

# seca mVSA 535

## Spot-check-monitor for customized configuration

new



- Conventional measurement of vital signs of blood pressure, SpO<sub>2</sub>, pulse rate and temperature.
- Fast and easy assessment of body composition, e. g., fat mass, body water and muscle mass.
- Easy integration into any EMR system and connection to all seca 360° wireless products.
- Easy-to-understand graphic presentation of measurement results on the touchscreen monitor.
- Internal storage for results of approximately 70,000 measurements.
- Integrated replaceable rechargeable lithium ion battery in the monitor.

# seca mVSA 535:

## The world's first medical Vital Signs Analyzer with BIA measurement.

The complex device measures the conventional four vital parameters of blood pressure, SpO<sub>2</sub>, pulse rate, and temperature as well as the complete body composition. This high-performance software guarantees the error-free transmission of all measurement values to your EMR system.

### Technical Data

#### General

Dimensions (WxHxD)	In-ear thermometer version 252 x 262 x 278 mm / 9.9 x 10.3 x 10.9"
Weight	In-ear thermometer version approx. 3 kg / 5.9 lbs
Display type	7" touchscreen display
Power supply	Built-in power adapter, internal rechargeable lithium-ion battery
Medical device class	Ila
Interfaces	Wi-Fi, Ethernet, USB 2.0, seca 360° wireless technology
Compatible printers	Conventional laser and ink jet printers via the seca analytics 115 PC software

#### Bioelectrical impedance analysis

Measurement method	8-point Bioelectrical Impedance Analysis
Measurement frequencies	1; 2; 5; 10; 50; 100; 200; 500 kHz
Measurement segments	right arm, left arm, right leg, left leg, right half of body, left half of body, torso
Measurement current	100 µA
Measurement	Impedance (Z), Resistance (R), Reactance (Xc), Phase angle (φ)
Measurement time	30 seconds

#### Blood pressure measurement

Measuring procedure	oscillometric, deflation or inflation measurement										
Measurement range	pSYS: 25–280 mmHg; pDIA: 10–220 mmHg; pMAP: 15–260 mmHg; Adjustable pressure for deflation measurement (80–280 mmHg)										
Measurement accuracy	<table border="0"> <tr> <td>Measurement accuracy of deflation measurement:</td> <td>Measurement accuracy of inflation measurement:</td> </tr> <tr> <td>Mean deviation systole 0,39 mmHg</td> <td>Mean deviation systole 0,94 mmHg</td> </tr> <tr> <td>Standard deviation systole 2,57 mmHg</td> <td>Standard deviation systole 3,84 mmHg</td> </tr> <tr> <td>Mean deviation diastole 0,43 mmHg</td> <td>Mean deviation diastole 0,57 mmHg</td> </tr> <tr> <td>Standard deviation diastole 1,73 mmHg</td> <td>Standard deviation diastole 3,17 mmHg</td> </tr> </table>	Measurement accuracy of deflation measurement:	Measurement accuracy of inflation measurement:	Mean deviation systole 0,39 mmHg	Mean deviation systole 0,94 mmHg	Standard deviation systole 2,57 mmHg	Standard deviation systole 3,84 mmHg	Mean deviation diastole 0,43 mmHg	Mean deviation diastole 0,57 mmHg	Standard deviation diastole 1,73 mmHg	Standard deviation diastole 3,17 mmHg
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Measurement certainty	Excess pressure limit 300 mmHg; automatic pressure release at 330 mmHg										
Measurement time	Normal: 15–20 sec. / max. 90 sec. (adults)										
Pulse rate	Range 30–240 BPM; accuracy ± 2 BPM										

#### SpO<sub>2</sub>

	Masimo	seca
Measurement method	Pulse oximetry	Pulse oximetry
Measurement range (SpO <sub>2</sub> )	0.0%–100.0%	0.0%–100.0%
Measurement accuracy (SpO <sub>2</sub> )	SpO <sub>2</sub> (no motion) 70%–100% ± 2 Arms; SpO <sub>2</sub> (in motion) 70%–100% ± 3 Arms	SpO <sub>2</sub> (no motion) 60%–100% ± 2 Arms; SpO <sub>2</sub> (in motion) 70%–100% ± 3 Arms
Measurement range (PR)	Pulse rate PR 25 bpm to 240 bpm; Perfusion index measurement range 0,02%–20%	Pulse rate PR (Standard) 30 bpm to 240 bpm; Pulse rate PR (Enhanced) 20 bpm to 300 bpm
Measurement accuracy (PR)	PR (no motion) 25 min <sup>-1</sup> –240 min <sup>-1</sup> ± 3 digits PR (in motion) 25 min <sup>-1</sup> –240 min <sup>-1</sup> ± 5 digits	PR ≤ 2 bpm

#### Temperature measurement

	Filac 3000®	Genius® 2
Measurement methods	axillary/oral, rectal (direct, predictive)	in-ear (direct)
Measurement range	direct 30 °C–43 °C (86 °F–109.4 °F) predictive 35.5 °C–42 °C (95.9 °F–107.6 °F)	33–42 °C / 91.4–107.6 °F
Measurement accuracy	direct ± 0.1 °C (± 0.2 °F) predictive ± 0.1 °C (± 0.2 °F)	<ul style="list-style-type: none"> <li>Ambient temperature: 25 °C (77 °F) Target temperature: 36.7 °C–38.9 °C (98.1 °F–102 °F) ± 0.1 °C (± 0.2 °F)</li> <li>Ambient temperature: 16 °C–33 °C (60.8 °F–91.4 °F) Target temperature: 33 °C–42 °C (91.4 °F–107.6 °F) ± 0.2 °C (± 0.4 °F)</li> </ul>
Response time	direct 60–120 sec.; predictive (oral) 3–10 sec.; predictive (axillary) 8–12 sec.; predictive (rectal) 10–14 sec.	< 2 sec.
Probe covers	490 0015	490 0016

#### Accessories

Bioelectrical impedance analysis	seca mBCA 531 measuring mat for bioelectrical impedance analysis
Blood pressure	Cuff sizes S: 17–26 cm / 6.7–10.2"; M: 24–32 cm / 9.4–12.6"; L: 32–42 cm / 12.6–16.5"; XL: 38–46 cm / 15–18.1"; extension cord for sphygmomanometer cuffs
SpO <sub>2</sub>	Finger clip (hard) for adults; finger clip (soft) for adults; finger clip (soft) for children; Patient cable for Masimo SET SpO <sub>2</sub> sensors; extension cord for seca SpO <sub>2</sub> sensors
Temperature	In-ear thermometer *
seca 360° wireless	seca 360° wireless PC software seca analytics 115 (with one workstation license included), system compatible with seca 360° wireless measuring systems and scales
Mobile use	Rolling stand seca 475, carrying case seca 432

\* In-ear thermometer may be used only on the Smart Bucket variant intended for that purpose.

We reserve the right to make modifications.

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