

# vital signs MONITOR

## VSM-300/300B

Vital Signs Monitors



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## VSM-300/VSM-300B Vital Signs Monitors

**VSM-300 ( SpO<sub>2</sub>+NIBP+Quick TEMP / SpO<sub>2</sub>+NIBP / NIBP+Quick TEMP / SpO<sub>2</sub> only / NIBP only) & VSM-300B ( CO<sub>2</sub>+SpO<sub>2</sub>):** **Advanced VSM-300 Series Vital Signs Monitor** has made its mark in out-patient department and doctors' office for its accuracy, durability and cost-effectiveness by SpO<sub>2</sub>, NIBP, Quick TEMP and CO<sub>2</sub> monitoring. Its portability and multi-parameter functionality address vital signs monitoring needs.

- 5.7 inch high resolution display for easy reading
- Lightweight, portable design and user-friendly interface for easy operation
- Flexible configurations to meet different clinical needs
- Nellcor Oximax™ / SpO<sub>2</sub>
- Quick Temp thermometer to obtain temperature in approximately 15 seconds
- PR measurement (from SpO<sub>2</sub>/ NIBP)
- Respiration Loflo™ sidestream and CAPNOSTAT® ETCO<sub>2</sub> mainstream measurement(M3B)
- Real-time parameters measurement display with trend table for easy reviewing
- Built-in rechargeable Lithium-ion battery for 10 hours continuous working
- Powerful storage capacity
- Bi-directional communications with central station by wired or wireless network
- Nurse call
- Suitable for adult, pediatric and neonatal patients



Quick, accurate and easy to use



Real-time data or USB data can be transferred to a PC through PC management software to review and print



Respiration Loflo sidestream and CAPNOSTAT 5 ETCO<sub>2</sub> mainstream measurement for intubated and non-intubated patients(VSM-300B)



Powerful storage capacity: 72 hours trend review of all parameters, 30,000 sets NIBP review, 800 items alarm review and USB data storage

# VSM-300/VSM-300B Vital Signs Monitors

## Classification

Anti-electroshock type Class I equipment  
and internal powered equipment  
EMC type Class A

Anti-electroshock degree

SpO<sub>2</sub>, NIBP: BF Defibrillation type; TEMP: CF type.

Ingress Protection IPX1 (W/O Temp module)  
IPX1 (with Temp module)

## Specifications

### Size and Weight

Size 200.8mm (L) x 241mm (H) x 189 mm (D)

Weight 3 kg

### Display

5.7 inches, LCD

Color TFT resolution: 640X480

### Power Supply

100-240 VAC, 50/60HZ

Pmax=70VA FUSE T 1.6AL

### Battery

Type: Lithium-ion

Voltage: 14.8 V DC Capacitance: 4,400 mAh

Working period Color TFT: 480min

Rechargeable period < 360min

### Recorder (Optional)

Record Width 48 mm

Paper Speed 25mm/s

### NIBP (VSM-300 only)

Method Oscillometric

Mode Manual, Auto, Continuous

### Measuring Interval in AUTO Mode

1/2/3/4/5/10/15/30/60/90/120/240/480 Min

Continuous 5min, interval is 5s

Measuring Type Systolic Pressure,  
Diastolic Pressure, Mean Pressure

### Measuring Range

#### Adult Mode

SYS 40~270mmHg

DIA 10~215mmHg

MAP 20~235mmHg

#### Pediatric Mode

SYS 40~200mmHg

DIA 10~150mmHg

MAP 20~165mmHg

### Neonatal Mode

SYS 40~135mmHg

DIA 10~100mmHg

MAP 20~110mmHg

Cuff Pressure measuring Range 0~290mmHg

Pressure Resolution 1mmHg

Maximum mean error 5mmHg

Maximum Standard deviation 8mmHg

Entire Measuring Period 30~45s typical  
(depend on HR/motion disturbance)

### Dual Overpressure protection

Adult 297±3mmHg

Pediatric 240±3mmHg

Neonatal 145±3mmHg

### PR

Measuring Range 40~240bpm

Resolution 1bpm

Accuracy ±3bpm or 3.5% of  
the maximum

IEC 60601-2-30

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

Measuring Range 0~100%

Alarm Range 0~100%

Resolution 1%

### Accuracy

Adult (including Pediatric)

±2% (70%~100% SpO<sub>2</sub>)

Undefined (0~70% SpO<sub>2</sub>)

Neonate ±3% (70%~100% SpO<sub>2</sub>)

Undefined (0~70% SpO<sub>2</sub>)

### Pulse Rate

Measuring and Alarm Range 30~300bpm

Resolution 1bpm

Accuracy ±3bpm

Data update period 2s

ISO 9919

SpO<sub>2</sub> (optional, by Nellcor Oximax™)

Measuring Range 1~100%



VSM-300

VSM-300B

Alarm Range 1~100%

Resolution 1%

### Accuracy

Adult and Low-perfusion

±2% (70%~100% SpO<sub>2</sub>)

Undefined (0~70% SpO<sub>2</sub>)

Neonate ±3% (70%~100% SpO<sub>2</sub>)

Undefined (0~70% SpO<sub>2</sub>)

### Pulse Rate

Measuring and Alarm Range 20~300bpm

Resolution 1bpm

Accuracy ±3bpm

### Quick Temperature

Measuring Range 25°C~45°C

Probe Type Oral/Axillary sensor

Rectal sensor

Resolution 0.1°C

Accuracy Monitor mode: ±0.1°C

Typical measurement time <15s

Update time 1s~2s

IEC 12470-4

### Respironics CO<sub>2</sub> (M3B only)

CO<sub>2</sub> (Mainstream and Sidestream, optional)

By Philips Respironics CAPNOSTAT 5® & LoFlo™

### Technology

Range: 0~150 mmHg

Accuracy: ±2% 0~40 mmHg

±5% 41~70 mmHg

±8% 71~100 mmHg

±10% 101~150 mmHg

AwRR Accuracy: ±1rpm

Convenient design for intubated and non-intubated applications

Possible to work at low sample flow rate: 50ml/min

Detailed specification refer to the user manual of

Respironics

ISO 21647

Configuration	SpO <sub>2</sub>	NIBP	QuickTEMP	CO <sub>2</sub>
VSM-300 (SpO <sub>2</sub> only)	✓	—	—	—
VSM-300 (NIBP only)	—	✓	—	—
VSM-300 (NIBP+QuickTEMP)	—	✓	✓	—
VSM-300 (SpO <sub>2</sub> +NIBP)	✓	✓	—	—
VSM-300 (SpO <sub>2</sub> +NIBP+QuickTEMP)	✓	✓	✓	—
VSM-300B (SpO <sub>2</sub> +CO <sub>2</sub> )	✓	—	—	✓



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