



## MEC-2000 PATIENT MONITOR

- 12.1" color TFT with maximum 8 waveforms
- Suitable for adult, pediatric and neonatal patients
- Parameters including ECG, RESP, SpO<sub>2</sub>, NIBP, 2-TEMP, 2-IBP, C.O., EtCO<sub>2</sub>
- 96-hour graphic and tabular trends of all parameters
- Optional built-in recorder and CF card (for power off storage)
- Networkable with central monitoring system

# MEC-2000

## PATIENT MONITOR

### Technical Specifications

#### Safety

IEC60601-1 approved

#### Dimension and Weight

Dimension: 318mm (W) x 270mm (H) x 145mm (D)  
Weight: 4.7 kg

#### Operation Environment

Power requirement: AC100-240V, 50Hz/60Hz

#### Performance Specifications

Display: 12.1" color TFT(diagonal)  
Rolling and refreshing waveform display  
Trace: 8 waveforms  
Resolution: 800X600

#### Multi displays selectable:

Standard screen display  
Trend coexist screen display  
OxyCRG screen display  
Viewbed screen display  
Large-font screen display

Lead-Acid battery: Rechargeable  
(for 2 pieces) Maximum 12 hours for charging;  
2 hours for continuous working

Trend time: 1-96 hours  
Alarm: User-adjustable High and Low limits  
3-level audible and visual alarm

Networking: Connected to central monitoring system

Recorder: Built-in, thermal array, 2 channels  
Record mode: manual, on alarm, time-defined, etc.  
Print speed: 25mm/s, 50mm/s

#### ECG

Lead type: 5-lead and 3-lead selectable  
Input: 5 leadwire cable: RA; LA; RL; LL; V (or R; L; N; F; C)  
3 leadwire cable: RA; LA; LL (or R; L; F)  
Lead selection: 5 lead: I; II; III; avR; avL; avF; V  
3 Lead: I; II; III;  
Gain selection: x0.125; x0.25; x0.5; x1; x2; auto  
Sweep speed: 12.5mm/s, 25mm/s, 50mm/s  
Heart Rate range: Adult: 15-300bpm,  
Pediatric/Neonate 15-350bpm  
Resolution:  $\pm 1$ bpm  
Accuracy:  $\pm 1$ bpm or  $\pm 1\%$ , whichever is greater  
Bandwidth: Diagnostic mode: 0.05~100Hz  
Monitoring mode: 0.5~40Hz  
Surgical mode: 1~20Hz  
Protection: Withstand 4000VAC/50Hz voltage in isolation. Against electrosurgical interference and defibrillation  
Scaling Signal: 1mV  $\pm 5\%$

Alarm range: 15~350bpm  
S-T segment detection: YES  
Measurement range: -2.0mV~2.0mV  
Alarm range: -2.0mV~2.0mV  
Arrhythmia analysis: YES  
Alarm: YES, audible and visual alarm, alarm events recallable  
Pace detection: YES

#### Respiration

Method: Thoracic impedance  
Measurement Range: Adult: 0-120BrPM;  
Neonata/Pediatric: 0-150BrPM  
Apnea alarm: YES  
Alarm: YES, audible and visual alarm, alarm event recallable

#### NIBP

Method: Automatic oscillometric  
Operation modes: Manual/Automatic/Continuous  
Auto measure time: Adjustable  
Measurement unit: mmHg /kPa selectable  
Measurement type: Systolic, Diastolic, Mean  
Range of Systolic pressure:  
Adult mode: 40-270mmHg  
Pediatric mode: 40-200mmHg  
Neonatal mode: 40-135mmHg  
Range of Diastolic pressure:  
Adult mode: 10-210mmHg  
Pediatric mode: 10-150mmHg  
Neonatal mode: 10-100mmHg  
Range of Mean pressure:  
Adult mode: 20-230mmHg  
Pediatric mode: 20-165mmHg  
Neonatal mode: 20-110mmHg

Accuracy of blood pressure measurement:  
The mean error shall be less than  $\pm 5$ mmHg  
The standard deviation shall be less than  $\pm 8$ mmHg  
Over-pressure protection: Double safety protection  
Resolution: 1mmHg  
Alarm: Systolic, Diastolic, Mean

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

Measurement range: 0~100%  
Resolution: 1%  
Accuracy:  
 $\pm 2\%$  (70%~100%, Adult/Pediatric, non-motion)  
 $\pm 3\%$  (70%~100%, Neonate, non-motion)  
 $\pm 3\%$  (70%~100%, Adult/Pediatric/Neonate, motion)  
0~69% unspecified  
Alarm range: 1~100%  
Pulse Rate: Range: 20~254bpm  
Resolution: 1bpm

Accuracy:  $\pm 3$ bpm(non-motion);  
 $\pm 5$ bpm(motion)

#### Temperature

Measurement: Range: 0~50°C (32~122°F)  
Resolution: 0.1°C  
Accuracy:  $\pm 0.1^\circ\text{C}$   
Channel: Dual-channel, provide T1; T2;  $\Delta T$   
Alarm: 3-level audible and visual alarm

#### IBP

Measurement range: -50~300mmHg  
Channel: 2 channels  
Pressure Transducer: Sensitivity: 5  $\mu$ V/V/mmHg  
Impedance range: 300~3000  $\Omega$   
Pressure names: ART, PA, CVP, RAP, LAP, ICP, P1, P2  
Resolution: 1 mmHg  
Accuracy:  $\pm 2\%$  or  $\pm 1$  mmHg whichever is greater  
Alarm range: -10~300mmHg

#### C.O. (Cardiac Output)

Method: Thermolodilution  
Measurement range: CO: 0.1~20l/min  
TB: 23~43°C  
TI: 0~27°C  
Resolution: CO: 0.1 l/min  
TB: 0.1°C  
TI: 0.1°C  
Accuracy: CO  $\pm 5\%$  or 0.1 l/min  
TB:  $\pm 0.1^\circ\text{C}$   
TI:  $\pm 0.1^\circ\text{C}$   
Parameter output: Cardiac output; Hemodynamics calculation

#### EtCO<sub>2</sub>

Method: Infrared Absorption  
Measurement Mode: Sidestream  
Measurement range: EtCO<sub>2</sub>: 0~99mmHg  
Accuracy:  $\pm 2$ mmHg (0~40mmHg)  
 $\pm 5\%$  of reading (41~76mmHg),  
 $\pm 10\%$  of reading (77~99mmHg)  
Sampling rate: 100 or 150ml/min  
Sampling rate accuracy: 0.15  
Start-up time: <1min. the module enters the warming up status after the startup.  
10 minutes later, it enters the ready-to-measure status  
Respiration rate: 0~120BrPM  
Respiration rate accuracy:  $\pm 2$ BrPM (0~70BrPM)  
 $\pm 5$ BrPM (>70BrPM)  
Response time: <240ms (10% to 90%)  
Delay time: <2s (Sampling line length: 7inches; internal diameter: 0.055 inches, sampling gas flow rate: 150ml/min)

Standard Configuration: ECG, NIBP, RESP, Mindray SpO<sub>2</sub>, PR, Dual-TEMP, Lead Acid Battery

Optional Configuration: Dual-IBP, CO, EtCO<sub>2</sub> (side-stream), Thermal recorder, CF Card (for power off storage)



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