

PM-9000Express Medical Device Depot Inc.

Patient Monitor

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1-877-646-3300

PM-9000Express Patient Monitor

Technical specifications

Safety	IEC60601-1 approved, CE marking according to MDD93/42/EEC
Dimension and Weight	318mm (W) x 270mm (H) x 137mm (D) Weight: < 7.5kg
Operation Environment	AC100-240V(10%), 50/60 Hz(3Hz), 140VA
Power Requirements:	0-40°C
Temperature:	15-95% non-condensing
Humidity:	Patient Range
Neonate, pediatric, and adult patients	Performance Specifications
Display:	12.1 ± color TFT Rolling and refreshing waveform display Resolution: 800x600 Multi displays selectable, including: Standard display Large-font Display Trend coexist 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 Working Indicator light QRS beep and alarm sound Parameter cable interface AC Power input socket Network interface External VGA interface for connection of an alternate display Aux Output interface (Analog/Defi-Synchro/Nurse Call)
Interface:	Li-ion Battery: Rechargeable Maximum 6.5 hours for charging; 5 hours for continuous working 1-96 hours
Trend time:	Alarm: User-adjustable High and Low limits 3-level audible and visual alarm
Networking:	Connected to central monitoring system (available soon in US market)
Recorder:	Built-in, thermal array Plethysmogram waveform: 2 channels Record mode: manual, on alarm, time-defined, etc. Paper width: 50mm Print speed: 25mm/s, 50mm/s
ECG	5-lead and 3-lead selectable
Input:	5-lead: RA; LA; RL; LL; V I; II; III; avR; avL; avF; V1-V6
Lead selection:	2 channels
ECG waveform:	x0.125;x0.25;x0.5;x1;x2; auto
Gain selection:	12.5mm/s, 25mm/s, 50mm/s
Sweep speed:	Adult: 15-300bpm; neonate/Pediatric: 15-350bpm
Heart Rate range:	1bpm or ± 1%, whichever is greater
Accuracy:	1bpm
Resolution:	Diagnostic mode: 0.05-100Hz Monitoring mode: 0.5-40 Hz Surgical mode: 1-20Hz Withstand 4000VAC/50Hz voltage in isolation Against electrosurgical interference and defibrillation
Filter:	1mV5%
Protection:	Alarm range: 15-350bpm Alarm: YES, audible and visual alarm, alarm events recallable
Scaling signal:	
Alarm range:	
Alarm:	
Respiration	Method: Thoracic impedance Sensing leads: Lead I and Lead II are optional (default: lead II) Operation modes: Auto/Manual
Standard configuration:	ECG, RESP, Dual-TEMP, NIBP, SpO ₂ , Li-ion Battery

Measurement range:	Adult: 0-120rpm; Neonate/Pediatric: 0-150rpm
Apnea alarm:	YES
Alarm:	YES, audible and visual alarm, alarm events recallable
NIBP	Method: Automatic oscillometric
Operation modes:	Manual/Automatic/Continuous
Auto measure time:	Adjustable
Measurement unit:	mmHg/kPa selectable
Measurement types:	Systolic, Diastolic, Mean
Measurement range:	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
Accuracy of blood pressure measurement	The mean error shall be less than ±5 mmHg The standard deviation shall be less than 8 mmHg
Over-pressure protection:	double safety protection
Resolution:	1mmHg
Alarm:	Systolic, Diastolic, Mean
SpO₂	0-100%
MINDRAY SpO₂	1%
Measurement range:	±2% (70-100%, Adult/Pediatric); ±3% (70-100%, Neonate); 0-69% unspecified
Resolution:	0-100%
Accuracy:	Range: 20-254bpm Resolution: 1bpm Accuracy: ±3bpm ±5bpm Alarm range: 20-254bpm
MASIMO SpO₂	0-100%
Measurement range:	1%
Resolution:	±2% (70-100%, Adult/Pediatric, non-motion); ±3% (70-100%, Neonate, non-motion); ±3% (70-100%, Adult/Pediatric/Neonate, motion);
Accuracy:	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	0-100%
Measurement range:	1%
Resolution:	±2% (70-100%, MAX-A, MAX-AL, MAX-N, MAX-P, MAX-I and MAX-FAST sensors); ±2.5% (70-100%, OxiCliq A, OxiCliq N, OxiCliq P and OxiCliq I sensors); ±3% (70-100%, D-YS, DS-100A, OXI-A/N and OXI-P/I sensors); ±3.5% (70-100%, MAX-R, D-YSE and D-YSPD sensors);
Accuracy:	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; Δ T
Options:	Multigas/O ₂ , Dual-IBP, EtCO ₂ , Thermal Recorder

IBP	Measurement range: -50-300mmHg Channel: 2 channels Pressure transducer: Sensitivity: 5V/V/mmHg Impedance range: 300-3000 ART, PA, CVP, RAP, LAP, ICP, CPP Pressure names: 1mmHg Resolution: ±2% or ±1 mmHg, whichever is greater (exclusive of transducer) Accuracy: -50-300mmHg
EtCO₂	0-99mmHg
Microstream CO₂	CO ₂ range: 0-38 mmHg ± 2 mmHg Accuracy: 39-99 mmHg ± 5% of reading + 0.08% for every 1 mmHg (above 38 mmHg) 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 3minutes.
Resolution	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)
Response time	0-150 breaths/min Respiration rate accuracy: 0 70bpm ± 1bpm 71 120bpm ± 2bpm 121 150bpm ± 3bpm Adult, neonate
Mode	< 2s 7 inches; internal diameter: 0.055 inches; sampling gas flow rate: 150ml/min
Delay time	
(Sampling line length):	

WelchAllyn CO₂ (Mainstream)	Method: Infrared Absorption Measuring Mode: Mainstream Measurement range: ETCO ₂ : 0-99mmHg InCO ₂ : 0-99mmHg AwRR: 0-150bpm ETCO ₂ : 1mmHg InCO ₂ : 1mmHg AwRR: 1bpm CO ₂ concentration: 2mmHg (0-40mmHg) 5% of reading (41-76mmHg) 10% of reading (77-99mmHg)
Resolution:	AwRR: 2bpm
Accuracy:	Same as Measurement range
Alarm range:	

Multi-Gas/O₂	Method: Infrared Absorption Gas sorts: CO ₂ ; N ₂ O, Des, Iso, Enf, Sev, Hal, O ₂ (optional paramagnetic sensor)
Measurement range:	CO ₂ : 0-30% N ₂ O: 0-105% O ₂ : 0-105% Enf, Iso, Hal: 0-30% Sev: 0-30% Des: 0-30%
Data output:	Fi and ET values
Respiration rate:	±1bpm(2-60 bpm) 61-100 bpm (unspecified) Up to 3 waveforms displayed Agent mixture detection MAC value displayed
Other:	





Parameters: ECG, RESP, NIBP, SpO₂, 2-TEMP, 2-IBP, EtCO₂, Multi-Gas/O₂

MINDRAY **PM-9000Express**
Patient Monitor

- 12.1" color TFT display with maximum 8 waveforms
- Anesthetic agent monitor (Artema)
- MasimoSET™ / Nellcor OxiMax™ / Mindray SpO₂
- Microstream EtCO₂ (Oridion)/Mainstream EtCO₂(WelchAllyn)
- Maximum 96-hour graphic and tabular trends of all parameters
- Large font display
- SpO₂ pulse-tone modulation (Pitch Tone)
- 40-second full-disclosure waveform review
- Alarm light indicator
- Compact flash memory card option
- Li-ion battery
- Suitable for adult, pediatric and neonatal patients



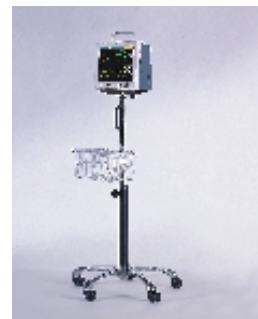
Multi-Gas/O₂ Module

Measures concentration of anesthesia gases (Des, Sev, Iso, Enf, Hal), N₂O, CO₂ and O₂
Automatically identifies the anesthetic agents
Short response time



Microstream™ EtCO₂

Suitable for non-intubated and intubated applications
For adult, pediatric, infant/neonate patients
Low sampling rate 50ml/min (± 7.5ml/min)

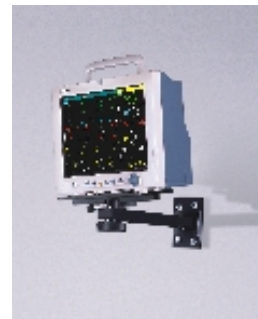


Rolling Stand



Fixed Memory Card

Provides power off storage for 96-hour graphic and trend, 800 NIBP records and 70 alarm records



Wall Mount



Left Side Panel

Connectors for ECG, NIBP, SpO₂, TEMP, IBP and Mainstream CO₂ cables and sensors



Large Font Display Mode

Basic parameters (ECG, SpO₂, NIBP) in large font for distance view



"Viewbed Screen" Mode

View patient data from another monitor with a simple LAN connection



Multi-gas/O₂ Option

Adopting infrared absorption technique to measure the concentration of EtCO₂, N₂O, O₂ and other five anesthesia gases (Des, Sev, Iso, Enf, Hal)



"Trend Screen" Mode

Dynamic 2-hour trend data viewed next to real-time waveform data