

Tidal Wave®
Hand-Held Capnograph

Tidal Wave® Sp
Hand-Held Capnograph
Pulse Oximeter



Portable and Reliable Mainstream Capnography

Based on the proven technology of our bedside capnographs, the Tidal Wave® family of products offers accurate, reliable monitoring in a convenient, portable package. Designed to provide immediate feedback, the Tidal Wave is ideal for use in emergency and transport settings, and other alternate site monitoring situations.

Tidal Wave® & Tidal Wave® Sp

- 30 minute on-screen graphic trend available for assessing outcome of therapeutic intervention.
- Visual and audible “No Respiration” alert provides for 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.

General

Alerts	
Limits:	Adjustable limits for ETCO ₂ , SpO ₂ , Respiratory and Pulse Rates. No Respiration Detected adjustable timeout.
Audio:	Adjustable volume, 2 min. silence or 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-hydrate: 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)
Four Optional 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



Respirationics offers a variety of reliable Tidal Wave accessories.

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:	.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:	N ₂ O & O ₂ (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% SpO ₂ (for 70 – 100% SpO ₂) (1 SD) Unspecified for 0 – 69% SpO ₂
Resolution:	1%
Averaging:	Menu selectable 2 or 8 seconds
Audio:	Pitch of pulse tone varies with SpO ₂ 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



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CAUTION: U.S. federal law restricts this device to sale by or on the order of a physician.

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