

# EMR-validated Spot-check Vital Signs Monitor

**seca**  
Precision for health

## seca mVSA 535

- + Easy to operate spot-check monitor to capture all basic routine patient vitals in less than 60 seconds
- + Quick and accurate blood pressure measurement in under 20 seconds
- + Configurable seca EQ BP® average mode (BP30) provides true screening of hypertension
- + seca scale connectivity through seca 360° proximity: One integration interface for all seca devices
- + Long lasting battery for up to 150 measurements on one single charge
- + Convincing data storage: All measurements stored and available for later processing
- + EMR-validated: transmit measured data directly to any Electronic Medical Record (EMR) system



# Where ease meets accuracy

We realize that the working environment for medical staff is complex. This is precisely why seca developed a spot-check monitor that simplifies and quickens the routine task of capturing vital signs. The seca mVSA is easy-to-use and self-explanatory with little to no training required for nursing staff. Just turn it on, start the measurement and see all basic vital signs at a glance.



## Technical Data

GENERAL			
Dimensions (WxHxD)	278 x 252 x 262 mm		
Net weight	approx. 3.0 kg (depending on configuration)		
Box dimensions (WxHxD)	290 x 490 x 380 mm		
Box gross weight	approx. 6 kg (depending on configuration)		
Box volume	0.053 m <sup>3</sup>		
Display type	7" touchscreen display		
Medical device class	IIa		
Interfaces	Wi-Fi (IEEE 802.11 b/g/n), LAN (IEEE 802.3u), seca 360° proximity technology (proprietary)		
Ports	USB 2.0 (2 ports)		
Power supply	<b>Internal power supply unit:</b> Type IEC 60320 C13 Supply voltage 100 V ~ - 240 V ~ Supply frequency 50 Hz ~ 60 Hz Current consumption 0.85 A	<b>Mobile power supply:</b> Type Lithium-ion battery Voltage 11.25 V Capacity 2950 mAh Range approx. 5 h	
Power consumption	Standby (touchscreen display off, ON/OFF button green) <5 W; In operation (ON/OFF button white) <9 W; Operation (battery charging, monitor, ON/OFF button illuminated white) <35 W		
Compatible printers	Microsoft® Windows®-compatible printer via seca analytics 115 PC software		

## BLOOD PRESSURE MEASUREMENT

Measuring method	Oscillometric, deflation or inflation measurement switchable between single measurement (seca EQ BP®) and configurable multiple measurements (BP 30)		
Measurement range	<b>Deflation measurement:</b> Systolic BP 25 mmHg – 280 mmHg Diastolic BP 10 mmHg – 220 mmHg	<b>Inflation measurement:</b> Systolic BP 77 mmHg – 200 mmHg Diastolic BP 45 mmHg – 190 mmHg	
Measurement accuracy (clinically validated according to ISO 81060)	<b>Measurement accuracy of deflation measurement:</b> Mean deviation systole 0.10 mmHg Standard deviation systole 3.24 mmHg Mean deviation diastole -0.20 mmHg Standard deviation diastole 2.95 mmHg	<b>Measurement accuracy of inflation measurement:</b> Mean deviation systole 0.36 mmHg Standard deviation systole 4.27 mmHg Mean deviation diastole -0.12 mmHg Standard deviation diastole 3.78 mmHg	
Measurement accuracy (under laboratory conditions)	max. +/- 3 mmHg / 2% (the larger values applies)		
Measurement certainty	Maximum cuff pressure 300 mmHg; automatic pressure release > 330 mmHg		
Measurement time	Normal: 15 – 20 seconds / max. 90 seconds (adults)		
Measuring range (PR)	Deflation measurement: 30 min <sup>-1</sup> – 240 min <sup>-1</sup> / Inflation measurement: 45 min <sup>-1</sup> – 200 min <sup>-1</sup>		
Measurement accuracy (PR) (under laboratory conditions)	max. +/- 3 min <sup>-1</sup> / 3% (the larger value applies)		

SpO <sub>2</sub>	Masimo SET®	seca
Measurement method	Pulse oximetry	Pulse oximetry
Measurement range (SpO <sub>2</sub> )	0 – 100 %	0 – 100 %
Measurement accuracy (SpO <sub>2</sub> )	SpO <sub>2</sub> – resting = < 2 %; SpO <sub>2</sub> – in motion = < 3 %	SpO <sub>2</sub> – resting (60 % – 100 %) ± 2 A <sub>rms</sub> ; SpO <sub>2</sub> – in motion (70 % – 100 %) ± 3 A <sub>rms</sub>
Measurement range (PR)	Pulse rate PR 25 bpm – 240 bpm; Perfusion index measurement range 0.02 % – 20 %	Pulse rate PR (standard) 30 bpm – 240 bpm; Pulse rate PR (enhanced) 20 bpm – 300 bpm
Measurement accuracy (PR)	PR – resting = < 3 bpm; PR – in motion = < 5 bpm	PR – resting = ≤ 2 bpm; PR – in motion = n/a

## TEMPERATURE MEASUREMENT

	Covidien Filac™ 3000	Covidien Genius™ 3
Measurement methods	axillary/oral, rectal (direct or predictive)	in-ear (direct)
Measurement range	direct 30 °C – 43 °C predictive 35.5 °C – 42 °C	33 – 42 °C
Measurement accuracy	direct ± 0.1 °C predictive ± 0.1 °C	Ambient temperature: 16 °C – 33 °C Target temperature: 33 °C – 42 °C ± 0.3 °C
Measurement time	direct 60 – 120 seconds predictive (oral) 3 – 10 seconds predictive (axillary/rectal) 8 – 14 seconds	< 2 seconds
Probe covers (disposable)	490 0015	490 0016

## ACCESSORIES

Blood pressure	Blood pressure cuffs (reusable), sizes: XS = 13 – 20 cm, S = 17 – 26 cm, M = 24 – 32 cm, L = 32 – 42 cm, XL = 38 – 46 cm, XXL = 42 – 54 cm; air hose for blood pressure cuffs (1.3 m or 3 m)
SpO <sub>2</sub>	seca SpO <sub>2</sub> SoftFlap® finger clip sensor for adults (reusable); seca SpO <sub>2</sub> SoftCap® finger clip sensors for adults and children (reusable); Masimo SET® SpO <sub>2</sub> finger clip®; extension cable for Masimo SET® SpO <sub>2</sub> sensors; extension cable for seca SpO <sub>2</sub> sensors
Temperature	Covidien Genius™ 3 thermometer (in-ear); Covidien Filac™ 3000, measurement methods axillary/oral, rectal (direct or predictive)
PC software	Optional wireless PC software seca analytics 115, system compatible with seca EMR-validated measuring systems and scales
Mobile use	Mobile stand seca 475 0535, carrying case seca 432, stand bracket seca 490 0017 for SmartBucket