

# Patient Monitor

## PM-2000XL PLUS

PAT



Patient Monitors

# Model PM-2000XL PLUS Patient Monitor

## All in One Solution Monitoring System

The PM-2000XL PLUS offers a wide range of optional parameters from IBP to cardiac output, from capnography to anesthesia gas and can meet most clinical requirements in cardiovascular monitoring and gas monitoring connected to hospital systems in all divisions.



# PM-2000XL PLUS Patient Monitor

Wall Mount



Transport Unit



2 YEARS warranty

- High Resolution Color TFT LCD Display.
- Full touch-screen display, intuitive operation by clicking parameter or waveform.
- Pacemaker detection.
- Nurse Call function.
- Defibrillation protection and synchronization.
- Electrosurgical interference protection.
- OxyCRG, assessment of respiration and circulation for neonates.
- Extended Full-disclosure trend information.
- Comprehensive alarm system.
- ECG (3/5 Lead) with waveform and Heart Rate (HR).
- Arrhythmia analysis & ST-segment analysis.
- Respiration Rate (RR) with waveform.
- SpO2 & Pulse Rate (PR).
- SpO2 plethysmographic waveform.
- SpO2 pulse tone modulation.
- NIBP: SYS, DIA, MAP and Pulse Rate.
- Two Temperature Channels.
- Temperature Difference between two channels (TD).
- Two IBP Channels with waveform (optional)
- CO2 (optional)
- Sidestream/Mainstream End Tidal CO2 (EtCO2).
- Fraction of inspired carbon dioxide (FiCO2).
- Air Way Respiration Rate (AwRR).
- Anesthetic agent measurement with identification.
- Nitrous oxide measurement (N2O)
- Fraction of inspired oxygen (FiO2) Paramagnetic.
- Cardiac Output (CO) measurement
- Bidirectional communication with Monitoring Central Station (CMS-2000).
- Wi-Fi (optional)
- HL7 communication via XML Files.
- Barcode Scanner Support. (optional)
- Thermal Recorder (optional)
- SD Card slot enables memory extension.
- Bed-to-Bed viewing display.
- Drug calculation and titration table.
- USB & serial ports, VGA & analog outputs and RJ-45.
- Built in rechargeable battery.
- Power Supply: AC 100~240 Volts 50/60 Hz.
- Meets IEC 60601-1+A2+A2 & IEC 60601-2+A1 Safety Standards.
- Meets FDA 510(k) requirements.

# Patient Monitor

## Clinical Network

Bi-directional communication through Central Monitoring station CMS-2000.



## Multiple Display Modes

- Multi-Waveform Display
- Large Font
- NIBP Table
- OxyCRG View



Multi-Waveform Display    Large Font    NIBP Table    OxyCRG View

- CO2 (For Intubation And Non-intubation Application) (optional)
- Suitable for neonatal patients / No need to calibrate on regular basis / Sidestream sampling rate of 50 ml/min
- Anesthetic Gas / O2 (optional)
- Mainstream (IRMA AX+)
- CO2, N2O and anesthetic agent measurement Sidestream and identification probes.
- Complete gas analysis system contained within sensor head. Plug in and measure.
- Lower power consumption.
- Sidestream (ISA AX+ / ISA OR+)
- Unique water handling Nomoline.
- Low sample flow 50ml/min for all type of patients.
- Extremely low power consumption and weight.
- Warm-up time 10/20 seconds before full performance.

- Paramagnetic Oxygen (ISA OR+)
- Fast response, totally linear.
- High stability and accuracy.
- Long operational life.
- Low maintenance requirements.
- Insignificant effect from background gases.



Built-in Temporary Memory			
1,200	120h	60	120s
NIBP Measurement Review	Trend Review	Trend Review	Frozen Waveform

## Technical Specifications

Safety Standards	Safety Standars	IEC 60601-1+A1+A2; IEC 60601-2+A1
Physical Specifications	Dimensions Weight	328mm(L) × 158mm(W) × 285mm(H) 5.5 kg (without battery)
Display	Display Resolution Traces Displayed Waveforms Displayed Various Workings Selectable Interface  Sweep Speed	12.1"Color TFT LCD Touch-screen 800X 600 dpi Up to 8 Up to 11 Standard Monitoring Display, Large Font Intensive Care Display, Trend Graph/Monitoring Co-Display, Bed to Bed view display (Optional), OxyCRG Dynamic View display, Drug Dose Calculation Interface  6.25mm/s,12.5mm/s, 25mm/s, 50mm/s
Environment Requirement	Ambient Temperature Humidity	-20 °C + 55°C (-4 - 131°F) 25%-93% non-condensing
Power Supply	AC Power Supply Internal Battery Battery Working Period  Recharging Time	100-240V AC, 50/60HZ Rechargeable Li-ion Battery / 2100 mAh 14.8 V DC 5 hours maximum (with 4200mAh batteries) / Under certain circumstance: 2100mAh: 150mins - 4200mAh : 300mins <200 minutes(2100 mAh) / <360 minutes(4200 mAh)
Resp	Method Operation Mode Rr Measurement Range Resolution Apnea Alarm Threshold Alarm Band Width Sweep Speed	Trans-thoracic impedance Auto/Manual Adult: 0-120rpm / Neonate/Pediatric: 0-150rpm 1rPM 10s, 15s, 20s (default), 25s, 30s, 35s, 40s 3 levels of audible and visual alarm, Alarms events recallable 0.2-2.5Hz (-3dB) 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
ECG	Lead Type 3 Leadwire Cable 5 Leadwire Cable Lead Selection Gain Selection Sweep Speed Ecg Hr Range Resolution & Accuracy Filter St-segment Detection  Alarm Pace Maker Detection	5-lead and 3-lead selectable RA; LA; LL or R; L; F RA; LA; RL; LL; V or R; L; N; F; C 3-lead: I; II; III / 5-lead: I; II; III; aVR; aVL; aVF; V x0.125; x0.25; x0.5; x1; x2; auto 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s Adult: 15-300bpm / Pediatric/Neonate: 15-350bpm +1bpm or +1%, whichever is greater Diagnosis mode: 0.05 to 150Hz / Monitoring mode: 0.05 to 40Hz / Surgical mode: 1-20Hz Measurement range: -2.0mV ~ +2.0mV Comes With St-segment Arrhythmia Analysis And Categorization 3 levels of audible and visual alarm, alarm events recallable Yes, and 5 types abnormal status detectable.
NIBP	Method Operations Modes Auto Measurement Time Interval Measurement Types Over-pressure Protection  Pressure Range Adults Pressure Range Pediatrics Pressure Range Neonates Resolution Max Standard Desviation Alarm Pr From NIBP Resolution Accuracy	Oscillometric Manual / Automatic/ Continuous Adjustable 1/2/3/4/5/10/15/30/60/90/120/240/480minutes  SYS, DIA, MAP, PR Dual Safety Protection Comes with leak test and pressure auto calibration  Systolic: 40 - 270 mmHg / Diastolic: 10 - 215 mmHg / Mean: 20 - 235 mmHg Systolic: 40 - 200 mmHg / Diastolic: 10 - 150 mmHg / Mean: 20 - 165 mmHg Systolic: 40 - 135 mmHg / Diastolic: 10 - 100 mmHg / Mean: 20 - 110 mmHg 1mmHg ±8mmHg Systolic, Diastolic, Mean Measurement 40-240 bpm 1 bpm 3bpm or 3.5% whichever is greater
NIBP (Optional by Omrom M3600)	Adult/pediatric:	(Omrom is a registered trademark of Omrom Corporation, SMART INFLATION™ is a trademark of Omrom Healthcare Co., LTD.)  Pulse Rate: 40 - 200bpm Systolic Rate: 60 - 250mmHg Diastolic Rate: 40 - 200mmHg Mean Arterial Pressure: 45 - 235mmHg

## Technical Specifications

NIBP (Optional by Omrom M3600) Continuous	Neonate  Measurement Accuracy	Pulse Rate: 40 - 240bpm Systolic Rate: 60 - 250mmHg Diastolic Rate: 40 - 200mmHg Mean Arterial Pressure: 45 - 235mmHg Pulse Rate $\pm 2$ bpm or 2% of reading whichever is greater
SPO <sub>2</sub>	Measurement Alarm Range Resolution Accuracy PR Measurement Alarm Range Resolution Accuracy Refresh	0 - 100% 1% +2% (70-100% Adult/Pediatric); +3% (70-100% Neonate) 25 ~ 300 bpm 1bpm $\pm 2$ bpm 1s
SPO <sub>2</sub> (Optional By Nellcor Oximax Tm)	Measurement Alarm Range Resolution PR Measurement Range Resolution Accuracy	0 - 100% 1% 20 - 300bpm 1bpm $\pm 3$ bpm (20bpm ~ 250bpm)
Temperature (2 Channels, 1 Probe By Default)	Measurement Alarm Range Resolution Accuracy Channel Quick Temperature Resolution Accuracy (Without Sensor) Sensor Type Prediction Type	0-50°C (32-122°F) 0.1°C $\pm 0.1$ °C (without sensor) Dual-channel. Provide T1; T2; $\Delta T$ Measuring Range: 25°C ~ 45°C (monitoring mode) / 35.5°C ~ 42°C (prediction mode) 0.1°C $\pm 0.1$ °C (25°C ~ 45°C) (monitoring mode) Oral/Axillary sensor, Rectal sensor Less than 30 seconds
IBP (2 Channels, Optional)	Measured Pressure Measurement Range  Resolution Accuracy Sensitivity Impedance Range	ART, PA, CVP, RAP, LAP, ICP, P1, P2 ART: 0 to 300 mmHg / PA: -6 to +120mmHg / CVP/RAP/LAP/ICP: -10 to +40 mmHg / $\Omega$ P1/P2: -50 to +300 mmHg 1 mmHg $\pm 2\%$ or $\pm 1$ mmHg. Whichever is greater (without probe) 5 $\mu$ V/V/mmHg; 300 - 3000 $\Omega$
Respironics CO <sub>2</sub> (Mainstream / Sidestream, Optional)	Range Accuracy  AWRR Accuracy	(By Philips Respironics CAPNOSTATR 5 & LoFlo™ Technology) 0~ 150mmHg $\pm 2\%$ 0~40mmHg / $\pm 5\%$ 41~70mmHg / $\pm 8\%$ 71~100mmHg / $\pm 10\%$ 101~150 mmHg / $\pm 12\%$ % of reading, RESP measurement value exceeds 80rpm (sidestream) $\pm 1$ rpm Convenient design for intubated and non-intubated applications. Possible to work at low sample flow rate: 50ml/ minute Detailed specification refer to the user manual or Respironics.
C.O. (Optional)	Method Measuring Range	Thermodilution Technology CO: 0.1~ 20L/min / TB: 23°C ~ 43°C / TI: - 1°C ~ 27°C
Anesthetic Gas/ O <sub>2</sub> (Optional)	Technology Paramagnetic Oxygen Gas Measuring Range	Infra-red absorption characteristic Optional CO <sub>2</sub> , O <sub>2</sub> , N <sub>2</sub> O, Des, Iso, Enf, Hal, Sev, awRR, MAC CO <sub>2</sub> : 0~15% / N <sub>2</sub> O: 0~100% / Hal/Iso/Enf: 0~8% / Sev: 0~10% / Des: 0~22% / O <sub>2</sub> : 0~100% (ISA OR+ / AX+)
Thermal Recorder (Optional)	Print Speed Paper Width	(Up to 3 channels printing and 1,2,3 channels selectable) 25mm/s, 50mm/s 50 mm
I/O Interface		USB Port • SD card Socket • RS-232 Serial Port • VGA Output • Analog and nurse Call output • Defibrillation • Synchronization Output

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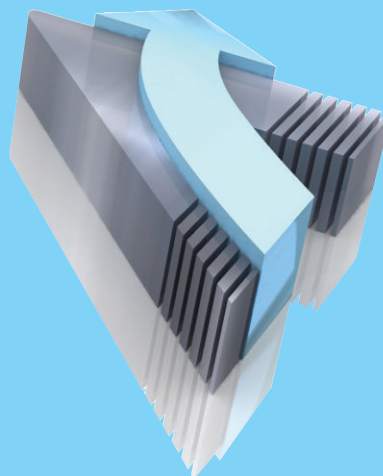
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