

## Patient Monitors



# Patient Monitors

## Patient Monitors

### CMS5000

CMS5000 Patient Monitor adopts Oscillometry for NIBP measuring, Photoelectric Oxyhemoglobin Inspection Technology combining Capacity Pulse Scanning & Recording Technology for SpO2 measuring. Systolic Pressure (SYS), Diastolic Pressure (DIA), Mean Pressure (MAP), SpO2 and Pulse rate (PR) can be accurately measured. Compact appearance, comprehensive functions, simple and convenient operation, which is applicable for hospitals, community medical treatment and family. Built-in rechargeable Li-polymer battery for uninterrupted monitoring. User-friendly interface. Display with 2.4" (320 × 240) colour TFT LCD and blue highlight LED. Visual and audible alarm for Systolic Pressure(SYS), Diastolic Pressure(DIA), Mean Pressure(MAP), SpO2 and Pulse rate(PR), and upper and lower limit of alarm can be set. Flash memory, storage for up to 2000 NIBP data or SpO2 data within 48-hour. Convenient and quick in inquiring measurement data. Optional parameter: temperature.

### Technical Specifications

#### NIBP monitoring

- Measurement method: Oscillometry (manual/auto/continuous)
- Auto measurement interval: adjustable from 1 to 255 minutes
- Resolution: 1mmHg
- Accuracy: Maximum Mean deviation  $\leq \pm 5\text{mmHg}$ , Maximum Standard deviation  $\leq 8\text{mmHg}$
- Self-check function
- Overpressure protection: double protection for software and hardware

#### Range Adult

Systolic pressure: 40mmHg ~ 270mmHg  
Mean pressure: 20mmHg ~ 235mmHg  
Diastolic Pressure: 10mmHg ~ 215mmHg

#### Range Neonatal

Systolic pressure: 40mmHg ~ 135mmHg  
Mean pressure: 20mmHg ~ 110mmHg  
Diastolic Pressure: 10mmHg ~ 150mmHg  
Upper and lower limit of alarm

#### SpO2 monitoring

- Continuous real-time measuring
- Adopt digital SpO2 technology, which has strong anti-interference capability
- Real-time display SpO2, pulse rate, SpO2 Plethysmogram, bar graph, SpO2 and Pulse rate(PR) trend graph
- Trend graph with the function of adaptive scaling
- Standard adult finger-clip probe, binding probe for neonatal is optional

#### SpO2 Measuring

- Range: 35% ~ 100% (Resolution: 1%)
- Accuracy:  $\pm 2\%$  in stage of 70% - 100%
- Range: 30bpm ~ 250bpm (Resolution: 1bpm)
- Accuracy:  $\pm 2\text{bpm}$  or  $\pm 2\%$ , whichever is greater

#### Physical Characteristics

- Dimension: 232mm (L) × 198mm (W) × 75mm (H)
- Weight: 1.15kg
- Certification documents
- Domestic registration, CE certification

#### Standard Accessories

- A power cord, A SpO2 probe
- An adult BP cuff
- An extending tube for blood pressure



# Patient Monitors

## Patient Monitors

### CMS5100

CMS5100 Patient Monitor adopts Oscillometry for NIBP measuring, Photoelectric Oxyhemoglobin Inspection Technology combining Capacity Pulse Scanning & Recording Technology for SpO2 measuring. Systolic Pressure (SYS), Diastolic Pressure(DIA), Mean Pressure(MAP), SpO2 and Pulse rate(PR) can be accurately measured. Compact appearance, comprehensive functions, simple and convenient operation, which is applicable for hospitals, community medical treatment and family.

#### Technical Specifications

##### NIBP monitoring

- Measurement method: Oscillometry (manual/auto/continuous)
- Auto measurement interval: Adjustable from 1 to 90 minutes
- Resolution: 1mmHg
- Accuracy: Maximum Mean deviation  $\leq \pm 5\text{mmHg}$ , Maximum Standard deviation  $\leq 8\text{mmHg}$
- Overpressure protection: Double protection for software and hardware.
- Self-check function

##### Range Adult

Systolic pressure: 40mmHg ~ 270mmHg  
Mean pressure: 20mmHg ~ 235mmHg  
Diastolic Pressure: 10mmHg ~ 215mmHg

##### Range Neonatal

Systolic pressure: 40mmHg ~ 135mmHg  
Mean pressure: 20mmHg ~ 110mmHg  
Diastolic Pressure: 10mmHg ~ 100mmHg  
Upper and lower limit of alarm

##### SpO2 monitoring

- Continuous real-time measuring
- Adopt digital SpO2 technology, which has strong anti-interference capability
- Real-time display SpO2, pulse rate, SpO2 Plethysmogram, bar graph, SpO2 and Pulse rate(PR) trend graph
- Standard finger-clip probe for adult , binding probe for neonatal is optional

##### SpO2 Measuring

- Range: 35% ~ 100% (Resolution: 1%)
- Accuracy:  $\pm 2\%$  in stage of 70% - 100%, and unspecified in stage of less than 70%.

##### Pulse Rate Measuring

- Range: 30bpm ~ 250bpm(Resolution: 1bpm)
- Accuracy:  $\pm 2\text{bpm}$  or  $\pm 2\%$ , whichever is greater.

##### Physical characteristics

- Dimension for product: 190mm(L)  $\times$  162mm(W)  $\times$  240mm (H)
- Weight: 1.6kg

##### Accessories

- Power cord and power adapter
- A SpO2 probe
- An adult NIBP cuff
- An extending tube for blood pressure



### CMS6000

8.4" color TFT display. Suitable for adult, pediatric and neonatal patients. Basic parameters (ECG, SpO2, NIBP) in a durable case for bedside monitoring and transport. Audible and visual alarms with adjustable alarm ranges. Powerful data management and storage capacity.

#### Technical Specifications

##### ECG

- Lead type: 5-lead
- Input: RA; LA; RL; LL; V
- Sweep speed: 12.5mm/s, 25mm/s, 50mm/s
- Accuracy:  $\pm$  bpm or  $\pm\%$ , whichever is greater
- Protection: Withstand 4000VAC / 50Hz voltage in isolation against electrosurgical and defibrillation
- S-T detection: YES, Arrhythmia analysis: YES
- Alarm: YES, audible and visual alarm, alarm events recallable

##### NIBP

- Method: Oscillometry
- Operation modes: Manual / Automatic / Stat
- Measurement unit: mmHg / KPa selectable
- Measurement types: Systolic, Diastolic, Mean
- Over-pressure protection: Yes

##### SpO2

- Measurement range: 0 - 100%
- Accuracy:  $\pm 2$ digit (70 ~ 100%);
- 0 ~ 69% unspecified

#### Standard Configuration

- ECG
- NIBP
- SpO2

#### Optional Configuration

- RESP
- 2-TEMP
- 2-IBP
- ETCO2
- Network
- Thermal Recorder



## Patient Monitors

### CMS6500

7" TFT, touch screen, led backlight , 800x480 pixels. Visual and Audio alarms, adjustable. Patient management, name and age and id. Network with Central Station Software. Audio volume adjustable form 1 ~ 8 level. Multi-language options: Germany, France, Italian, Turkey. Built-in removable and rechargeable lithium battery. UI with both Keypad and Touch Screen operation. Memory: Built-in memory or miniSD Memory card. Store more than 1000 pieces of archive. Powerful data storage and management, Trend graph, Trend table. Arrhythmia analysis and S-T segment analysis.

#### Technical Specifications

##### ECG

- Lead mode:3-lead or 5-lead
- HR range:15 ~ 300 bpm
- Accuracy:±2bpm or  $\pm 2\%$ , which is greater

##### NIBP

- Method: Oscillometry
- Mode: Manual / Auto / Continuous
- Measurement Range: 25 ~ 260mmHg
- 

##### SPO2

- Measurement Range: 0 ~ 100%
- Accuracy:  $\pm 2\%$  (70% ~ 100%)
- 0% ~ 69% unspecified

##### Pulse Rate

- Measurement Range: 25 ~ 250 bpm
- Accuracy:  $\pm 3$  bpm

##### Physical Characteristics

- Dimension: 191mm (L) x 160mm (W) x 244mm (H)
- Net weight: 2.1KG





### CMS6800

8" TFT, led backlight, 800x480 pixels. Visual and Audio alarms, adjustable. Patient management, name and age and ID. Network with Central Station Software. Audio volume adjustable form 1 ~ 8 level. Multi-language options: Germany, France, Italian, Turkey. Built-in removable and rechargeable lithium battery. UI with both Keypad and Touch Screen operation. Memory: Built-in memory or miniSD Memory card. Store more than1000 pieces of archive. Powerful data storage and management, Trend graph, Trend table. Arrhythmia analysis and S-T segment analysis.

#### Technical Specifications

##### ECG

- Lead mode: 3-lead or 5-lead
- HR range: 15 ~ 300 bpm
- Accuracy:  $\pm 2$ bpm or  $\pm 2\%$

##### NIBP

- Method: Oscillometry
- Mode: Manual/Auto/Continuous
- Measurement Range: 25 ~ 260mmHg

▪

##### SPO2

- Measurement Range: 0 ~ 100%
- Accuracy:  $\pm 2\%$  (70% ~ 100%)
- 0% ~ 69% unspecified

##### Pulse Rate:

- Measurement Range: 25 ~ 250 bpm
- Accuracy:  $\pm 3$  bpm

##### Physical Characteristics

- Dimension: 210mm (L) x 130mm (W) x 210mm (H)
- Net weight: 2.3KG



### CMS7000

12.1" High brightness TFT LCD display. Portable, streamline handle design. Big figure display. ECG Waveforms of 7-lead displayed in one screen. 96-hour tabular and graphic trends & date storage. Compatible and self identify 3-lead and 5-lead ECG cable. NIBP dual Over Pressure Protection. Isolated floating, anti-defibrillation protected and anti high-frequency interference.

#### Technical Specifications

##### Standard Parameter & Configuration

- 3/5 lead ECG
- RESP
- SpO2
- NIBP
- TEMP
- PR
- Network

##### Optional Parameter & Configuration

- 2-IBP
- Recorder
- 12 lead ECG
- ETCO2



### CMS7000 Plus

This equipment with touch screen can monitor such parameters as ECG, RESP, SpO2, NIBP, and Dual-channel TEMP. It integrates parameter measuring module, display and recorder in one device to form a compact and portable device. At the same time, its built-in replaceable battery provides convenience for patient moving.

#### Main Features

- Elegant appearance, clear marks, standard interface, oxyCRG screen, trend graph, big characters, other BED observation, which are convenient for user.
- Applicable for adult, paediatric and neonatal.
- Standard parameters of ECG, RESP, NIBP, SpO2 and dual-channel TEMP.
- IBP, CO2, built-in printer, curving handle, moving bracket and hanging bracket are optional.
- Finish all operations by touch screen or keys and knobs.
- Operation interface in Chinese and English. (Optional languages: French, German, Italian, Dutch, Portuguese, Turkish, Spanish and Polish)
- Design with full built-in module, stable and reliable performance.
- 12.1" colour TFT LCD with high-resolution displays patient parameter and waveform, and alarm, bed No., clock, state and other information provided by the monitor synchronously.
- Monitoring contents scan speed, volume and output contents can be set optionally.
- Storage of 480-hour trend data, and review of 40-second holographic waveform.
- Storage and review of 72-hour ECG waveform.
- Function of NIBP review, storage for up to 2400 NIBP data.
- Adopt digital SpO2 technology, which has strong anti-interference and anti-weak filling capability.
- Calculation of drug concentration.
- Network: connecting with central station, other Bed observation and software updating.
- Built-in rechargeable battery for uninterrupted monitoring.
- Print ECG, SpO2, RESP, BP and temperature data with one-key.

#### Technical Specifications

- Dimension: 310mm (L) × 140mm (W) × 263 mm (H)
- Net weight: 3.8 kg

#### Standard Accessories

- Adult SpO2 probe (5-pin)
- Adult NIBP cuff
- Extending tube for blood pressure
- ECG lead
- ECG electrode
- Temperature probe
- Power cord
- User Manual

#### Optional

- Thermal recording paper





### CMS8000

#### Main Features

- High resolution 12.1" color TFT display.
- Lightweight, compact and portable.
- ECG, APO2, NIBP, RESP, 2-TEMP, PR; optional: 2-IBP, ETCO2 and thermal printer
- Built-in rechargeable lithium battery
- ECG waveforms of 7-leads display on the same screen
- 72-hours graphic and tabular trends of all parameters; 72 alarm events of all parameters recall
- 32 seconds full-disclosure waveform review ; 500 NIBP measurement date can be storage and recall
- Date and waveforms colour be adjustable
- Arrhythmia analysis and S-T segment analysis
- Suitable for adult, paediatric and neonatal patient

#### Technical Specifications

##### NIBP

- Method: Oscillometry
- Modes: Manual/Auto/Continuous
- Auto measure time: Adjustable
- Measurement rang: 10 - 270mmHg

##### ECG

- Lead mode: 3-lead or 5-lead
- Lead selection: I; II; III; avR; avL; avF; V
- Heart rate range: Adult: 15-300bpm; Paediatric/Neonatal: 15 - 300bpm
- ECG waveform: 2 channels
- Accuracy:  $\pm 1$  bpm or  $\pm 1\%$
- S-T segment detection Measurement rang : - 0.2mv ~ 2.0mv
- Alarm: audible and visual alarm, alarm events review

##### SPO2

- Measurement range: 0 - 100%
- Accuracy: 70 - 100%,  $\pm 2\%$  0 - 69%, unspecified

##### Pulse rate

- Range: 20 - 254bpm
- Accuracy:  $\pm 3$ bpm

##### Respiration

- Method: RA - LL impedance
- Range: Adult: 0 - 120rpm; pediatric/neonatal: 0 - 150rpm
- Apnca alarm: Yes

##### Temperature

- Range: 0 - 50°C
- Apnca: 0.1°C
- Channel: Dual-Channel



# Patient Monitors

## Patient Monitors

### CMS9000

Colour TFT Screen, waveform up to 8 channels . Light and portable with build-in rechargeable battery. Up to 10 kinds of monitor parameters. Arrhythmia analysis, pace-marker detection and S-T Segment analysis. 72 hour storage and review of trend grams and tables, 40 second review of holographic waveforms. Built-in recorder (option). All-round monitor of adult, paediatric and neonatal. Electrosurgical unit and defibrillation protected. Standard parameters: ECG, NIBP, SPO2, Respiration, Temperature, Pulse rate . Option parameters: EtCO2, CO, IBP, Thermal Printer.

#### Technical Specifications

##### ECG

- 5-lead or 3-lead selectable
- Input: 5-lead: RA; LA; RL; LL; V or R; L; N; F; C
- Lead selection: I; II; III; avR; avL; avF; Vx; CAL
- Gain selection: 12.5mm/s, 25mm/s, 50mm/s
- Accuracy:  $\pm 1$  bpm or  $\pm 1\%$ , whichever is greater
- Protection: Withstand 4000VAC / 50Hz voltage in isolation against electrosurgical and defibrillation
- Calibration signal: 1mV  $\pm$  5%
- Operation modes: Diagnostic, Monitor, Surgery
- Alarm range: Adult: 15 - 300bpm
- Paediatric/Neonatal: 15 - 350bpm
- Alarm range: -2.0mV ~ 2.0mV
- S-T detection: YES, Arrhythmia analysis: YES
- Alarm: YES, audible and visual alarm, alarm events recallable

##### SpO2

- Measurement range: 0 - 100%
- Accuracy:  $\pm 2$  digit (70 ~ 100%);
- 0 ~ 69% unspecified
- Alarm range: 0 - 100%

##### Temperature

- Resolution: 0.1°C
- Channel: Dual-channel
- Alarm range: 0 - 50°C

##### Respiration

- Method: RA-LL impedance
- Pediatric/Neonatal: 6 - 150rpm
- Alarm range: Adult: 6 - 120rpm
- Pediatric/Neonatal: 6 - 150rpm
- Apnea alarm: YES

##### NIBP

- Method: Oscillometry
- Operation modes: Manual / Automatic / STAT
- Measurement unit: mmHg / KPa selectable
- Measurement types: Systolic, Diastolic, Mean
- Measurement range: Adult: 10 - 270mmHg
- Over-pressure protection: YES
- Resolution: 1mmHg
- Accuracy: Mean error and standard deviation per ANSI / AAMI SP-10
- Alarm: Systolic, Diastolic, Mean

##### Optional

- EtCO2
- CO
- IBP



### CMS9100

15" TFT, led backlight, 1024 x 768 pixels. Visual and Audio alarms, adjustable. Patient management, name and age and ID. Network with Central Station Software. Audio volume adjustable form 1 ~ 8 level. Multi-language options: Germany, France, Italian, Turkey. Built-in removable and rechargeable lithium battery. Memory: Built-in memory or miniSD Memory card. Store more than 1000 pieces of archive. Powerful data storage and management, Trend graph, Trend table. 120-hour graphic and tabular trends of all parameters. 120 seconds frozen waveforms. 1000 pieces of NIBP record storage. 100 pieces of regular alarms review. 100 pieces of ARR alarms storage. Arrhythmia analysis and S-T segment analysis.

### Technical Specifications

#### ECG

- Lead mode: 3-lead or 5-lead
- HR range: 15 ~ 300 bpm
- Accuracy:  $\pm 2$ bpm or  $\pm 2\%$ , which is greater

#### Respiration

- Measurement Range: 0 ~ 120
- Apnea alarm

#### SPO2

- Measurement Range: 0 ~ 100%
- Accuracy:  $\pm 2\%$  (70% ~ 100%)
- 0% ~ 69% unspecified

#### Pulse Rate:

- Measurement Range: 25 ~ 250 bpm
- Accuracy:  $\pm 3$  bpm

#### NIBP

- Method: Oscillometry
- Mode: Manual / Auto / Continuous
- Measurement Range: 25 ~ 260mmHg

#### Temperature

- Measurement Range: 0 ~ 50°C
- Resolution: 0.1°C
- Dimension: 365mm (L) x 150mm (W) x 340mm (H)
- Net weight: 4kg

#### Optional

- Parameters: 12 lead ECG, Dual-IBP, EtCO2, Thermal Recorder
- Navigating options: mouse, keyboard
- Other options: Wireless LAN



### CMS9200

CMS9200 features in high cost-performance, high safety and low power consumption. To ensure monitoring quality and reduce operation risk, it adopts full-isolation (floating), ECG defibrillation-proof protection, ECG anti-high frequency surgical unit and NIBP dual-overpressure protection.

#### Technical Specifications

##### Recorder

- Print Mode thermal array
- Recording Width 48mm
- Paper Speed 25mm/s, 50mm/s
- Quantity of Printing Waveform dual-channel

##### Physical Characteristic

- Dimension 365mm (L) x 150mm (W) x 340mm (H)
- Net Weight 4.0 Kg

##### Standard Accessories

- Adult SpO2 probe (5-pin)
- Adult NIBP cuff
- Extending tube for NIBP
- ECG lead
- ECG electrode
- Power cord
- User Manual
- Temperature probe

##### Optional

- IBP sensor
- IBP cable
- CO2 module
- CO2 collection pipe
- IBP integration module



### GIMA BM1

GIMA BM1 MONITOR SpO2 + NIBP optional Temp. and EtCO2. Professional multi-parameter monitor in compact size.

#### Main Features

- Only 60mm (2.36 inch) thick and 1.0 Kg (2.2lb)
- Easy mounting to an IV pole
- 4.5 hours battery operation (rechargeable li-ion)
- Top handle and rear grip
- Monitoring mode and spot check mode
- 4.3" colour TFT monitor for clear view 480 x 272 pixels
- Touch key and wheel navigation
- External VGA output for large LCD monitor (option)
- Saves 128 hours trend and 400 cases
- Multilanguage internal software (GB, DE, FR, IT, PT, PL, RO, HU, ES, CZ, BG, RU, TR, CN)
- Highly advanced CO2 monitoring technology
- Plug and play EtCO2 module

#### Technical Specifications

- Same accessories of BM3 and BM5 line
- SpO2, TEMP, EtCO2, NIBP technical specifications same as BM5
- Size: 190mm (L) x 125mm (W) x 60mm (H)
- Weight: 1 kg





### GIMA BM3

Heart/pulse rate. ST analysis, PVC count display 3 lead ECG (5 lead optional). Non-invasive blood pressure (NIBP) Nellcor Pulse oximetry (SpO2) pitch tone. Impedance respiration. Temperature (sensor is optional). Pacemaker detection indicated on ECG display. Battery and direct DC (18 VDC) input (not for recharge). Built-in printer (58 mm). 120 hours memory trend capacity. Remote alarm function. 20 alarm memory. Wired or wireless LAN and HL7. Internal software selectable in GB, DE, FR, IT, PT, PL, RO, HU, ES, CZ, BG, RU, TR, CN. User manual: English (on request: Italian, Spanish, French, German)

#### Technical specifications

- Display: 7" colour TFT (800x480) up to 4 waves
- Dimensions/Weight: 238mm x 250mm x 163mm; 3.1 kg
- Categorized alarms (3 priority levels), external
- Power LED, heart rate tone, battery status
- Thermal printer: 25, 50 mm/sec (paper width 58 mm)
- Battery: internal battery: Li-ion
- Operating time: 2 hours (fully charged)
- Interfaces: Lan digital output for transferring data
- DC input connector: 18 VDC, 2.5 A max
- Operating voltage: 100-240 V, 50-60 Hz

#### ECG

- Leads: 3 leads, 5 leads (option)
- Heart Rate Range: 30 to 300 bpm
- Heart Rate Accuracy:  $\pm 3$  bpm
- ST level: yes
- PVC Count display: yes
- Bandwidth: 0.5 Hz to 40Hz
- ECG Size (Sensitivity): 0.5, 1, 2, 4 mV/cm
- Pacemaker Detection Mode: Indicator on waveform display
- CMRR: >90 dB at 50 or 60Hz
- Input Dynamic Range:  $\pm 5$  mVAC,  $\pm 300$  mVDC
- Defibrillator Discharge: <4 s
- Arrhythmia analysis: VTAC/VFIB/ ASYSTOLIC

#### SpO2

- % Saturation Range: 0% to 100%
- Pulse Rate Range: 0 to 254 bpm
- SpO2 Accuracy: 70% to 100%  $\pm 2$  digits
- Pulse Rate Accuracy:  $\pm 2$  bpm

#### Respirations

- Range: 5 to 120 breaths/min
- Accuracy:  $\pm 3$  breaths/min

#### Temperature Unit

- Range: 15° to 45°C (59°F to 113°F)
- Accuracy:  $\pm 0.1^\circ\text{C}$
- Compatible with: Y SI Series 400 Temperature Probes

#### NIBP

- Technique: Oscillometric
- Measurement Modes: Manual: Single measurement
- Auto: Automatic intervals adjustable
- Stat: Continuous measurement for 5 minutes
- Cuff pressure display: 50 to 300 mmHg
- B.P. measurement range: Systolic: 0 to 260 mmHg
- Mean Arterial Pressure: 30 to 220 mmHg
- Diastolic: 20 to 200 mmHg
- Adjustable Cuff Inflation Pressure

#### Standard accessories

- 3 lead patient cable (ECG)
- Disposable electrodes: 10 pcs
- NIBP tubing 3 m
- Adult bracelet 25-35 cm
- Pediatric bracelet
- SpO2 sensor reusable
- SpO2 sensor extension cable 2 m
- DC adaptor (18 VDC, 2.5A)
- Thermal printer
- Rechargeable battery
- User manual (English, Italian)



### GIMA BM5 - 7 or 12 channels

High-performance ECG analysis ST level PVC count display 13 kinds of Arrhythmia analysis 7 or 12 channels (please indicate). 10.4" colour TFT screen with 6 waveforms. Visible alarm lamp handle. SpO2 technology with very low-perfusion detection. SpO2 pitch tone. 58mm built-in chart recorder. Graphical and tabular trends of printing. LAN or wireless LAN. 120 full hours trend data stored. Direct DC input for vehicle transport. Li-ion battery with long life time. Connection to central monitoring system. Selectable software language (English, French, Spanish, Italian, German). Standard accessories as BM3 monitor.

#### Technical Specifications

- Dimensions/Weight: 270mm x 185mm x 250mm; 4 kg
- Trace: 6 waveform (ECGx2, SpO2, RR or EtCO2 IBPx2)
- Thermal printer: 25, 50 mm/sec (paper width 58 mm)
- Battery: Li-ion (2 hours operating time)
- DC input connector: 12 to 18 VDC, 2.5A max
- Operating voltage: 100 - 240 V, 50 - 60 Hz
- Indicators:
  - Categorized alarms (3 priority levels)
  - Visual alarm lamp handle
  - Heart rate
  - SpO2 pulse pitch tone
  - Battery status
  - External power led
- Interfaces:
  - Lan digital output for transferring date
  - Nurse call system connection
  - Defibrillator sync. Output

#### SpO2

- % Saturation Range: 0% to 100%
- Pulse Rate Range: 0 to 254 bpm
- SpO2 Accuracy: 70% to 100%  $\pm$  2 digits
- Pulse Rate Accuracy:  $\pm$  2 bpm

#### ECG

- Pacemaker detection mode: Indicator on waveform display
- Protection against electrosurgical interference + defibrillation
- S-T Segment detection range: - 2.0 to 2.0 mV
- Heart rate range:
  - Adult: 30 - 300 bpm
  - Neonate/paediatric: 30 - 350 bpm
- Lead 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: 3/7 channels
- Heart rate accuracy:  $\pm$  1 bpm or  $\pm$  1%,
- Filter:
  - Diagnostic mode: 0.67 - 150 Hz
  - Monitoring mode 0.67 - 40 Hz
  - Surgical mode: 5 - 25 Hz

#### NIBP

- Technique: Oscillometric with linear deflation
- Measurement
  - Adult pressure: 20 to 260 mmHg
  - range:
    - Paediatric pressure: 20 to 230 mmHg
    - Neonate pressure: 20 to 120 mmHg
- Cuff pressure display: 0 to 300 mmHg
- B.P. measurement
  - Systolic: 40 to 270 mmHg
  - range:
    - Mean: 20 to 230 mmHg
    - Diastolic: 10 to 210 mmHg

#### EtCO2

- Measurement mode: Side stream
- Measurement range: 0 ~ 150 mmHg 0 to 19%
- Respiration range: 2 ~ 150 bpm
- Respiration accuracy:  $\pm$  1 breath per min.

#### TEMPERATURE UNIT

- Range: 15° to 45°C (59°F to 113°F)
- Accuracy:  $\pm$  0.1°C
- Compatible with: YSI Series 400 Temperature Probes

#### IBP

- Channels: 2
- Measuring range: -50 to 300 mmHg
- Measuring
  - $\pm$  1 mmHg ( < 100 mmHg)
  - accuracy:  $\pm$  1 % of reading( > 100 mmHg)
- Pulse rate counting range: 0 to 300 beats/min
- Zero balancing:
  - Range  $\pm$  200 mmHg
  - Accuracy  $\pm$  1 mmHg
  - Drift  $\pm$  1 mmHg over 24 hours

#### RESPIRATIONS

- Range: 5 to 120 breaths/min
- Accuracy:  $\pm$  1 breath/min
- Apnea alarm: yes

#### Standard Accessories

- Same as BM3



### HMS6500

HMS6500 is a portable self-examination machine with touch screen. Lightly touch corresponding icons, ECG, Blood pressure, SpO2, PR, TEMP, Blood glucose can be measured and then be transmitted via network for further analysis. At the same time, data also can be uploaded to data centre for user viewing data and ECG within 10 seconds. Furthermore, user with gold and silver card can obtain professional opinion of examination data from different experts. User registered with telephone number can receive the messages after examination.

#### Main Features

Display mode: 7" colour touch screen LCD with high-resolution. Waveform and data colour can be set optionally. 7-lead ECG display (optional: 12-lead). Adopt digital SpO2 technology, which has strong anti-interference and anti-weak filling capability. User data terminal of PHMS health management system. ECG, Blood pressure, SpO2, PR, TEMP, Blood glucose can be measured within one minute. Measured data can be uploaded to PHMS data management centre. Network connection mode: 3G, WIFI, wired. Built-in rechargeable lithium battery for uninterrupted monitoring. Standard parameters of ECG, SpO2, Blood pressure, TEMP and PR. Optional parameter: Blood glucose.

#### Technical Specifications

##### ECG

- Wave 7-channel; ECG Measuring Range 15 ~ 300bpm
- Display Error  $\pm 1\%$  or  $\pm 1$  bpm; Resolution 1 bpm
- Scan Speed for Waveform 5mm/s

##### SpO2

- Measuring Range 0 ~ 100 %; Resolution 1 %
- Accuracy 70% ~ 100%  $\pm 2\%$ ; 0% ~ 69% unspecified

##### Pulse Rate(PR)

- Measuring and Alarm Range 0~250bpm
- Resolution 1bpm
- Measuring Accuracy or  $\pm 2\%$ ,

##### Blood pressure

- Method Oscillometry
- Mode Manual
- Measuring Range 10~270mmHg
- Accuracy  $\pm 10\%$  or  $\pm 8$ mmHg
- Over-pressure Protection Adult Mode:  $315 \pm 10$  mmHg

##### Temperature Unit

- Channel single channel
- Measuring and Alarm Range 0 ~ 50C
- Resolution 0.1C
- Accuracy 0.1C

##### Physical Characteristic

- Dimension: 190mm (L)  $\times$  160mm (W)  $\times$  240 mm (H)
- Net Weight: 2.1 Kg

##### Blood glucose

- Sample capillary whole blood
- Sample Type for Calibration vein plasma
- Test Range 40mg/dL ~ 500mg/dL
- Test Time 25 seconds
- Memory 220 results

##### Standard Accessories:

- Integration extension cable (5-pin)
- Adult fingertip SpO2 probe (DB9)
- Adult NIBP Cuff; Air pipe for NIBP
- Suction ball for Limb clamp (EU standard)
- ECG 5-lead wire: AIP0336 and AIP0210 (EU standard)
- Temperature probe; Power cord; Power adapter
- USB wireless network card
- ECG electrode; User Manual

##### Optional

- 10-lead suction ball for dynamic ECG
- 10-lead wire for monitoring
- 3G wireless network card
- Blood Glucose Test Strip
- Blood Glucose Meter



### HMS9800

HMS9800 is a portable and intellectualized self-examination machine, simple in operating and fashion in appearance. ECG, Blood pressure, SpO2, TEMP, Blood glucose, height and weight can be measured within one second, and measured data can be transmitted to experts via network for further analysis, which is convenient for user consulting. At the same time, data also can be uploaded to data centre for user viewing data and ECG within 10 seconds. Furthermore, user with gold and silver card can obtain professional opinion of examination data from different experts. User registered with telephone number can receive the messages after examination.

#### Features:

Display mode: 17" colour LCD with high-resolution. 7-lead ECG display and one-channel SpO2 display. Adopt digital SpO2 technology, which has strong anti-interference and anti-weak filling capability. Only be suitable for adult. User data terminal of PHMS health management system. ECG, Blood pressure, SpO2, PR, TEMP, Blood glucose, weight and height within one minute can be measured. Measured data can be uploaded to PHMS data management centre. Select different experts for consultation. Network connection mode: 3G. Standard parameters of ECG, SpO2, Blood pressure, TEMP, blood glucose and weight.

#### Technical Specifications

##### ECG

- Lead Mode 5-lead; Gain  $\times 1$ ; Lead Selection I, II, III, avR, avL, avF, V
- Wave 7-channel; ECG Measuring Range 15 ~ 300bpm
- Display Error:  $\pm 1\%$  or  $\pm 1\text{bpm}$ (which is greater)
- Resolution: 1bpm; Scan Speed for Waveform 25mm/s

##### SpO2

- Waveform one-channel
- Measuring Range 0 ~ 100 %; Resolution 1 %
- Accuracy: 70% ~ 100%  $\pm 2\%$ ; 0% ~ 69% unspecified

##### Blood pressure

- Method Oscillometry
- Mode Manual
- Measuring Range 10 ~ 270mmHg
- Accuracy  $\pm 10\%$  or  $\pm 8\text{mmHg}$ , which is greater
- Over-pressure Protection Adult Mode:  $315 \pm 10 \text{ mmHg}$

##### TEMP

- Channel single channel
- Measuring and Alarm Range 0 ~ 50C
- Resolution 0.1C; Accuracy 0.1C

##### Blood glucose

- Sample capillary whole blood
- Sample Type for Calibration vein plasma
- Blood Size about 3ul
- Test Range 2.2mmol/L ~ 27.8mmol/L (40mg/dL ~ 500mg/dL)
- Test Time 25 seconds
- Calibration Curve automatically select test curve by the correction number
- Memory 220 results

#### Physical Characteristic

- Dimension: 108mm  $\times$  52mm  $\times$  250mm
- Net Weight: 48 Kg

#### Standard Accessories

- Adult fingertip SpO2 probe
- Suction ball for Limb clamp (EU standard)
- ECG 5-lead wire (EU standard)
- Power cord, Power adapter
- Blood Glucose Test Strip
- 3G wireless network card
- Blood Glucose Meter
- Temperature probe
- Adult NIBP Cuff
- Air pipe for NIBP
- User Manual

