

PM-8000Express

Patient Monitor

Technical Specifications

Safety	IEC60601-1 approved, CE marking according to MDD93/42/EEC
Dimension and Weight	261 mm (W) x 240mm (H) x 171mm (D) Weight: Standard Configuration < 5 kg
Operation Environment	100-240 VAC, 50/60 Hz, 70Vad
AC Power Requirements:	12VDC (rated), 10-16VDC, 70W
DC Power Requirements:	0-40°C
Temperature:	15% - 95%, non-condensing
Humidity:	
Patient Range	Neonate, pediatric, and adult patients
Performance Specifications	
Display:	8.4" color TFT (diagonal) Rolling and refreshing waveform display Resolution: 800x600 Multi displays selectable, including: Standard display Large-font Display Trend coexist display Bed-to-bed view display OxyCRG dynamic view display 8 waveforms
Trace:	6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
Sweep Speed:	Alarm indicator light
Indicator:	Power indicator light Battery indicator light QRS beep and alarm sound Parameter cable interface Network interface External VGA interface for connection of an alternate display Aux Output (Analog / Defib-Synch / Nurse Call) Rechargeable, maximum 6.5 hours for charging, 3 hours for continuous working
Interface:	Rechargeable, maximum 6 hours for charging; 75 minutes for continuous working 1-96 hours User-adjustable High and Low limits 3-level audible And visual alarm Connected to central monitoring system Built-in, thermal array Plethysmogram waveform: 3 channels Record mode: manual, on alarm, time-defined, etc. Paper width: 50 mm Print speed: 25mm/s, 50mm/s
LI-ion Battery:	
Lead Acid Battery:	
Trend time:	
Alarm:	
Networking:	
Recorder:	
ECG	
Lead type:	5-lead and 3-lead selectable
Input:	5-lead: RA; LA; RLL; LV
Lead selection:	I; II; III; aVR; aVL; aVF; V
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: 15-350 bpm
Accuracy:	± 1bpm or ± 1%, whichever is greater
Resolution:	1 bpm
Filter:	Diagnostic mode: 0.05-100 Hz Monitoring mode: 0.5-40 Hz Surgical mode: 1-20 Hz
Protection:	Withstand 4000VAC/50Hz voltage in isolation Against electro-surgical interference and defibrillation 1mV ± 5%
Scaling signal:	15-350 bpm
Alarm range:	Measurement range: -2.0mV-2.0mV Alarm range: -2.0mV-2.0mV
S-T segment detection:	
Arrhythmia analysis:	YES
Pace detection	YES
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: 0-120 BrPM; Neonate/Pediatric: 0-150 BrPM
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 - 100 mmHg
Range of mean pressure:	Adult Mode 20 - 230 mmHg Pediatric Mode 20 - 165 mmHg Neonatal Mode 20 - 110 mmHg
Accuracy of blood pressure measurement:	The mean error shall be less than ± 5 mmHg The standard deviation shall be less than 8 mmHg Double safety protection
Over-pressure protection:	1mmHg
Resolution:	Systolic, Diastolic, Mean
Alarm:	1mmHg
Resolution:	Measurement range: 40~240 bpm
PR from NIBP:	Resolution: 1 bpm Accuracy: ± 3bpm or ± 3% whichever is greater
SpO2	
MINDRAY SpO2:	
Measurement range:	0-100%
Resolution:	1%
Accuracy:	± 2% (70-100% Adult/Pediatric) ± 3% (70-100%, Neonate); 0-69% unspecified
Alarm range:	0-100%
Pulse rate:	Range: 20-254bpm Resolution: 1bpm Accuracy: ± 3bpm (non-motion) ± 5bpm (motion) Alarm range: 0-254 bpm
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:	1-100%
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: 20-300 bpm Resolution: 1bpm Accuracy: ± 3bpm (20-250bpm); 251-300bpm unspecified Alarm range: 0-254 bpm
Temperature	
Measurement range:	0-50°C (32-122°F)
Resolution:	0.1°C
Accuracy:	without sensor
Channel:	Dual-channel, Provide T1; T2; Δ T
IBP	
Measurement range:	-50-300mmHg
Channel:	2 channels
Pressure transducer:	Sensitivity: 5 μ V/V/mmHg

Pressure names:	Impedance range: 300-3000 Ω ART, PA, CVP, RAP, LAP, ICP, P1, P2
Resolution:	1mmHg
Accuracy:	± 2% or ± 1 mmHg, whichever is greater (exclusive of transducer) -10-300mmHg
Alarm range:	Range & Accuracy: 25 ~ 200 bpm ± 1 BPM or ± 1% whichever is greater 201 ~ 350 bpm ± 2%
PR from IBP:	Resolution: 1 bpm
ETCO2	
Microstream CO2:	
CO2 range:	0-99 mmHg
Accuracy:	0-38 mmHg ± 2 mmHg 39-99 mmHg ± 5% + 0.08% (reading-38 mmHg)
Resolution:	Waveform: 0.1 mmHg Value: 1 mmHg
Sampling rate:	50 +15 ml/min -7.5
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) <190ms (rising from 10% to 90%)
Rising time:	2.7s (typical value)
Delay time:	0-150 breaths/min
Respiration rate:	0-70BrPM ± 1BrPM 71-120BrPM ± 2BrPM 121-150BrPM ± 3BrPM Adult, Neonate, Pediatric
Respiration rate accuracy:	
Mode:	
Sidestream CO2	
Measurement range:	0-99mmHg
Accuracy:	± 2mmHg (0-40 mmHg) ± 5% of reading (41-76 mmHg) ± 10% of reading (77-99 mmHg)
Sampling rate:	70 ml/min, 100ml/min
Sampling rate accuracy:	± 15% or 15ml/min
Start-up time:	30 Sec. The module enters the warming up status after the start-up. 1 minute later, it enters the ready-to-measure status. 10 minutes after start-up, the module reaches full accuracy mode
Mode:	
Respiration rate:	0-120 bpm
Respiration rate accuracy:	± 2 BrPM (0-70 BrPM) ± 5 BrPM (>70 BrPM)
Response time:	When measured with a neonatal watertrap and a 2.5 m-long neonatal sampling line: <3.5 s @ 100 ml/min <4 s @ 70 ml/min When measured with an adult watertrap and a 2.5 m-long adult sampling line: <5.5 s @ 100 ml/min <7 s @ 70 ml/min When measured with a neonatal watertrap and a 2.5m-long neonatal sampling line: <3 s @ 100 ml/min <3.5 s @ 70 ml/min When measured with an adult watertrap and a 2.5m-long adult sampling line: <5 s @ 100 ml/min <6.5 s @ 70 ml/min
Delay time:	
Standard	ECG (Mindray 3/5 Lead); NIBP; RESP; Mindray-5pO2; Dual-Temp; Lead Acid Battery
Options	ECG (Mortara 3/5 lead with Extended ARR); ECG (Mortara 3/5 lead with Extended ARR & 3/5 Lead ST); Clinical proven SpO2; Dual-IBP; ETCO2; Thermal Recorder; Li-Ion Battery, CF Card for power off storage, WLAN card.



PM-8000Express

Patient Monitor

DISTRIBUTOR:

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P/N: ENG-PM8000E-420285-20080710



PM-8000Express Patient Monitor

Parameters: ECG, RESP, NIBP, SpO₂, 2-TEMP, 2-IBP, EtCO₂



Microstream™ EtCO₂

Suitable for non-intubated and intubated
Flexible for adult, pediatric, infant/neonate
Low sampling rate 50ml/min (-7.5ml/min, +15ml/min)



Wall Mount



Compact Flash Card

Power off storage use for 96-hour graphic and trend, 800 NIBP records and 70 alarm records



Bedrail Clamp



Rear Panel

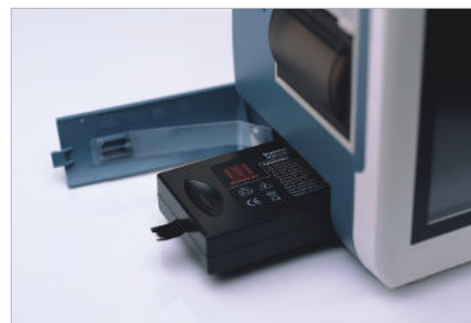
Ethernet Receptacle
12V DC Input
VGA Output
AUX port (for Analog/ Nurse Call/ Defib-Synch output)



Bedrail Hook



Rolling Stand



Li-ion Battery

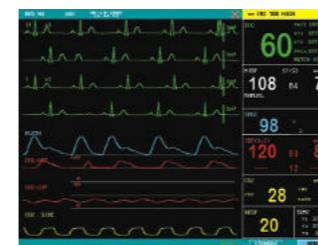
Up to 3-hour continuous monitoring

- 8.4" color TFT display with maximum 8 waveforms
- Maximum 96-hour graphic and tabular trends of all parameters
- Mindray or Mortara Arrhythmia and ST segment analysis
- Large font display
- SpO₂ pulse-tone modulation (Pitch Tone)
- Microstream™ EtCO₂ / Sidestream EtCO₂
- Clinical Proven SpO₂ technology
- Compact flash slot for memory card , wireless LAN card
- External 12V DC input
- Li-ion battery / Lead acid battery



Large Font Display Mode

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



EtCO₂ Waveform

Adopting infrared absorption technique to measure the concentration of EtCO₂, InsCO₂, AWR



"Trend Screen" Mode

Small tables next to waveforms with dynamic 2-hour trend length



OxyCRG

Display of the interactive relation between heart rate, respiration and SpO₂ parameter, judging the respiration and circulation function of neonate