PM-7000

PORTABLE PATIENT MONITOR

Technical Specifications

Safety
Meet the requirements of IEC60601 serials, CE marking according to MDD93/42/EEC

Dimension and Weight
Dimension: 310mm (W) x 280mm (H) x 150mm (D)
Weight: 5.5kg (not including external Multi-gas module)

Operation Environment
Power: AC100-250V, 50/60 Hz
Temperature: 0-40°C
Humidity: 15-95%

Patient Range
Adult, pediatric and neonatal

Performance Specifications
Display: 10.4" color TFT
        Resolution: 800x600
Trace: 8 waveforms
Sweep speed: 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
Indicator: Alarm indicator
        Power indicator
        QRS beep and alarm sound
Interface: Net Port
Battery: Rechargeable
        Lead-Acid: >45 minutes
        Lithium-ion: >90 minutes
Trend time: 1-96 hours
Alarm: 10-level audible and visual alarm
Networking: LAN/Wireless LAN to Mindray Hypervisor III central staion
Wireless LAN: Operates on license free ISM (Industrial, Scientific and Medical) 2.4 ~ 2.483 GHz radio frequency band IEEE 802.11b compliant
Recorder: Built-in, thermal array, 2 channels
        Record width: 48mm, (record paper 50mm)
        Record speed: 25mm/s, 50mm/s

ECG
5-lead or 3-lead selectable
Input: 5-lead: RA; LA; RL; LL; V or R; L; N; F; C
        3-lead: RA; LA; LL or R; L; F
Lead selection: 5-lead: I; II; III; avR; avL;
        avF; Vx I, II, III, aVR, aVL, aVF, V (n)
        3-lead: I; II; III
ECG waveform: 2 channels
Gain selection: x0.25; x0.5; x1; x2(mm/mV); auto
Sweep speed: 12.5mm/s, 25mm/s, 50mm/s
Heart Rate range: Adult: 15-300bpm;
        Pediatric/Neonatal: 15-350bpm
Accuracy: ±1bpm or ±1%, whichever is greater
Protection: Withstand 4000VAC/50Hz voltage in isolation. Against electrosurgical interference and defibrillation
CMRR: Diagnostic mode: >90dB
        Monitoring mode: >105dB
        Operating mode: >105dB
Operation modes: Diagnostic, Monitor, Surgery
Bandwidth: 0.05-100Hz
Alarm range: Adult: 15-300bpm
        Pediatric/Neonatal: 15-350bpm
S-T detection: YES
        Measurement range: -2.0mV~2.0mV
        Alarm range: -2.0mV~2.0mV
Arrhythmia analysis: YES

Pace Detection: YES
Alarm: YES, audible and visual alarm, alarm events recallable

Respiration
Method: RA-LL impedance
Measurement range: Adult: 6-120rpm
        Pediatric/Neonatal: 6-150rpm
Accuracy: ±2 rpm
Alarm range: Adult: 6-120rpm
        Pediatric/Neonatal: 6-150rpm
Apnea alarm: YES

NIBP
Method: Oscillometric
Operation modes: Manual/Automatic/STAT
Measurement unit: mmHg/kPa selectable
Measurement types: Systolic, Diastolic, Mean
Measurement range: Adult: 10-270mmHg
        Pediatric: 10-200mmHg
        Neonatal: 10-135mmHg
Over-pressure protection: YES
Resolution: 1mmHg
Accuracy: Mean error and standard deviation per ANSI/AAMI SP-10
Alarm: Systolic, Diastolic, Mean

Temperature
Measurement range: 0-50°C
Resolution: 0.1°C
Accuracy: ±0.1°C (not including probe)
Channel: Dual-channel
Alarm range: 0-50°C

Mindray SpO2
Measurement range: 0-100%
Resolution: 1%
Accuracy: 70~100% ±2% ; 0~69% unspecified
Alarm range: 0-100%
Pulse rate
        Range: 0-254bpm
        Resolution: 1bpm
        Accuracy: ±2bpm (30-250bpm)
        Alarm range: 0-254bpm

Masimo SET™ SpO2
Range
Saturation (SpO2):   1-100%
Pulse Rate: 30-235 bpm
Adult
SpO2 Range: 70%-100% 0% to 69%
Accuracy (±1Std. Dev.)*: ±2 digits Unspecified
Pulse Rate Range: 25-240 bpm
Accuracy (±1Std. Dev.)*: ± 3 bpm
Neonate
SpO2 Range: 70%-95% 0% to 69%
Accuracy (±1Std. Dev.)*: ± 3 Digits Unspecified
Pulse Rate Range: 30-235 bpm
Accuracy (±1Std. Dev.)*: ± 3 bpm

Nellcor SpO2
Measurement Range
SpO2:   1% to 100%
Pulse Rate: 20 to 250 beats per minute (bpm)
Accuracy
Saturation (% SpO2 ± SD):
        ***** Adults *70% to 100% *±2 digits
        ***** Neonates *70% to 100% ±3 digits
        ***** 1% to 69%   unspecified
Pulse rate: 20 to 250 bpm   ±3 digits

IBP
Measurement range: -50~300mmHg
Channel: 2 channels
Pressure transducer: Sensitivity: 5 μV/V/mmHg
        Impedance range:>300
Transducer sites: ART, PA, CVP, RAP, LAP, ICP
Measurement unit: mmHg/kPa selectable
Resolution: 1mmHg
Accuracy: ±1mmHg or ±2%, whichever is greater
Alarm range: -10~300mmHg

CO
Method: Thermo dilution
Measurement range: CO: 0.1-20 lit./min.
        TB: 23-43°C
        TI: 0-27°C
Resolution: CO: 0.1 lit./min.
        Temperature: ±0.1°C
Accuracy: CO: 2%
        TB: ± 0.1°C
        TI: ± 0.1°C

EtCO2
Method: Infrared Absorption
Measurement Mode: Sidestream or mainstream (optional)
Measurement range: EtCO2: 0-99mmHg
        InsCO2: 0-99mmHg
        AwRR: 0-150rpm
Resolution: EtCO2: 1mmHg
        InsCO2: 1mmHg
        AwRR: 1rpm
Accuracy: CO2 concentration:
        ±2mmHg (0-40mmHg)
        ±5% of reading (41-76mmHg)
        ±10% of reading (77-99mmHg)
        AwRR: ±2rpm
Alarm range: Same as Measurement range
Apnea alarm: YES

External Muti-Gas/O2
Method: Infrared Absorption
Gas sorts: EtCO2, N2O, Des, Iso, Enf, Sev, Hal O2(optional, paramagnetic sensor)
Measurement range: EtCO2: 0~10%(0~76mmHg)
        N2O: 0~100%
        O2:   0~100%
        Enf, Iso, Hal: 0~5%
        Sev: 0~8%
        Des: 0~18%
        AwRR: 2-100rpm
Resolution: CO2: 0.1% (1mmHg)
        N2O: 1%
        O2: 0.1% (1mmHg)
        Enf, Iso, Hal, Sev, Des: 0.01%
        Resp rate: 1bpm
Data output: Fi and Et Values
Respiration rate: 4~60±1bpm
Other: Up to 3 waveforms displayed
        Agent mixture detection
        MAC value displayed

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* Testing is based on healthy adult volunteers in induced hypoxia studies with LNOP®Adt sensors; during no motion.
  Testing to verify saturation specification is done against a CO-Oximeter. Testing to verify pulse rate specification is done against an ECG monitor.
**Languages: Chinese, English, French, German, Italian, Spanish, Portuguese, Polish, Russian, Turkish, Czechish

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Standard configurations: ECG/RESP, NIBP, Mindray SpO2, TEMP, Battery
Optional configurations: Masimo SET™ SpO2, 2-IBP, CO, EtCO2, External Multi-Gas/O2, Thermal Recorder

PM-7000

PORTABLE PATIENT MONITOR

DISTRIBUTOR:

Artemis Medical Ltd,
Butterly Avenue, Questor Business Park,
Dartford, Kent   DA1 1JG
Tel: 01322 628877   •   Fax: 01322 628878
Email: info@artemismedical.co.uk
Web: www.artemismedical.co.uk

NOTE: specifications subject to change without prior notice
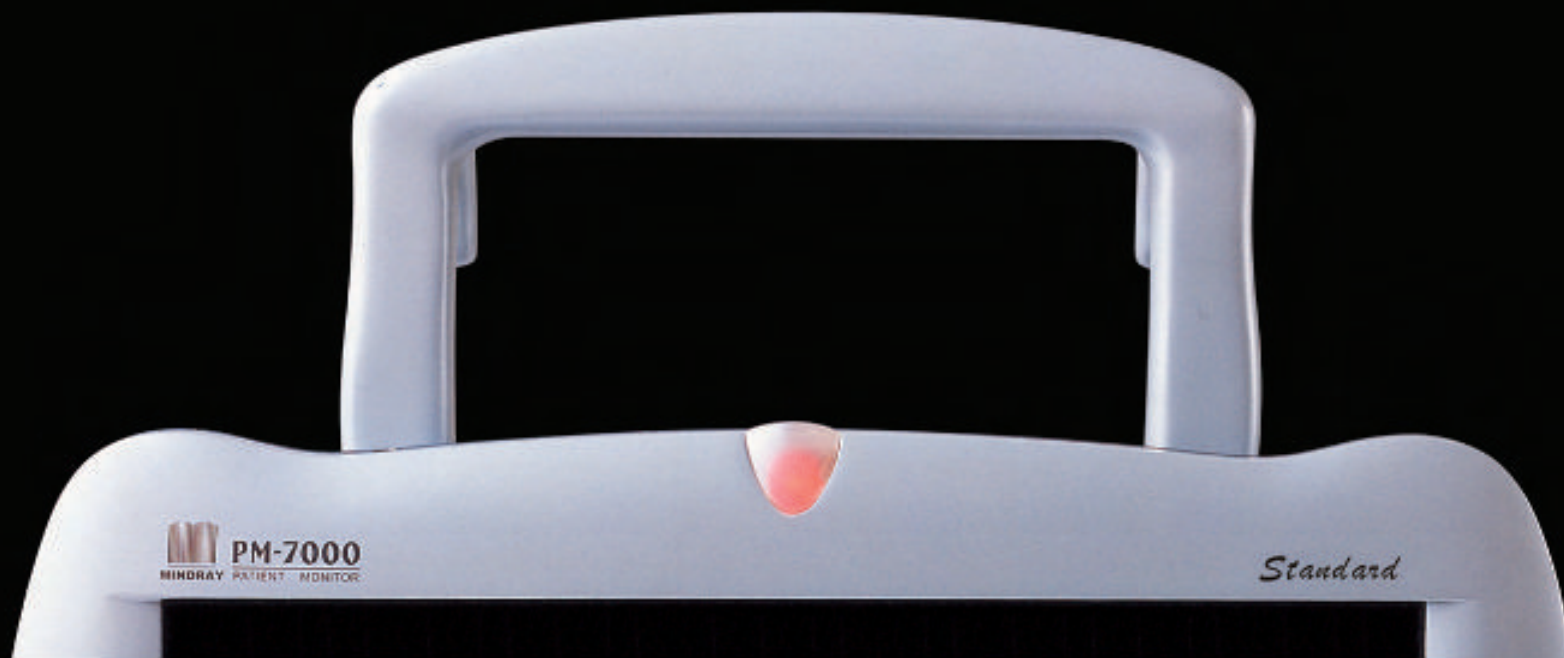P/N: CHN-PM7000-420285-20041013

PM-7000
MINDRAY PATIENT MONITOR

Standard

10.4"color TFT with maximum 8 waveforms

Masimo and Nellcor SPO$_2$ optional

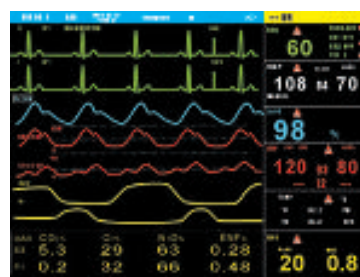**SpO$_2$ pulse-tone modulation (Pitch Tone)**

Adjustable 10-level alarm sound

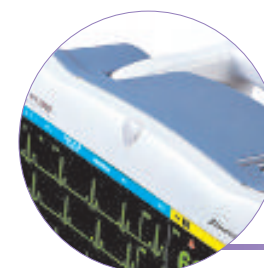**Nurse call connection available**

Optional Li-ion battery

Large numeric for visibility from distance

LAN/ Wireless LAN connection

$C\mathcal{E}$ 0123

Multi-Gas/O$_2$ Measuring
Adopting infrared absorption technique to measure the concentration of EtCO$_2$, N$_2$O and five other anesthesia gases, including Des, Iso, Enf, Sev, Hal. O$_2$ is also available.

Alarm light
Illuminates when an alarm is triggered with conspicuous color: yellow or red

Wireless LAN
Wireless solution for Central Monitor system

Handle/bedrail hook
Bedrail hook with slide proof design

External Multi-GAS module

Large Color Display
10.4"color TFT display with 8 waveforms and values of parameters in large size, featured by high resolution and particular design.

Trend Graph
Comprehensive review of monitoring information obtaining access to 72-hour trend graph of all parameters and 40" full-disclosure waveforms

Comprehensive Arrhythmia Review
Display of real-time waveforms and vital data produced prior to, during and after the occurrence of Arrhythmia events

MINDRAY