

# BM7Vet Pro

*Elite Performance / Uncompromising Value*



The BM7Vet Pro boasts a wide range of parameters including ECG, respiration, HR, dual temperature, EtCO<sub>2</sub> capability, NIBP and SpO<sub>2</sub>. Its 12.1" wide touchscreen color monitor offers multiple function and display views for user convenience. A built-in printer provides documentation of all measured values as well as up to 6 waveforms of clinical data.

Optional accessories include a Dual Invasive BP monitoring kit, Mainstream and Sidestream EtCO<sub>2</sub> sensors, and our Dual Gas module which measures both EtCO<sub>2</sub> and anesthetic gas agent volume.

Alarms and settings are easily customizable and are retained after turning off the power.

Superior data transfer and management via Wi-Fi capability, dual USB drives, and included proprietary BT-Link and BT-Link Mobile software.

## Superior Advantages

- ▶ ECG, SpO<sub>2</sub>, NIBP, respiration, 2 temperature (Option: EtCO<sub>2</sub>, Anesthetic Gas/O<sub>2</sub>, IBP)
- ▶ 12.1" color TFT touch screen with 6 wave forms (1024x768 pixels)
- ▶ Individual sweep speed setting for each parameter
- ▶ 168 full hours trend data are stored
- ▶ Multiple display modes for ease of viewing
- ▶ Screen freeze ON/OFF
- ▶ Enhanced & Extendible multi-parameter
  - Mainstream/Sidestream EtCO<sub>2</sub> (option)
  - Mainstream/Sidestream Anesthetic Gas/O<sub>2</sub> (option)
  - Dual Gas (Bionet)–EtCO<sub>2</sub> and anesthetic gas monitoring module
- ▶ Enhanced Data Management
  - Easy network connectivity, support wireless LAN
  - B2B, Up to 8 BM7Vet Pro veterinary monitors can be controlled by one of the networked BM7Vet Pro
- ▶ High-performance Measurement
  - Full disclosure
  - 48 hours of full disclosure waveforms provide
  - ST level, PVC count real-time display
  - 13 kinds of arrhythmia analysis
- ▶ Transportable
  - Li-ion battery with longer lifetime (Up to 2hrs for continuous operation / 4hrs using optional battery)
  - External HDMI output for large screen

# SPECIFICATIONS

## General

Display, Resolution	12.1" color TFT, LCD, 1024x768 pixels
Dimension, Weight	322(W)x250(H)x224.8(D) mm, Approx. 4.5kg
Trace	6 waveforms : 2*ECG, SpO <sub>2</sub> , RR or EtCO <sub>2</sub> or MGAS, 2*IBP Sweep speed : 6.25, 12.5, 25, 50 mm/sec
Indicators	Categorized alarms (3 priority levels) Visual alarm lamp handle QRS beep & SpO <sub>2</sub> , pulse beep Percent(%) SpO <sub>2</sub> , pitch tone Battery status, external power LED Touch screen, rotary knob
Interfaces	Power supply : AC 100-240V(50/60Hz) CD input connector : 18VDC, 2.8A Defibrillator sync.output: -Signal level: 0to 5V C6plus - Pulse width : 100 ± 10ms LAN digital output for transferring data Nurse call system connection -0.3A at 125 VAC -1A at 24 VDC External HDMI monitor connection USB barcode reader USB memory data storage / Software Up
Battery	Rechargeable Li-ion battery, 2 hours for continuous operation (Option: using additional battery total of 4 hours)
Thermal printer(option)	Speed : 25,50mm/sec, paper width : 58mm
Data Storage	168hours trends, 20cases of 10sec alarm waveform
Language	English, French, Spanish, Italian, German, Chinese, Russian, Czech, Polish, Turkish, Romanian, Portuguese Bulgarian, Hungarian, Korean

## Accessory

Standard Accessory	3 lead vet ECG cable	1ea
	NIBP extension tube (3m)	1ea
	NIBP vet cuff neonate disposable #1-#5	1set
	NIBP vet cuff infant reusable	1ea
	SpO <sub>2</sub> extension cable(2m)	1ea
	Esophageal ECG probe with temperature	1ea
	Extension cable for esophageal probe	1ea
	Transflectance SpO <sub>2</sub> probe	1ea
	Temperature probe (rectal/esophageal)	1ea
	DC adapter (18VDC, 2.5A)	1set
Optional Accessories	5 lead vet ECG cable	
	Temperature probe (skin)	
	B-Link automated record keeping software	
	IBP disposable pressure transducer kit	
	IBP reusable pressure transducer kit	
	Mainstream EtCO <sub>2</sub> airway adapter kit	
	Sidestream EtCO <sub>2</sub> airway adapter kit	
	ECG alligator clip (5ea)	
	3 lead ECG cable (snap type)	

## Optional Module

Mainstream EtCO <sub>2</sub> module (sensor)
Sidestream EtCO <sub>2</sub> module (sensor)
Anesthetic gas/O <sub>2</sub> module (sensor)
Dual Gas module (sensor)



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## Performance

### ECG

Leads Type	3-lead, 5-lead
Lead Selection	3-lead : I, II, III 5-lead : I, II, III, aVR, aVL, aVF, V
ECG Waveforms	3-lead: 1 channel 5-lead: 1/2/7 channels
Heart Rate Range	Horse,dog: 30 to 300 BPM, Puppy,cat: 30 to 350 BPM
Heart Rate Accuracy	± 1BPM or ± 1%, whichever is greater
Sweep Speed	6.25, 12.5, 25, 50 mm/sec
Filter	· Diagnosis : 0.05 to 150 Hz · Monitoring : 0.5 to 40 Hz · Moderate : 0.5 to 25 Hz · Maximum : 5 to 25 Hz
S-T Segment Detection Range	-2.0 to 2.0 mV
Arrhythmia Analysis	ASYSTOLE, VTACH, V-FIB, BIGEMINY, ACCVENT, COUPLET, IRREGULAR, PAUSE, PVC, RONT, TRIGMINY, VBRADY, SHORTRUN
Protection	Against electrosurgical interference and defibrillation

### Respiration

Method	Thoracic impedance
Channel Selection	RA-LA or RA-LL
Measurement Range	5 to 120 breath per minute
Accuracy	± 1 breath per minute
Apnea Alarm	Yes

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

Saturation Range	0 to 100%
Saturation Accuracy	70 to 100% ± 2 digits, 0 to 69% unspecified
Pulse Rate Range	30 to 254 BPM
Pulse Rate Accuracy	± 2 BPM

### NIBP-Suntech

Method	Oscillometric
Operation Mode	Manual / Automatic / Continuous
Pressure Range	0 to 300mmHg (accuracy : ± 3mmHg)
Measurement Range	Systolic: 40-260mmHg, 40 - 230mmHg, 40 - 130mmHg MAP: 26-220mmHg, 26 - 183mmHg, 26 - 110mmHg Diastolic: 20-200mmHg, 20 - 160mmHg, 20 - 100mmHg
Plus Rate Range	30-220 BPM, ± 2% or ± 3 BPM, whichever is greater

### Temperature

Channels	2
Measurement Range	0 to 50°C (32 to 122°F)
Accuracy	25 to 50°C: ± 0.1°C, 0 to 24°C: ± 0.2°C
Compatibility	YSI Series 400 temperature probes

### IBP (Option)

Channels	2
Measurement Range	-50 to 300mmHg
Accuracy	<100mmHg : ± 1mmHg >=100mmHg : ± 1% of reading
Plus Rate Measurement Range	0 to 300 BPM
Zero Balancing Range :	Range: ± 200mmHg Accuracy: ± 1mmHg Drift: ± 1mmHg over 24 hours
Transducer Sensitivity	5µV/V/mmHg

### Mainstream EtCO<sub>2</sub>, Sidestream EtCO<sub>2</sub> - Respronics (Option)

Measurement Range	0 to 150 mmHg, 0 to 19%
Accuracy	0-40mmHg ± 2mmHg, 41-70mmHg ± 5% of reading 71-100mmHg ± 8% of reading, 101-150mmHg ± 10% of reading
Respiration Rate	0 to 150 breath per minute (Mainstream EtCO <sub>2</sub> ) 2 to 150 breath per minute (Sidestream EtCO <sub>2</sub> )
Respiration Accuracy	± 1 breath per minute

### Anesthetic Gas / O<sub>2</sub>-Masimo (Option)

Method	Infra-red absorption characteristic
Mainstream	IRMA AX +
Sidestream	ISA OR+ / AX+
Gas	CO <sub>2</sub> , O <sub>2</sub> , N <sub>2</sub> O, Des, Iso, Enf, Hal, Sev
Warm-up Time	Mainstream (IRMA AX+) Iso accuracy mode : 45s Full accuracy mode : 60s Sidestream (ISA OR+ / AX+) : <20s
Sample Flow Rate(for ISA OR+ / AX+)	50 ± 10ml/min
Measuring Range	CO <sub>2</sub> : 0~15% N <sub>2</sub> O : 0~100% Hal/Iso/Enf : 0~8% Sev : 0~10% Des : 0~22% O <sub>2</sub> : 0~100%(ISA OR+)
Respiratory Rate	0~150BPM ± 1BPM

### Dual Gas-Bionet (Option)

Method	Sidestream
Gas	CO <sub>2</sub> , Iso, Sev, Enf, Hal, Des
Range, Accuracy	CO <sub>2</sub> : 0~10% ± (0.2 vol% + 4% relative) Hal/Iso/Enf /Hal : 0~6% ± (0.15 vol% + 4% relative) Des : 0~18% ± (0.15 vol% + 4% relative)
Respiration Rate	0~150BPM ± 1BPM

\* Specifications can be changed without prior notification

\* You may have distortion or signal noise when you use nonstandard or other brand's accessories

\* We strongly recommend you use only the authorized accessories which we supply

\* The ST algorithm has been tested for accuracy of the ST segment data

\* The significance of the ST segment changes need to be determined by a clinician