## PHILIPS

### Sure**Signs**

VS4 vital signs monitor

# **Supporting your processes,** at the patient's side

Expand vital signs monitoring with SureSigns VS4

Responding to a variety of changing patient conditions means you have to be able to document and escalate effectively, without neglecting your other patients. You need a patient monitor that not only lets you alternate between spot check and frequent measurement of vitals, but that also helps you capture and check values, and document your observations and assessments.

The SureSigns VS4 simplifies your workflow with an intuitive touch-screen interface, tools like QuickCapture and QuickCheck for documentation, and QuickAlerts (single parameter Early Warning Scoring (EWS)) – to activate your hospital's Rapid Response Team (RRT). It provides you with versatility to support many of your monitoring processes.



### Key advantages

- Easy change between spot check and frequent vital measurements, to help you cope with changing patient conditions
- Intuitive tools to simplify documentation and escalation processes
- Straightforward interfacing, using standard networking infrastructures and protocol<sup>1</sup>

# The specs that matter, **the versatility**

## Functionality at a glance

Ease-of-use for caregivers, and IT and network informatics teams

- Touch screen: color LED backlit screen
- · QuickCheck:
- Caregiver authentication at the bedside
- Patient record validation at the bedside
- Patient record review before export to EHR
- QuickCapture: customize up to 20 observation and assessment entries, for fast recall and reuse
- QuickAlerts: supports hospital Rapid Response Team
- QuickNBP: for fast NBP measurements, Onetouch NBP on/off button
- SpO<sub>2</sub> with a choice of Philips FAST-based SpO<sub>2</sub> algorithm, or Masimo® rainbow® SET® SpO<sub>2</sub> (including certain Masimo rainbow parameters). Either are compatible with a wide variety of sensors.
- Microstream<sup>™</sup> etCO<sub>2</sub> option with Integrated Pulmonary Index (IPI)
- Temperature choices: predictive, tympanic, or temporal

- Exergen TemporalScanner™ thermometer option:
- Accurate temperature with a gentle forehead scan

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Sp02 Temp

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- A 90% cost savings is provided because disposable covers are optional<sup>2</sup>
- Uses same supplies as all Philips monitors
- 2D barcode scanner accessory: programmable to support consistent
- and accurate patient ID entry • 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
- importing 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



Premium rollstand includes an easyto-clean molded basket that can swivel 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, sensor.

### **Product specifications** Width, height, depth W: 26 cm (10.2 in), H: 22 cm (8.6 in), D: 14.5 cm (5.7 in) 3.6 kg (8 lb) – excluding optional recorder Weight Screen 21.3 cm (8.4 in) SVGA TFT-AM LCD display, 800 active pixels/line. Resolution: 600 active lines per frame. Viewing angle ±60 degrees NBP Oscillometric using stepwise deflation pressure - NBP interval choices · Adult measurement range: - Systolic: 30 - 270 mmHg (4.0 - 36.0 kPa) – Diastolic: 10 – 245 mmHg (1.3 – 32.7 kPa) - MAP: 20 - 225 mmHg (2.7 - 34.0 kPa) Pediatric measurement range: - Systolic: 30 - 180 mmHg (4.0 - 24.0 kPa) - Diastolic: 10 - 150 mmHg (1.3 - 20.0 kPa) - MAP: 20 - 160 mmHg (2.7 - 21.3 kPa) Neonatal measurement range: - Systolic: 30 - 130 mmHg (4.0 - 17.0 kPa) - Diastolic: 10-100 mmHg (1.3 - 13.3 kPa) - MAP: 20 - 120 mmHg (2.7 - 16.0 kPa) The NBP measurement has an accuracy over the ranges listed for the values: - Maximum standard deviation: 8 mmHg Maximum mean error: ±5 mmHg · Subsequent cuff Inflation (in NBP interval mode only): - The subsequent inflation pressure is determined automatically depending on the previous measurement and patient type Measurement range: 0 mmHg – 150 mmHg CO<sub>2</sub> Total response time for adults: 3.9 seconds Accuracy: 0 mmHg – 38 mmHg: ±2 mmHg 39 mmHg – 150 mmHg: ±(5% of reading + 0.08% for every 1 mmHg above 38 mmHg) Respiration rate range: 1 – 150 bpm Respiration accuracy: $\pm 1$ bpm in the range of 0 – 70 bpm, $\pm 2$ bpm in the range of 71 - 120 bpm, $\pm 3$ bpm in the range

of 121 - 150 bpm.

# that counts

#### **Product specifications (continued)**

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SpO <sub>2</sub> Philips FAST- based	Meets EN ISO 9919 standard Measurement range: 0 – 100% Pulse rate measurement range: 30 bpm – 300 bpm Pulse accuracy: greater of 2% and 1 bpm
SpO <sub>2</sub> Masimo SET/rainbow®	SpO <sub>2</sub> measurement range: 0 – 100% SpO <sub>2</sub> accuracy: depends upon patient type and motion/no motion SpHb measurement range: no motion: 0 – 25.0 g/dL SpHb accuracy: ±1 g/dL over range of 8 – 17 g/dL RRa measurement range: 0 breaths per minute to 70 breaths per minute RRa accuracy: 4 breaths per minute to 70 breaths per minute, ±1 breath per minute SpHb and RRa are only supported on adult and pediatric patients (>10 kg)
Temperature Welch Allyn™ predictive	Modes: predictive and monitored Probe sites: oral, rectal or axillary Range: 26.7 – 43.3 °C (80 – 110 °F) in monitoring mode Accuracy: ±0.1 °C (±0.2 °F) in monitoring mode
Temperature Covidien tympanic	Equivalency modes: ear (no adjustment), oral, core, and rectal (adjusted from ear)
Monitor mode	Range: 33 – 42.0 °C (91.4 – 107.6 °F) Accuracy (overall range) : ±0.2 °C (±0.4 °F) Measurement response time: ≤2 seconds
Temperature Exergen temporal	Temperature range: 16 – 43 °C (60.8 – 109.4 °F) Accuracy: 0.1 C or 0.2 F Response time: approximately 1 second
Battery	Lithium ion: 10.8 – 11.1 V (with a "202" form factor) Operating time: four hours with NBP every 15 minutes
Data output	<ul> <li>HL7 format, via Ethernet port</li> <li>Serial data</li> </ul>
Patient type	• Adult, pediatric, neonatal

**Ordering information** NBP, FAST-based SpO 863283 A01 SpO<sub>2</sub> and NBP accessories included A02 No accessories Temperature: T01 Welch Allyn predictive temperature т02 Covidien tympanic temperature тоз Exergen temporal temperature C05 Exergen temporal cap holder SpO<sub>2</sub> M01 Masimo SET SpO M02 Masimo rainbow SpO<sub>2</sub>, SpHb M03 Masimo rainbow SpO<sub>2</sub>, RRa C01 Masimo SpO LNCS cable C02 Masimo SpO., SpHb cable C03 Masimo SpO<sub>2</sub>, SpHb, RRa cable C04 Masimo SpO<sub>2</sub>, SpHb/ LNCS, RRa cable N01 Adult NBP cuff Capnography: E01 Microstream CO, Other: F01 FIPS (US only) R01 Recorder W01 802.11 a/b/g Wireless

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- <sup>1</sup> SureSigns VS4 has tested compatible with Cisco Compatible Extensions, Version 4. Go to www.cisco.com/go/compatibledisclaimer for complete disclaimer.
- <sup>2</sup>The vast majority of hospitals have approved the use of an alcohol or other hospital approved disinfectant wipe of the probe head between patients.

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