



# PHILIPS

## SureSigns

VS4 vital signs monitor



# Act. Don't react.

## Spot subtle but significant deterioration early

Now vital signs can count for more. The SureSigns VS4 helps you track subtle signs of deterioration so you can document and escalate effectively. It simplifies your workflow with an intuitive touchscreen interface, and provides time-saving tools like QuickCapture and QuickCheck for documentation, and QuickAlerts (single- or multi-parameter modified Early Warning Scoring) to activate your hospital's Rapid Response Team (RRT) as appropriate. Now you can act decisively to provide targeted care when it can do the most good. Because it's wiser to act rather than react.

### Key advantages

- Brings configurable Early Warning Scores to the bedside to help you identify subtle signs of patient deterioration for decisive action
- Provides intuitive tools, such as QuickCapture to simplify documentation, and QuickAlerts to highlight patient deterioration for escalation
- Offers desired interfacing, using standard networking infrastructures and the latest security and encryption<sup>1</sup>

# Specs that matter, clinical **benefits that count**

Now there's a vital signs monitor that helps you identify subtle signs of patient deterioration early and act decisively. Alternate between spot check and frequent measurement of vitals. Capture and check values. Streamline your workflow.

## Simplify your workflow

- Touchscreen: color LED backlit screen
- Connect with IntelliVue Guardian software (MEWS)
- **QuickCheck**
  - Caregiver authentication at the bedside
  - Patient record validation at the bedside
  - Patient record review before export to EHR
- **QuickCapture**
  - Customize up to 40 observation and assessment entries for fast recall and reuse
- **QuickAlerts**
  - Choose Single or Modified Early Warning Scoring at the bedside, including detection of patient deterioration
- **QuickNBP**
  - Provides fast NBP measurements
  - One-touch NBP on/off button
- **SpO<sub>2</sub>**
  - Choice of Philips FAST-based SpO<sub>2</sub> algorithm or Masimo® SET® or rainbow® SpO<sub>2</sub> (including certain Masimo rainbow parameters)
  - Either choice is compatible with a wide variety of sensors
- **Microstream™ etCO<sub>2</sub> option**
  - Includes Integrated Pulmonary Index (IPI)
- **Temperature choices**
  - Welch Allyn® Predictive, Covidien™ tympanic, or Exergen® temporal
- **Biomedical and IT device maintenance tool kit**
- **Exergen TemporalScanner™ thermometer option**
  - With optional disposable covers for cost-savings
- **1D/2D/RFID barcode scanner**
  - Programmable to support consistent and reliable patient ID entry

### Other benefits

- Uses same supplies as all Philips monitors
- Time-sync with hospital or network clock
- Stores up to 800 patient records
- Confirmation of exported records easily seen in green
- LAN/serial data export in HL7 format
- Internal WiFi – 802.11 a/b/g option
- USB port for easy software upgrades and to import configuration settings
- Nurse call output
- Lithium ion battery
- Battery management, including a visible icon to show unit is plugged in and charging
- AC power input with power cord clip
- Sturdy handle and rugged housing for easy portability
- Compatible with SureSigns Dashboard



# Easy to use, **easy to maintain**

## Product specifications

Width, height, depth	W: 26 cm (10.2 in), H: 22 cm (8.6 in), D: 14.5 cm (5.7 in)	SpO <sub>2</sub> Philips FAST-based	Meets EN ISO 9919 standard <b>Measurement range:</b> 0 – 100% <b>Pulse rate measurement range:</b> 30 bpm – 300 bpm <b>Pulse accuracy:</b> within 2% or 1 bpm
Weight	3.6 kg (8 lb)		
Screen	21.3 cm (8.4 in) SVGA TFT-AM LCD, resistive touchscreen, 800 active pixels/line <b>Resolution:</b> 600 active lines per frame <b>Viewing angle:</b> ±60 degrees		
NBP	<ul style="list-style-type: none"> <li>• Oscillometric using stepwise deflation pressure – NBP interval choices</li> <li>• Adult measurement range                             <ul style="list-style-type: none"> <li>– Systolic: 30 – 270 mmHg (4.0 – 36.0 kPa)</li> <li>– Diastolic: 10 – 245 mmHg (1.3 – 32.7 kPa)</li> <li>– MAP: 20 – 250 mmHg (2.7 – 34.0 kPa)</li> </ul> </li> <li>• Pediatric measurement range                             <ul style="list-style-type: none"> <li>– Systolic: 30 – 180 mmHg (4.0 – 24.0 kPa)</li> <li>– Diastolic: 10 – 150 mmHg (1.3 – 20.0 kPa)</li> <li>– MAP: 20 – 160 mmHg (2.7 – 21.3 kPa)</li> </ul> </li> <li>• Neonatal measurement range                             <ul style="list-style-type: none"> <li>– Systolic: 30 – 130 mmHg (4.0 – 17.0 kPa)</li> <li>– Diastolic: 10–100 mmHg (1.3 – 13.3 kPa)</li> <li>– MAP: 20 – 120 mmHg (2.7 – 16.0 kPa)</li> </ul> </li> <li>• The NBP measurement has an accuracy over the ranges listed for these values                             <ul style="list-style-type: none"> <li>– Maximum standard deviation: 8 mmHg</li> <li>– Maximum mean error: ±5 mmHg</li> </ul> </li> <li>• Subsequent cuff inflation (in NBP interval mode only)                             <ul style="list-style-type: none"> <li>– The subsequent inflation pressure is determined automatically depending on the previous measurement and patient type</li> </ul> </li> </ul>	SpO <sub>2</sub> Masimo SET and rainbow  Temperature Welch Allyn® predictive  Temperature Covidien™ tympanic  Temperature Exergen® temporal  IntelliVue Guardian software	<b>SpO<sub>2</sub> measurement range:</b> 0 – 100% <b>SpO<sub>2</sub> accuracy:</b> depends upon patient type and motion/no motion <b>SpHb measurement range, no motion:</b> 0 – 25.0 g/dL <b>SpHb accuracy:</b> ±1 g/dL over range of 8 – 17 g/dL <b>RRa measurement range:</b> 0 breaths per minute to 70 breaths per minute <b>RRa accuracy:</b> 4 breaths per minute to 70 breaths per minute SpHb and RRa are only supported on adult and pediatric patients (>10 kg)  <b>Modes:</b> predictive and monitored <b>Probe sites:</b> oral, rectal, or axillary <b>Range:</b> <b>Monitor mode:</b> 26.7 – 43.3 °C (80.1 – 109.9 °F) <b>Predictive mode:</b> 34.4 – 40.6 °C (93.9 – 105.1 °F) <b>Accuracy:</b> ±0.1 °C (±0.2 °F) <b>Measurement time:</b> 4 – 6 seconds  <b>Equivalency modes:</b> ear (no adjustment), oral, core, and rectal (adjusted from ear) <b>Range:</b> 33 – 42.0 °C (91.4 – 107.6 °F) <b>Accuracy (overall range):</b> ±0.2 °C (±0.4 °F) <b>Measurement response time:</b> ≤ 2 seconds  <b>Range:</b> 16 – 43 °C (60.8 – 109.4 °F) <b>Accuracy:</b> ±0.1 °C (±0.2 °F) <b>Response time:</b> approximately 1 second
CO <sub>2</sub>	<b>Measurement range:</b> 0 mmHg – 150 mmHg <b>Total response time for adults:</b> 3.9 seconds <b>Accuracy:</b> 0 mmHg – 38 mmHg: ±2 mmHg 39 mmHg – 150 mmHg: ±(5% of reading + 0.08% for every 1 mmHg above 38 mmHg) <b>Respiration rate range:</b> 1 – 150 bpm <b>Respiration accuracy:</b> ±1 bpm in the range of 0 – 70 bpm, ±2 bpm in the range of 71 – 120 bpm, ±3 bpm in the range of 121 – 150 bpm	Battery	Lithium ion, 10.8 – 11.1 V
		Data output	HL7 format, via Ethernet port Serial data
		Patient type	Adult, pediatric, neonatal



“An EWS system would be a major change in the hospital, especially from the nursing and medical records perspective.”

Archie Marangos, Biomed, Tufts Medical Center, Boston, MA

# Make **vital signs** count for more

Catch the subtle signs that signal patient deterioration.  
With the SureSigns VS4, you can act, not just react.

## Ordering information

Parameters	To order	Also available	To order
NBP, FAST-based SpO <sub>2</sub>	863283	SureSigns premium rollstand	989803176601
SpO <sub>2</sub> and NBP accessories included	A01	SureSigns standard rollstand	989803144001
No accessories	A02	Wall mount	989803144011
<b>Temperature</b>		2D barcode scanner	989803147821
Welch Allyn predictive temperature	T01	2D barcode scanner holder	989803191611
Covidien tympanic temperature	T02	HS-1 2D barcode scanner	989803176611
Exergen temporal temperature	T03	HS-1 barcode scanner roll-stand insert	989803184701
Exergen temporal cap holder	C05	Serial interface adapter	989803159601
<b>SpO<sub>2</sub></b>		Wireless upgrade kit	989803181201
Masimo SET SpO <sub>2</sub>	M01	Tympanic temperature upgrade kit	863293
Masimo rainbow SpO <sub>2</sub> , SpHb	M02	Predictive temperature upgrade kit	863294
Masimo rainbow SpO <sub>2</sub> , RRa	M03	Temporal temperature upgrade kit	863342
Masimo SpO <sub>2</sub> LNCS cable	C01	IntelliVue Guardian software license	863357
Masimo SpO <sub>2</sub> , SpHb cable	C02	SpO <sub>2</sub> FAST to Masimo SET upgrade kit	863343
Masimo SpO <sub>2</sub> , SpHb, RRa cable	C03		
Masimo SpO <sub>2</sub> , SpHb/LNCS, RRa cable	C04		
Adult NBP cuff	N01		
<b>Capnography</b>			
Microstream CO <sub>2</sub>	E01		
<b>Other</b>			
FIPS (US only)	F01		
IntelliVue Guardian software	G01		
Recorder	R01		
802.11 a/b/g wireless	W01		



Premium rollstand has an easy-to-clean molded basket that swivels for easy positioning in tight spaces, and dedicated sections for accessories such as a barcode scanner, cleaning wipes, NBP cuffs, extra disposable temperature covers, and the SpO<sub>2</sub> sensor.



<sup>1</sup> SureSigns VS4 has tested compatible with Cisco Compatible Extensions, Version 4. Go to [www.cisco.com/go/compatibledisclaimer](http://www.cisco.com/go/compatibledisclaimer) for complete disclaimer.

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