

PM-8000Express

PATIENT MONITOR

Medical Device Depot Inc.

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1-877-646-3300

Technical specifications

Safety

IEC60601-1 approved

Dimension and Weight

Dimension: 261mm (W) x 240mm (H) x 171mm (D)
Weight: < 5 kg (including a battery)

Operation Environment

AC Power Requirements: 100-240 VAC (± 10%), 50/60 Hz (± 3 Hz), 110 VA
DC Power Requirements: 12 VDC (rated), 10-16 VDC, 70W
Temperature: 0-40°C
Humidity: 15% - 95%, non-condensing

Patient Range

Neonate, pediatric, and adult patients

Performance Specifications

Display: 8.4 ± color TFT
Rolling and refreshing waveform display
Resolution: 800x600
Multiple display modes, including:
Standard display
Large-font Display
Trend split display
Freeze display with 40-second full-disclosure
Alarm limit display
Multi-lead and ECG simultaneous display
Bed-to-bed view display
OxyCRG dynamic view display

Trace: 8 waveforms
Sweep Speed: 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s

Indicator: Alarm indicator light
Power indicator light
Battery indicator light
QRS beep and alarm sound

Interface: Parameter cable interface
AC and DC Power input socket
Software upgrade through networking port
External VGA interface for connection of an alternate display
Aux Output (Analog / Defib-Synch / Nurse Call)

Lithium Ion Battery: Rechargeable, maximum 6.5 hours for charging, 3 hours for continuous working;

Lead Acid Battery: Rechargeable, maximum 6 hours for charging; 50 minutes for continuous working
1~96 hours

Trend time: User-adjustable High and Low limits 3-level audible and visual alarm

Networking: Connected to central monitoring System (be available in the middle of 2006)

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

ECG

5-lead and 3-lead selectable
Input: 5-lead: RA; LA; RL; LL; V
Lead selection: I; II; III; avR; avL; avF; V1-V6
ECG waveform: 2 channels
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;
neonate/pediatric: 15-350bpm

Standard configuration:

ECG, RESP, Dual-Temperature, SpO₂, NIBP, Sealed Lead Acid Battery

Accuracy: ± 1bpm or ± 1%, whichever is greater
Resolution: 1bpm
Filter: Diagnostic mode: 0.05-100Hz
Monitoring mode: 0.5-40 Hz
Surgical mode: 1-20Hz

Protection: Withstand 4000VAC/50Hz voltage in isolation
Against electro-surgical interference
and defibrillation

Scaling signal: 1mV5%
Alarm range: 15-350bpm
Alarm: YES, audible and visual alarm,
alarm events recallable

Respiration

Method: Thoracic impedance
Sensing leads: Lead I and lead II are optional (default: lead II)
Operation modes: Auto/Manual
Measurement range: Adult: 0~120rpm; Neonate/Child: 0~150rpm
Apnea alarm: YES

NIBP

Method: Automatic oscillometric
Operation modes: Manual/Automatic/Continuous
Auto measure time: Adjustable
Measurement unit: mmHg/kPa selectable
Measurement types: Systolic, Diastolic, Mean

Range of systolic pressure	Adult Mode	40 - 270 mmHg
	Pediatric Mode	40 - 200 mmHg
	Neonatal Mode	40 - 135 mmHg
Range of diastolic pressure	Adult Mode	10 - 210 mmHg
	Pediatric Mode	10 - 150 mmHg
	Neonatal Mode	10 - 95 mmHg
Range of mean pressure	Adult Mode	20 - 230mmHg
	Pediatric Mode	20 - 165mmHg
	Neonatal Mode	20 - 110mmHg

Over-pressure protection: double safety protection
Resolution: 1mmHg
Alarm: Systolic, Diastolic, Mean
Accuracy: mean error +/-5mmHg
Standard deviation 8mmHg

SpO₂

MINDRAY SpO₂
Measurement range: 0~100%
Resolution: 1%
Accuracy: ±2% (70-100%, Adult/Pediatric, non-motion);
±3% (70-100%, Neonate, non-motion);
±3% (70-100%, Adult/Pediatric/Neonate, motion);
0-69% unspecified

Alarm range: 0~100%
Pulse rate: Range: 20~254bpm
Resolution: 1bpm
Accuracy: ±3bpm (non-motion), ±5bpm (motion)
Alarm range: 20~254bpm

MASIMO SpO₂

Measurement range: 0~100%
Resolution: 1%
Accuracy: ±2% (70-100%, Adult/Pediatric, non-motion);
±3% (70-100%, Neonate, non-motion);
±3% (70-100%, Adult/Pediatric/Neonate, motion);
0-69% unspecified

Alarm range: 0~100%

Pulse rate: Range: 25~240bpm
Resolution: 1bpm
Accuracy: ±3bpm (non-motion), ±5bpm (motion)
Alarm range: 25~240bpm

NELLCOR SpO₂

Measurement range: 0~100%
Resolution: 1%
Accuracy: ±2% (70-100%, MAX-A, MAX-AL, MAX-N, MAX-P, MAX-I and MAX-FAST sensors);
±2.5% (70-100%, OxiClq A, OxiClq N, OxiClq P and OxiClq I sensors);
±3% (70-100%, D-YS, D5-100A, OXI-A/N and OXI-P/I sensors);
±3.5% (70-100%, MAX-R, D-YSE and D-YSPD sensors);

0-69% unspecified

Alarm range: 0~100%
Pulse rate: Range: 20~300bpm
Resolution: 1bpm
Accuracy: ±3bpm (20-250bpm);
251-300bpm unspecified
Alarm range: 20~250bpm

Temperature

Measurement range: 0~50°C
Resolution: 0.1°C
Accuracy: ±0.1°C
Channel: Dual-channel. Provide T1; T2; A T

IBP

Measurement range: -50~300mmHg
Channel: 2 channels
Pressure transducer: Sensitivity: 5V/V/mmHg
Impedance range: 300-3000 Ohm
Pressure names: ART, PA, CVP, RAP, LAP, ICP, CPP
Resolution: 1mmHg
Accuracy: ±2% or ±1 mmHg, whichever is greater (exclusive of transducer)
Alarm range: -50~300mmHg

Microstream CO₂

CO₂ range: 0-99mmHg
Accuracy: 0-38 mmHg ± 2 mmHg
39-99 mmHg ± 5% of reading
+ 0.08% for every 1 mmHg (above 38 mmHg)

Resolution: Waveform: 0.1 mmHg
Value: 1 mmHg

Sampling rate: 50ml/min - 7.5+15ml/min
Initialization time: 30 seconds (typical),
Reaches ±5% steady-state accuracy within 3 minutes.

Response time: Typical value: 2.9s, including the rising time and the delay time (adopting the FilterLine of standard length)
Rising time < 190ms (rising from 10% to 90%)
Delay time = 2.7s (typical value)

Respiration rate: 0-150 breaths/min
Respiration rate accuracy: 0 70bpm ± 1bpm
71 120bpm ± 2bpm
121 150bpm ± 3bpm

Mode: Adult, Neonate

Options:

Dual-IBP, ETCO₂, Thermal Recorder, Li-ion Battery