# Avante Echo CO<sub>2</sub>

Capnography Monitor

# Effective Capnography Monitoring (EtCO<sub>2</sub>)

The Avante Echo Capnography Monitor provides cost-effective  $EtCO_2$  monitoring with accuracy and durability. The Echo  $CO_2$  ensures effective monitoring for intubated and non-intubated patients for continuous long-term monitoring. It is tailored for mechanically ventilated and non-intubated patients. Nellcor  $SpO_2$  available as an additional option.

#### **FEATURES**

- 5.7 inch high resolution display for easy reading
- Lightweight, portable design and user-friendly interface for easy operation
- Flexible configurations to meet different clinical needs
- ➤ Optional Nellcor SpO₂
- > PR measurement
- Respironics Loflo sidestream or CAPNOSTAT 5 EtCO<sub>2</sub> mainstream measurement
- > Powerful storage capacity
- Real-time parameters measurement display with trend table for easy reviewing

- Built-in rechargeable Lithium-ion battery for 10 hours continuous working
- Bi-directional communications with central station by wired or wireless network



#### **SPECIFICATIONS**



Weight: 6.6 lbs (3 kg)



Dimensions: 7.9 x 9.49 x 7.44 in (200.8 x 241 x 189 mm)

Display Size: 5.7 in

Record Width: 1.89 in (48 mm)



Power Supply: 100-240 VAC, 50/60Hz

> Battery Type: Lithium-ion

> > Voltage: 14.8 V DC

Capacitance: 4,400 mAh



Color TFT Resolution: 640X480

Working Period: Color TFT 480min

Rechargeable Period: < 360min

Paper Speed: 25mm/s

Thermal Recorder: Optional

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### Respironics CO<sub>2</sub>

#### Sidestream

Sample Rate:

50 m/L per minute

CO<sub>2</sub> Measurement Range:

0 - 150 mm Hg, 0 to 20 kPa (at 760 mm Hg).

Barometric Pressure supplied by Host

CO<sub>2</sub> Resolution:

0.1 mm Hg 0 to 69 mm Hg 0.25 mm Hg 70 to 150 mm Hg

CO<sub>2</sub> Accuracy:

0 - 40 mm Hg ±2 mm Hg

41 - 70 mm Hg ±5% of reading

71 - 100 mm Hg  $\pm 8\%$  of reading

101 - 150 mm Hg ±10% of reading

Above 80 bpm ±12% 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

Respiratory Rate Range:

2 to 150 bpm

Respiratory Rate Accuracy:

±1 breath

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 CO<sub>2</sub> sampling, nasal CO<sub>2</sub> sampling and O<sub>2</sub> delivery Adult and pediatric nasal/oral CO<sub>2</sub> sampling, nasal/oral CO<sub>2</sub> sampling and O<sub>2</sub> 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

Sample Cell Detection:

Insertion automatically turns sampling pump on. Removal automatically turns sampling pump off.

Water Resistance IPX4:

Splash-proof (when sample cell is inserted in sample cell receptacle)

Shock ImpactIEC 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





#### Mainstream

CO<sub>2</sub> Measurement Range:

0 to 150 mm Hg,0 to 19.7% 0 to 20 kPa (at 760 mm Hg)

Rise Time:

Less than 60 ms Adult/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

CO<sub>2</sub> Accuracy:

0-40 mm Hg  $-\pm 2$  mmHg 41 - 70 mm Hg  $-\pm 5\%$  of reading

101 - 150 mm Hg  $-\pm 10\%$  of reading

Above 80 bpm  $-\pm 12\%$  of reading

Water Resistance:

IPX4-Splash-proof (sensor head only)

CO<sub>2</sub> 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

Respiration Rate Accuracy:

±1 breath

Calibration:

No routine user calibration required. An airway adapter zero is required when changing to a different style of airway adapter

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

## SpO<sub>2</sub> (Option, by Nellcor OxiMax)

#### General

Measuring Range: 1 ~ 100%

Alarm Range: 1 ~ 100%

Resolution: 1%

#### Accuracy

Adult (including Pediatric):

± 2% (70%~100% SpO<sub>2</sub>) Undefined (0~70% SpO<sub>2</sub>)

Neonate:

± 3% (70%~100% SpO<sub>2</sub>) Undefined (0~70% SpO<sub>2</sub>) Pulse Rate:

Measuring and Alarm Range:

20 ~ 300 bpm Resolution: 1 bpm

Accuracy: 3 bpm

