 x 39 mm)
- Automatic barometric compensation
- Rapid Quantitative Measurement
- End tidal CO₂ and Respiratory Rate
- Hygienic Disposable Airway Adapter
- Infant through Adult use
- Automatic self test at power on
- Battery powered (2 AAA)
- Alarms & Indicator
- No routine calibration required
- Low cost of ownership

to order just call us today on: 0239 246 9737