

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

## Capnography Monitor

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

The DRE Echo Capnography Monitor provides cost-effective EtCO<sub>2</sub> monitoring with accuracy and durability. The Echo CO<sub>2</sub> 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<sub>2</sub> 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 SpO<sub>2</sub>
- ✓ PR measurement
- ✓ Respiration 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
- ✓ Nurse call
- ✓ Suitable for adult, pediatric and neonatal patient



#### SPECIFICATIONS



**Weight:** 3 kg



**Dimensions:**  
200.8mm (L) x 241mm (H)  
x 189mm (D)

**Display Size:**  
5.7 inches

**Record Width:**  
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

859-2017-08-23

## Sidestream

### Sample Rate:

50 mL 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  $\pm 2$  mm Hg  
41 - 70 mm Hg  $\pm 5\%$  of reading  
71 - 100 mm Hg  $\pm 8\%$  of  
reading  
101 - 150 mm Hg  $\pm 10\%$  of  
reading  
Above 80 bpm  $\pm 12\%$  of  
reading

### 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

### Respiratory Rate Range:

2 to 150 bpm

### Respiratory Rate Accuracy:

$\pm 1$  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 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

## 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

### 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 —  $\pm 2$  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:

$\pm 1$  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%

Resolution: 1%

Alarm Range: 1 ~ 100%

### Accuracy

Adult (including Pediatric):

$\pm 2\%$  (70%~100% SpO<sub>2</sub>)  
Undefined 0~70% SpO<sub>2</sub>

Neonate:

$\pm 3\%$  (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

