

## SurgiVet® V3404 Series ECG Monitor

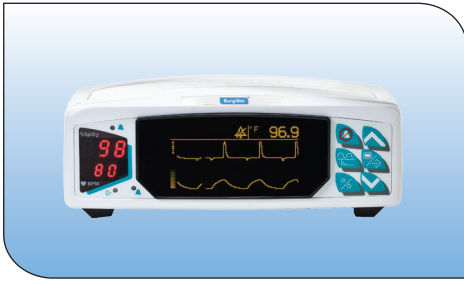


The SurgiVet® V3404 Series ECG monitor is a cost-effective, multi-parameter monitor that takes pulse oximetry to another level with its integrated handles and compact size. The standard 3 or 5-lead ECG provides optional respiration, temperature and printing capabilities to meet the needs of veterinary clinics.

For more information, visit [www.surgivet.com](http://www.surgivet.com).

VETERINARY

SurgiVet™



# SurgiVet® V3404 Series ECG Monitor

- Patented Serial Autocorrelation (SAC) technology identifies pulse detection artifact for optimal performance in challenging veterinary environments
- Features 3 or 5-lead ECG
- Expanded heart rate range for the veterinary environment
- Bright, dual trace electroluminescent display
- Optional printer provides crisp, high resolution printing
- Optional mounting assemblies enhance system flexibility
- Veterinary specific SpO<sub>2</sub> sensors to accommodate a variety of species

## Technical Specifications

### DISPLAY & INDICATORS

- **Display**  
Electroluminescent (EL)
- **LEDs**  
SpO<sub>2</sub>: 3-digit, Pulse Rate (SpO<sub>2</sub>), Heart Rate (ECG): 3-digit
- **Icons**  
Alarms Silenced, External Power (green), High Priority Alarm (red), Medium/Low Priority Alert (yellow)
- **Numeric** (optional V3404P only)  
Respiration Rate: 3-digit  
Temperature: 3-digit (°C) or 4-digit (°F), 10 x 14 pixel fonts, each 1 Hz update; display alternates @ 5 s. if both active
- **Text**  
LOW BATTERY (battery life less than 10 minutes), with audio; ASYSTOLE, with ALARM LED (both blinking) and audio; SPO2 SENSOR and ECG/LEAD FAIL, with ALERT LED and audio; SPO2 SEARCH, ARTIFACT, Temp. SENSOR;
- Patient parameter high and low limit alarms (with blinking digits)
- **Waveforms**  
ECG and/or Plethysmogram; (12.5, 25 or 50 mm/s)
- **Graphic Trends**  
SpO<sub>2</sub>, pulse rate (heart rate), pulse signal strength and (optional) respiration
- **Keys**  
On/Off, Alarm Silence, Wave/Trend, Menu/Enter, Up Arrow, Down Arrow—menu navigation and selection; alarm limit and audio volume adjustment

### SpO<sub>2</sub> DIGITAL OXIMETRY

- **Range:** 50 to 100% SpO<sub>2</sub> (functional, 1% increments)
- **Accuracy**  
±2% @ 70 to 100% SpO<sub>2</sub>  
±3% @ 50 to 69% SpO<sub>2</sub>
- **Averaging**  
4, 8 or 16 pulse beats (selectable)
- **Calibration**  
Factory calibrated; no in-service calibration required
- **Alarm Ranges**  
Low: 50 to 100% (1% increments), and OFF  
High: 50 to 100% (1% increments), and OFF (Minimum low limit @ power up is 85%)
- **Pulse Strength**  
10-segment bargraph, 0-15 logarithmic scale; not proportional to pulse volume; 60 Hz update

### PULSE RATE (SpO<sub>2</sub>) or HEART RATE (ECG)

- **Range**  
20 to 350 bpm
- **Accuracy**  
Greater of ±2% or ±2 bpm over full range
- **Averaging**  
8 or 16 seconds (from SpO<sub>2</sub>);  
8 seconds (from ECG)
- **Alarm Ranges**  
Low: 20 to 350 bpm (1 bpm increments), and OFF  
High: 20 to 350 bpm (1 bpm increments), and OFF

### RESPIRATION (optional V3404P only)

- **Range**  
5 to 150 breaths/min
- **Sensitivity**  
7 levels, user selectable
- **Accuracy**  
Greater of ±2% or ±2 breaths/min over full range
- **Alarm Ranges**  
Low: 5 to 150 BrPM (1 breaths/min increments) and OFF  
High: 5 to 150 BrPM (1 breaths/min increments) and OFF
- **Minimum Signal**  
10 ml/s. (air volume passing thermistor)

### TEMPERATURE (optional V3404P only)

- **Range**  
32°F to 140°F (0°C to 60°C)
- **Accuracy**  
±1°C
- **Alarms**  
None

### ECG

- **Heart Rate Range**  
20-350 bpm
- **Heart Rate Accuracy**  
±2 bpm or ±2%, whichever is greater
- **QRS Detection**  
0.10, 0.12, 0.15 or 0.40 mV threshold
- **Lead Selection**  
I, II, III (3 lead), V, aVR, aVL or aVF (5 lead)
- **Display Gain**  
x1, x2, x4 or x8

### TRENDS

- SpO<sub>2</sub>, pulse (heart) rate, signal strength, respiration, and temperature data stored @ 30 sec intervals
- **Capacity**  
V3404P: 12-hour  
V3404: 21-hour

### SERIAL (PRINTER/REMOTE ALARM) & ANALOG OUTPUTS

- Serial port (DB-9) compatible with 3408 Printer  
*Data log at selectable intervals*  
5, 15, 30, 45, 60 secs, 5, 10, 15, 30, 60 min [SpO<sub>2</sub>, HR/PR, Pulse strength, (Resp, Temp)]
- **Trend at selectable intervals**  
30 secs, 1, 5, 10, 15, 30, 60 min.  
Waveform (ECG or pleth @ 50, 25 or 12.5 mm/s)
- Analog output channels (2), configurable for wave-forms, parameter values, or calibration option

### AUDIO OUTPUT (Pulse beep, Alarms)

15 levels < 85 dBA, and off (pulse beep) or silenced (alarms)

### POWER REQUIREMENTS

- AC Power options  
(12 VDC, 1 A output, with 4 kV isolation)
- **Wall Mount:** 105-125 V, 60 Hz, 90-110 V, 50 Hz
- **Tabletop:** 208-264 V, 50/60 Hz

### BATTERY

Sealed lead-acid, internally rechargeable  
Fully-charged continuous operation life of 1 to 50 minutes  
Maximum charging time of 6 hrs

### DIMENSIONS

- 3.5" H\* x 10" W x 5.5" D  
(8.89 cm H x 25.4 cm W x 14 cm D)  
\*Handle folded down

### WEIGHT

5 lbs. (2.27 kg)

### ENVIRONMENTAL

- **Operating Temperature**  
32°F to 131°F (0°C to 55°C)
- **Storage Temperature**  
-40°F to 167°F (-40°C to 75°C)
- **Relative Humidity** (non-condensing)  
15 to 95% (operating)  
10 to 95% (storage)

### CATALOG NUMBERS

- **V34041** ECG and SpO<sub>2</sub>
- **V3404P** ECG, SpO<sub>2</sub>, temperature, and respiration

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

Please read the Instructions for Use supplied with the product for detailed instructions, warnings and cautions.

### Smiths Medical PM, Inc.

Veterinary

N7W22025 Johnson Drive, Waukesha, Wisconsin 53186 USA

Phone: 262-513-8500 Fax: 262-542-0718 Toll-Free USA: 888-745-6562

www.surgivet.com

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