

Capnography **to go**

The hand-held Tidal Wave features full graphics capabilities and offers accurate, reliable monitoring—all in a convenient, portable package. It provides immediate feedback and is ideal for use in emergency and transport settings.

The Tidal Wave incorporates rugged, solid-state, mainstream CAPNOSTAT® sensor technology and is designed to monitor CO₂ in virtually any clinical setting.

► A Quick Look

- Hand-held mainstream and sidestream capnograph
- 30-minute on-screen graphic trend available for assessing outcome of therapeutic intervention
- Visual and audible “no respiration” alert provides a higher level of patient safety during transport and other alternate site monitoring situations
- Display is visible in any lighting condition – from total darkness to bright sunlight.
- User-replaceable disposable and rechargeable battery packs eliminate the need to wait while batteries are charging (standard AA lithium: 5.5 hours of life)
- Easy user CO₂ calibration



Four available configurations

Tidal Wave Model 610

Hand-held mainstream capnograph

Tidal Wave Model 615

Hand-held mainstream and sidestream capnograph

Tidal Wave Sp Model 710

Hand-held mainstream capnograph/pulse oximeter

Tidal Wave Sp Model 715

Hand-held mainstream and sidestream capnograph/
pulse oximeter

Product Specifications

Capnograph

Principle of Operation

Solid state mainstream sensor. Single beam, non-dispersive infrared (NDIR) absorption, ratiometric measurement

Initialization Time

Capnogram within 15 seconds, full specifications within 60 seconds

Calibration

No calibration required

Capnostat® Mainstream CO₂ Sensor

Size 1.30" H x 1.67" W x .85" D (3.30 x 4.24 x 2.16 cm)
Weight 0.64 oz (18 gm) – cable excluded
Shock Resistance Withstands repeated 6-ft drops

CO₂ (Carbon Dioxide)

Range 0 - 150 mm Hg, 0 - 19.7%, 0 - 20 kPa at 760 mm Hg Pb
Accuracy +/- 2 mm Hg (0 - 40 mm Hg)
..... +/- 5% of reading (41 - 70 mm Hg)
..... +/- 8% of reading (71 - 100 mm Hg)
Resolution 1 mm Hg
Response Time 60 ms
Units mm Hg, kPa or %
Compensations N₂O & O₂ (selectable), Pb (automatic)
Capnogram Selectable sweep speed

Respiratory Rate

Accuracy +/- 1 bpm
Range 0 - 150 bpm
Resolution 1 bpm

Sampling Flow Rate (model 615 & 715 only)

180 ml/min (for non-intubated patients).
Response time is less than 200 ms at 180 ml/min flow.

Pulse Oximeter

Principle of Operation

Red/Infrared absorption

SpO₂ (Oxygen Saturation)

Range 0-100%
Accuracy +/- 2% SpO₂ (for 70 - 100% SpO₂) (1SD)
..... Unspecified for 0 - 69% SpO₂
Resolution 1%
Averaging Menu selectable 2 or 8 seconds
Audio Pitch of pulse tone varies with SpO₂ value

Pulse Rate

Range 30 - 250 bpm
Accuracy +/- 1% of full scale
Resolution 1 bpm
Averaging 8 seconds

Sensors

Reusable Y-Sensor™ (can be sterilized and used with all patient populations); reusable adult finger sensor

Plethysmogram

Pulsatile waveform

General

Alerts

Limits Adjustable limits for ETCO₂, Spo₂, respiratory and pulse rates.
No respiration detected, adjustable timeout
Audio Adjustable volume, 2 min. silence and OFF (LED indicators).
Visual On-screen and LED.

Display

Type Dot matrix, backlit (LCD)
Size 2.2" W x 1.1" H (5.6 x 2.8 cm)

Trending Capabilities

Memory 24-hour, battery backed
Format 30-minute on-screen or printed in trend or tabular mode. Download data to personal computer for use with NovaCARD™ software

Communication Output

RS232 to Seiko SPU 414 printer, NovaCARD™ software or computer

Physical

Size 7.9" H x 3.25" W x 1.5" D (20 x 8.25 x 3.8 cm)
Weight 28 oz.

Electrical

External Power Supply
..... Optional
Input 100 - 250 VAC, 50 - 60 Hz
Battery Nickel-metal-hydride: 4.5-hr life
..... Standard AA lithium: 5.5-hr life

Environmental

Operating Temperature 32 - 104° F (10 - 40° C)
Operating Humidity 0 - 90% relative
..... (non-condensing)