



THE **YM6000** PATIENT MONITOR

High Technology & Easy User Interface



The YM6000 is sophisticated monitor with best technologies.

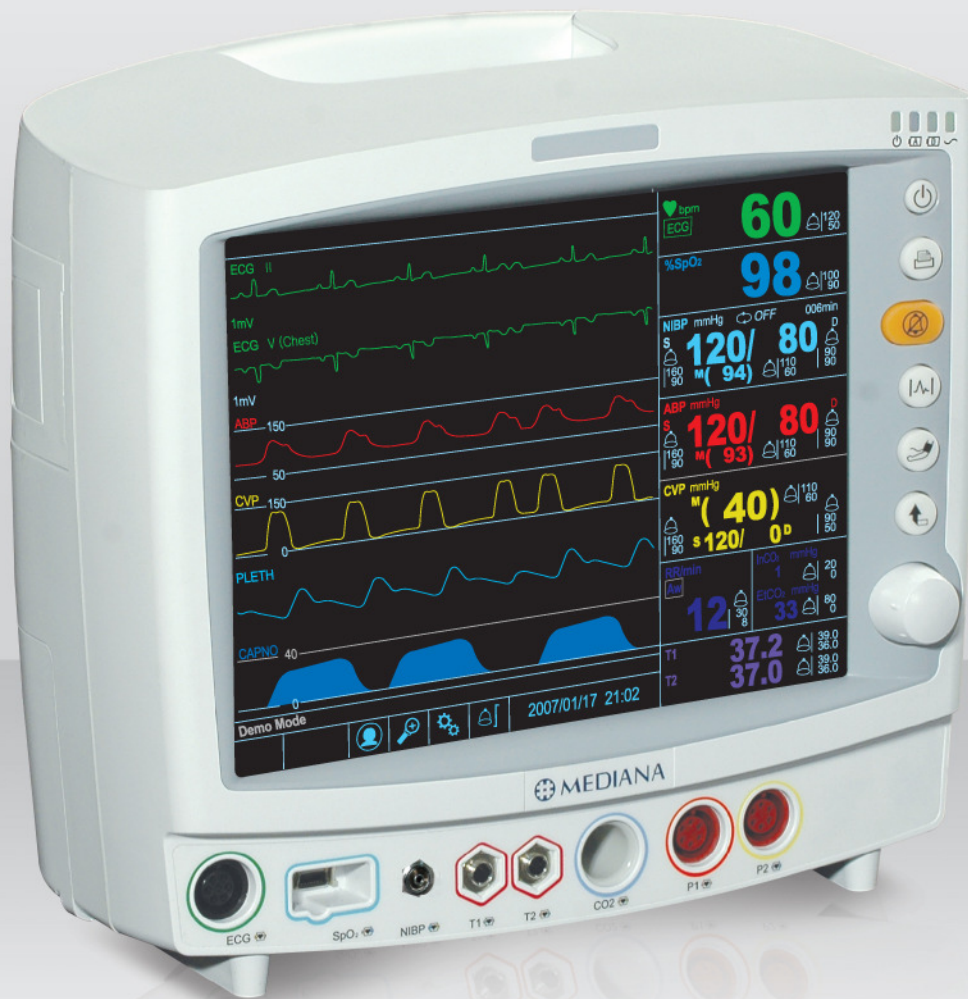
The dynamic linear deflation NIBP module guarantees greater patient comfort, shorter measurement time and improved accuracy for all adult, pediatric and neonate.

The new SpO₂ module with sensors lets you take full advantages of the ongoing advances in pulse oximetry.

Up to 24hrs tabular and graphical trends show all parameters to support clinician's decision at every necessary time.

Central monitoring system displays real time and dual waveforms (Standard model) or 4 analysis waveforms enable a single clinician to care 8 to 16 patients effectively.

" Progressive YM6000 Multi-Parameter Patient monitor. "



Progressive YM6000 Multi-Parameter Patient Monitor Provides full parameters.

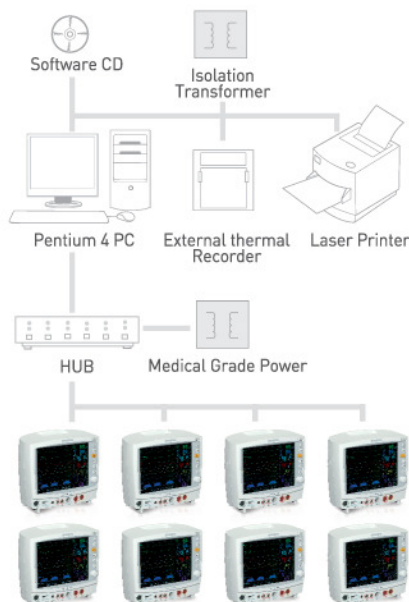
THE YM6000 PATIENT MONITOR



- Available parameters including 3 or 5 lead ECG, Respiration, NIBP, SpO₂, 2 temperatures. Included battery and optional 2IBP, EtCO₂, and built-in printer.
- High quality 12.1 inch color TFT LCD screen enables you to monitor 6 traces with 10 numerics vital sign clearly even under the most difficult lighting conditions.
- Color coded 6 keyboards and a trim knob admits to clinicians quickly access to monitoring functions controls within a second.
- Optimized rechargeable battery and wheeled mobile cart integrated top handle are ensured continuous monitoring during transport between the care sites.
- Connect to the central monitoring system to receive alarm signal automatically when the patient's condition turns critical. Also the stored event or real time vital sign can be re-called to display or print on the optional integrated dual channel.

YM9000 CENTRAL MONITORING SYSTEM

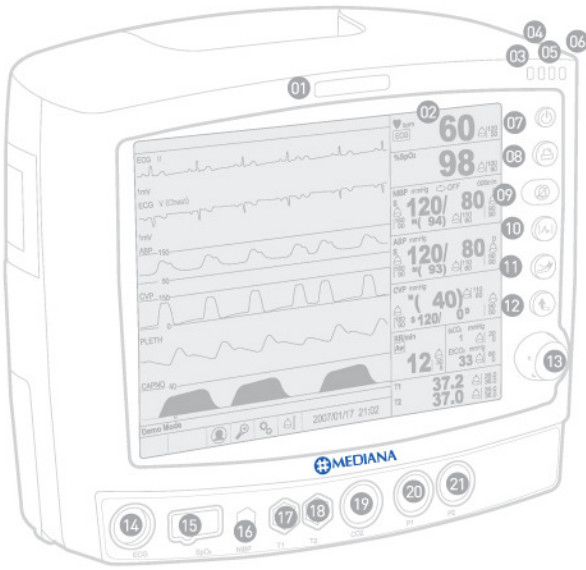
The YM9000 central monitoring system provides the centralized display with real-time physiological waves and the values of each parameter. It also provides the function which can review 48 hours data history, including full sized waves, alarm history and trends.



Specification

Standard : software CD, manual, external thermal recoder. Isolation transformer.
Optional : HUB, Laser printer, PC/Monitor, LANcard

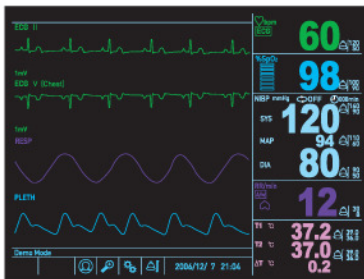
PC	Up to 8 beds	Up to 16 beds
Model	HP Pavilion t1221	Compaq XW6000
CPU	Min.pentium4,2.0GHz	Min.Intel Xeon,2.0GHz
Memory	Min.512Mbyte	1Gbyte
O/S	window2000pro	window2000pro
Video memory	Min.16Mbyte	Min.16Mbyte
Sound card	0	0
Speaker	0	0
Monitor	Min.17"resolution	Min.17"resolution
	1280x1024	1280x1024



YM6000 FRONT PANEL CONTROL AND CONNECTORS

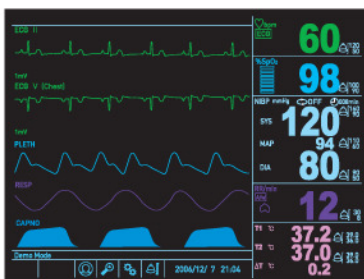
- | | |
|----------------------------------------|--------------------------|
| 01 Visual alarm indicator | 12 Return button |
| 02 TFT LCD (Liquid crystal display) | 13 Trim knob |
| 03 Power on indicator | 14 ECG connector |
| 04 Battery charging status indicator A | 15 SpO2 connector |
| 05 Battery charging status indicator B | 16 NIBP connector |
| 06 AC indicator | 17 Temperature channel 1 |
| 07 Power button | 18 Temperature channel 2 |
| 08 Print button | 19 EtCO2 connector |
| 09 Alarm silence/ suspension button | 20 IBP connector 1 |
| 10 Freeze button | 21 IBP connector 2 |
| 11 NIBP start/ stop button | |

YM6000 PARAMETERS AND ORDERING INFORMATION



- Unit Code# PAA20-0
Standard with LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature
- Unit Code# PAA20-P0
Standard with Printer and LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature

- Unit code# PAA20-0B
Standard with 2IBP and LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature, 2IBP
- Unit Code# PAA20-P0B
Standard with 2IBP, printer and LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature, 2IBP



- Unit Code# PAA20-0E
Standard with EtCO2 and LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature, EtCO2
- Unit Code# PAA20-P0E
Standard with EtCO2, printer and LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature, EtCO2

- Unit Code# PAA20-0BE
Standard with 2IBP, EtCO2 and LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature, 2IBP, EtCO2
- Unit Code# PAA20-P0BE
Standard with 2IBP, EtCO2, Printer and LAN card
Parameters : ECG, Respiration, NIBP, SpO2, Temperature, 2IBP, EtCO2

YM6000 FEATURES AND SPECIFICATIONS

Display

Screen Size	246.0 mm × 184.5 mm (12.1 inches measured diagonally across the TFT-LCD screen)
Screen Type/Color	Liquid Crystal Display (LCD) Color Cold Cathode Fluorescent Backlit
Resolution	800 × 600 pixel

Physical Characteristics and Printer

Instrument	
Dimensions	341 × 305 × 172 [mm] (W × H × D) including a handle and excluding options and accessories
Weight	5.5kg excluding optional configurations and accessories

Printer (Optional)

Type	Thermal
Weight	150 g
Resolution	8 dot/mm
Number of channels	1 to 2 channels
Paper Width	50 mm
Paper Speeds	25.0 mm/s and 50.0 mm/s

Electrical

Instrument	
Power Requirements	AC Mains 100Vac-240V-50 Hz/60 Hz, 63-110VA

Battery

Recharge	12 hours with monitor turned on/off
Two batteries typically provide 2 hour of battery life when fully charged with no printing, no external communication, no audible alarm sound and one NIBP measurement per 15 minutes at 25°C.	
Type	Ni-MH

Environmental Conditions

Operation	
Temperature	10°C to 40°C (50°F to 104°F)
Humidity	15% RH to 90% RH, non-condensing
Altitude	700hPa-1060hPa

Transport and Storage (in shipping container)

Temperature	-20°C to 50°C (-4°F to 122°F)
Humidity	15% RH to 95% RH, non-condensing
Altitude	700hPa-1060hPa

ECG

Measurement Range	20 BPM to 250 BPM
Accuracy	±3BPM or ±5% whichever is greater
Leads	3 / 5 Lead, detected automatically
Lead Off Detection	Lead I, II, III, aVR, aVL, aVF, Chest (V) Lead Detected and displayed
Voltage range	±0.5 mV to ±5 mV
Signal Width	40 ms to 120 ms (Q to S)
Display Sweep Speeds	12.5 mm/sec, 25.0 mm/sec, and 50.0 mm/sec

Respiration rate

Technique	Trans-thoracic impedance
Range	0, 3 to 120 breaths/min
Accuracy	±3 breaths/min
Leads	RA to LA
Display Sweep Speeds	6.25 mm/s, 12.5 mm/s, 25.0 mm/s
Lead Off Condition	Detected and displayed

NIBP

Pulse Rate Range	Adult/Pediatric 40 BPM to 200 BPM / Neonatal 40 BPM to 240 BPM
Pulse Rate Accuracy	±2 BPM or ±2%, whichever is greater
Technique	Oscillometric Measurement
Measurement modes	MANUAL, AUTO and CONT
MANUAL Mode	Single measurement initiated by NIBP, Start/Stop button
AUTO Mode	Automatic BP measurements at intervals of 1, 2, 3, 5, 10, 15, 20, 30, 45, 60, 90, 120 or 180 minutes
CONT Mode	Series of consecutive measurements for 5 minutes NIBP pressure measuring range
Systolic pressure range	Adult/Pediatric 60 mmHg to 250 mmHg Neonatal 40 mmHg to 120 mmHg
Diastolic pressure range	Adult/Pediatric 40 mmHg to 200 mmHg Neonatal 20 mmHg to 90 mmHg
Mean pressure range	Adult/Pediatric 45 mmHg to 235 mmHg Neonatal 30 mmHg to 100 mmHg
Pressure Display Range	0 mmHg to 300 mmHg
Pressure Display Accuracy	Mean error and standard deviation per ANSI/AAMI SP10:2002+A1:2003

SpO2

%Saturation	
Range	1% to 100%
Perfusion Range	0.03% to 20%
Accuracy	Adults ¹ 70% to 100% ±2 digits Neonate 70% to 100% ±3 digits Low Perfusion ² 70% to 100% ±2 digits
Display Sweep Speeds	12.5 mm/sec, 25.0 mm/sec, and 50.0 mm/sec

Pulse Rate

Range	0 and 20 BPM to 250 BPM
Accuracy	Adults and Neonate ¹ 20 BPM to 250 BPM ±3 digits Low Perfusion ² 20 BPM to 250 BPM ±3 digits
1 Adult specifications are shown for OXiMAX MAX-A and MAX-N sensors with the YM6000. Neonate specifications are shown for OxiMax MAX-N sensors with the YM6000. Saturation accuracy will vary by sensor type.	
2 Specification applies to YM6000 performance. Reading accuracy in the presence of low perfusion (detected IR pulse modulation amplitude < 1.5%) was validated using signals supplied by a patient simulator. SpO2 and pulse rate values were varied across the monitoring range including weak signal conditions and compared to the known true saturation and pulse rate of the input signals.	

Capnography

Parameter Displayed	EtCO2, InCO2
Range	0 mmHg ~ 99 mmHg
The detail conditions are on the operation manual.	
Rise Time	240 ms (average)
Delay Time	1.12 (average)
System Response	1.32 (average)
Warm Up Time	3 minutes maximum
Sweep Speeds	6.25mm/sec, 12.5 mm/sec and 25.0 mm/sec
Sound Noise Level	Less than 41dB when ambient sound pressure level is 22dB

IBP

Pulse Rate	
Range	20 BPM ~ 250 BPM
Accuracy	±1% or ± 1 BPM

IBP

Parameter Displayed	P1, ABP P2, CVP, PAP, LAP
Pressure Measuring Range	-50 mmHg ~ 300 mmHg
Input Impedance	More than 1 M ohm
Transducer Driving Voltage	DC 5V
Transducer Input Sensitivity	5uV/V/mmHg
Transducer Volume Displacement	0.1mm ³ /100mmHg
Zero Calibration Range	±100mmHg
Zero Calibration Accuracy	Less than ±1mmHg
Frequency Characteristics	dc to 25Hz
Pressure Display Accuracy	Monitor: Less than ±3mmHg
Scale	P1 0-50, 0-100, 0-200, 0-300, AUTO P2 0-20, 0-50, 0-100, 0-200, 0-300, AUTO
Display Sweep Speeds	12.5 mm/sec, 25.0 mm/sec, and 50.0 mm/sec

Temperature

Probe Type	Thermistor probe
Parameter displayed	TEMP1, TEMP2
Range	15°C to 45°C (59°F to 113°F)
Display Accuracy	±0.1°C (25°C to 45°C) or ±0.2°F (77°F to 113°F) ±0.2°C (15°C to less than 25°C) or ±0.4°F (59°F to less than 77°F)

Trends

Types	Graphical and Tabular
Memory	saves total 1500 data saves at selected time interval saves alarm condition & error events saves NIBP Measurements
Graphical Format	Total 2 graphs a graph for NIBP, P1/P2, SpO2, T1/T2 parameters a graph for HR/PR, Resp, EtCO2 parameters User-selectable each parameter to be desired
Tabular Format	One table for all parameters
Display	8 lists
Save Time Interval	30sec or 1, 2, 2.5, 5, 10, 15, 20, 30, 60 or 120 minutes
The detail compliances are listed on the operation manual	

