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 encryption1
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
  - **SpO₂**
    - Choice of Philips FAST-based SpO₂ algorithm or Masimo® SET® or rainbow® SpO₂ (including certain Masimo rainbow parameters)
    - Either choice is compatible with a wide variety of sensors
  - **Microstream™ etCO₂ 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
### 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

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## Product specifications

<table>
<thead>
<tr>
<th>Width, height, depth</th>
<th>W: 26 cm (10.2 in), H: 22 cm (8.6 in), D: 14.5 cm (5.7 in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight</td>
<td>3.6 kg (8 lb)</td>
</tr>
<tr>
<td>Screen</td>
<td>21.3 cm (8.4 in) SVGA TFT-AM LCD, resistive touchscreen, 800 active pixels/line</td>
</tr>
<tr>
<td><strong>Resolution:</strong></td>
<td>600 active lines per frame</td>
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<tr>
<td><strong>Viewing angle:</strong></td>
<td>±60 degrees</td>
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</table>

### 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 – 250 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 these 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

### CO₂

- **Measurement range:** 0 mmHg – 150 mmHg
- **Total response time for adults:** 3.9 seconds

### SpO₂

- **Philips FAST-based**
  - Meets EN ISO 9919 standard
  - **Pulse rate measurement range:** 30 bpm – 300 bpm
  - **Pulse accuracy:** within 2% or 1 bpm
- **Masimo SET and rainbow**
  - **SpO₂ measurement range:** 0 – 100%
  - **SpO₂ 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

### Temperature

- **Welch Allyn® predictive**
  - **Modes:** predictive and monitored
  - **Probe sites:** oral, rectal, or axillary
  - **Range:**
    - **Monitor mode:** 26.7 – 43.3 °C (80.1 – 109.9 °F)
    - **Predictive mode:** 34.4 – 40.6 °C (93.9 – 105.1 °F)
  - **Accuracy:** ±0.1 °C (±0.2 °F)
  - **Measurement time:** 4 – 6 seconds
- **Covidien™ tympanic**
  - **Equivalency modes:** ear (no adjustment), oral, core, and rectal (adjusted from ear)
  - **Range:** 33 – 42.0 °C (91.4 – 107.6 °F)
  - **Accuracy (overall range):** ±0.2 °C (±0.4 °F)
  - **Measurement response time:** ≤ 2 seconds
- **Exergen® temporal**
  - **Range:** 16 – 43 °C (60.8 – 109.4 °F)
  - **Accuracy:** ±0.1 °C (±0.2 °F)
  - **Response time:** approximately 1 second

### Battery

- **Lithium ion, 10.8 – 11.1 V**

### Data output

- **HL7 format, via Ethernet port**
- **Serial data**

### Patient type

- Adult, pediatric, neonatal
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

<table>
<thead>
<tr>
<th>Parameters</th>
<th>To order</th>
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</thead>
<tbody>
<tr>
<td>NBP, FAST-based SpO₂</td>
<td>863283</td>
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<tr>
<td>SpO₂ and NBP accessories included</td>
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<tr>
<td>No accessories</td>
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#### Temperature

<table>
<thead>
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<tbody>
<tr>
<td>Welch Allyn predictive temperature</td>
<td>T01</td>
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<tr>
<td>Covidien tympanic temperature</td>
<td>T02</td>
</tr>
<tr>
<td>Exergen temporal temperature</td>
<td>T03</td>
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<tr>
<td>Exergen temporal cap holder</td>
<td>C05</td>
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#### SpO₂

<table>
<thead>
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<th>SpO₂</th>
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<tr>
<td>Masimo SET SpO₂</td>
<td>M01</td>
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<tr>
<td>Masimo rainbow SpO₂, SpHb</td>
<td>M02</td>
</tr>
<tr>
<td>Masimo rainbow SpO₂, RRa</td>
<td>M03</td>
</tr>
<tr>
<td>Masimo SpO₂, LNCS cable</td>
<td>C01</td>
</tr>
<tr>
<td>Masimo SpO₂, SpHb cable</td>
<td>C02</td>
</tr>
<tr>
<td>Masimo SpO₂, SpHb, RRa cable</td>
<td>C03</td>
</tr>
<tr>
<td>Masimo SpO₂, SpHb/LNCS, RRa cable</td>
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<tr>
<td>Adult NBP cuff</td>
<td>N01</td>
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#### Capnography

<table>
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<td>Microstream CO₂</td>
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#### Other

<table>
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<tr>
<td>FIPS (US only)</td>
<td>F01</td>
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<tr>
<td>IntelliVue Guardian software</td>
<td>G01</td>
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<td>Recorder</td>
<td>R01</td>
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<tr>
<td>802.11 a/b/g wireless</td>
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### Also available

<table>
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<th>Also available</th>
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<tr>
<td>SureSigns premium rollstand</td>
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<tr>
<td>SureSigns standard rollstand</td>
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<td>Wall mount</td>
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<td>2D barcode scanner holder</td>
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<td>HS-1 barcode scanner roll-stand insert</td>
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<td>Predictive temperature upgrade kit</td>
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<td>Temporal temperature upgrade kit</td>
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<td>IntelliVue Guardian software license</td>
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<tr>
<td>SpO₂ FAST to Masimo SET upgrade kit</td>
<td>863343</td>
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### Premium rollstand

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 SpO₂ sensor.

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1. SureSigns VS4 has tested compatible with Cisco Compatible Extensions, Version 4. Go to www.cisco.com/go/compatibledisclaimer for complete disclaimer. Masimo, SET, and rainbow are registered trademarks of Masimo Corporation. Microstream and Covidien are trademarks of Covidien companies. Welch Allyn is a registered trademark and TemporalScanner is a trademark of Welch Allyn Corporation. Exergen is a registered trademark of Exergen Corporation. All other trademarks are property of their respective owners.