

Summary of Features and Benefits

- 8.4" TFT display, configurable up to 8 waveforms, enables maximum data analysis of your most critical parameters
- Standard features include 3/5-lead ECG, dual-channel invasive blood pressure, non-invasive blood pressure, SpO₂, pulse rate, respiration, dual-channel temperature, lithium ion battery, and integrated recorder
- Optional features include Masimo SET® or DPM SpO₂ and DPM CO₂
- Selectable display modes allow you to adjust data layouts based on particular patient circumstances
- 96-hours of graphic and list trends, NIBP list including 800 measurements and alarm event recall for 70 alarm episodes for comprehensive historical review of all parameters
- 40-seconds of full disclosure waveform recall for detailed review of physiological events
- 3-trace recorder for printing real-time and historical data is included as standard
- Compact flash back-up included on every device protects your patient's data should a sudden loss of power occur
- Nurse call interface allows connection to most hospital call systems

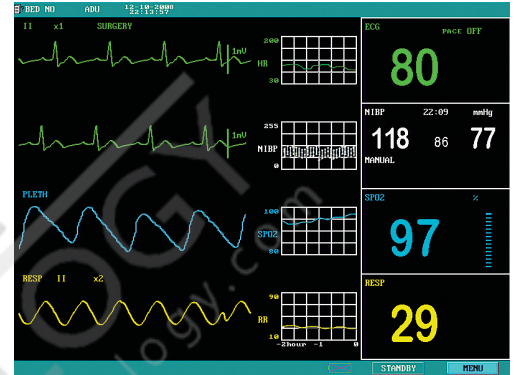
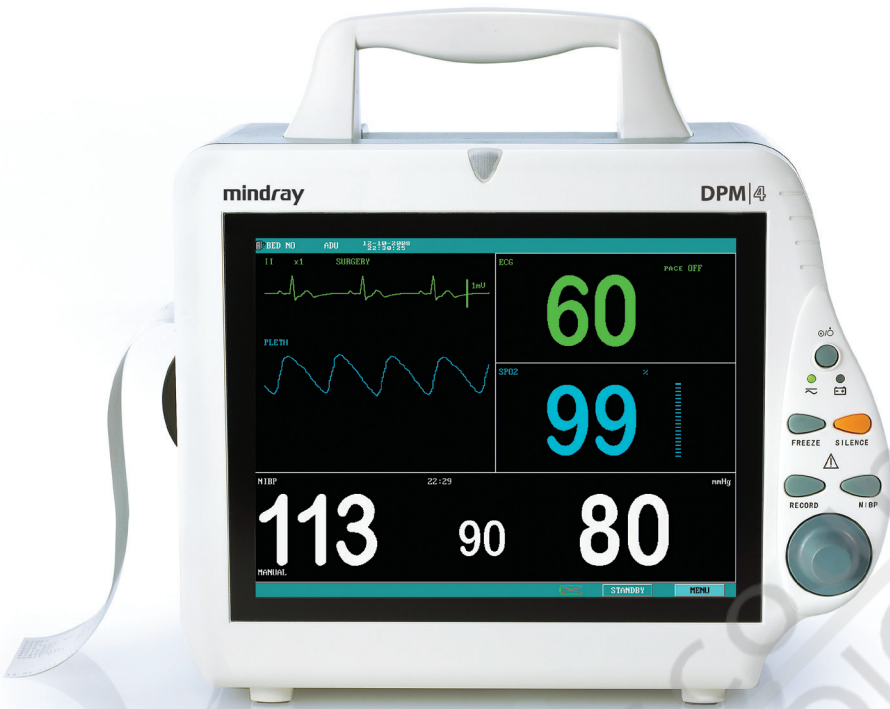


The versatile, yet affordable, compact portable monitor.

DPM4 is a portable patient monitor ideal for use across a variety of clinical settings due to its compact size and simple design. Intended to meet basic continuous monitoring needs, it focuses on providing core capability in an uncomplicated manner. Its high resolution color display offers a surprisingly vibrant view of your patient's physiological data, making it practical for use at the bedside or on transport. Available with or without invasive blood pressure measurement, DPM4 delivers the flexibility you need in order to properly respond to your patients' changing needs. Pre-operative areas, medical/surgical departments, general floors and beyond will want to consider this very effective, yet surprisingly affordable monitoring solution.

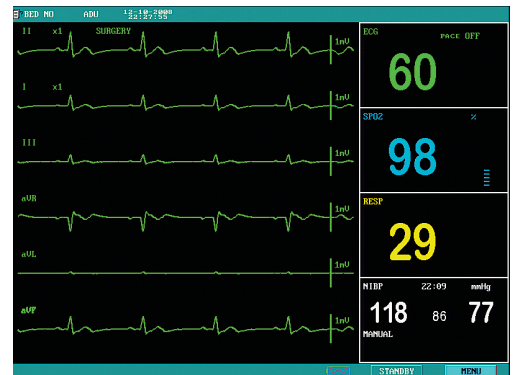
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PATIENT MONITOR



Choose Mini-Trend Mode to display 2 hours of graphically trended data alongside corresponding real-time waveforms.

Select Large Numerics Mode for optimal visualization of key parameter data. This display mode features bright, prominent numerics, with NIBP values nearly as wide as the display itself!



Multi-ECG feature allows you to perform extended review of your 5-lead ECG data.



Various mounting schemes enable you to situate the DPM4 monitor according to your particular environment.

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Display

Type:	8.4" color TFT
Resolution:	800 x 600 pixels
Waveforms:	8 selectable

ECG (3 and 5-Lead)

Leads:	I, II, III, aVR, aVL, aVF, V
Gain Selection:	x0.125, x0.25, x0.5, x1, x2, auto
Sweep Speed:	12.5mm/sec, 25mm/sec, 50mm/sec
Bandwidth:	Diagnostic Mode: 0.05-100Hz, Monitor Mode: 0.5-40Hz, Surgical Mode: 1-20Hz

Defibrillator Overload

Protection: Withstand 4000 VAC/50Hz voltage in isolation against electrosurgical interference and defibrillation

Recovery Time: <5sec

CMRR: Diagnostic Mode: ≥90dB, Monitor Mode: ≥105dB, Surgical Mode: ≥105dB

Heart Rate Meter

Measurement Range:	Adult: 15-300bpm, Pediatric: 15-350bpm, Neonate: 15-350bpm
Accuracy:	±1bpm or ±1%, whichever is greater
Resolution:	1bpm

Pacer Rejection:

When tested in accordance with ANSI/AAMI EC13-1992 Section 4.1.4, the 3/5 Lead ECG derived heart rate meter shall reject all pacer pulses ± 2.0mV to ± 700mV and duration 0.1ms to 2ms with no tail

Tall T-Wave Rejection:

When tested in accordance with ANSI/AAMI EC13-1992 Section 4.1.2.1 c, the heart rate meter shall reject all T-waves with amplitudes less than 120% of a 1mV, 100ms QRS, and a T wave duration of 180ms and a Q-T interval of 350ms

Scaling Signal: 1mV ±5%

Respiration

Range:	Adult: 0-120bpm, Pediatric/Neonate: 0-150bpm
Resolution:	1bpm
Accuracy:	7-150bpm: ±2bpm or ±2%, whichever is greater 0-6bpm: undefined
Lead:	I or II (default: lead II)
Sweep Speed:	6.25mm/sec, 12.5mm/sec, 25mm/sec

Pace Pulse

Pulse Indicator:

Pace pulses meeting the following conditions are marked by the PACE indicator

Amplitude: ±4 to ±700mV (3/5-lead)

Width: 0.1 to 2ms

Rise time: 10 to 100µs

Pulse Rejection:

When tested in accordance with the ANSI/AAMI EC13-2002: Sections 4.1.4.1 and 4.1.4.3, the heart rate meter rejects all pulses meeting the following conditions

Amplitude: ±2 to ±700mV

Width: 0.1 to 2ms

Rise time: 10 to 100µs

Minimum input slew rate: 20V/s RTI

Non-Invasive Blood Pressure

Measurement Method:	Oscillometric
Measurement Modes:	Manual, interval, continuous
Connector Type:	Rectus
Units of Measure:	mmHg, kPa (user-selectable)
Resolution:	1mmHg
Systolic Range:	Adult: 40-270mmHg, Pediatric: 40-200mmHg, Neonate: 40-135mmHg
Diastolic Range:	Adult: 10-210mmHg, Pediatric: 10-150mmHg, Neonate: 10-100mmHg
Mean Range:	Adult: 20-230mmHg, Pediatric: 20-165mmHg, Neonate: 20-110mmHg
Accuracy:	Mean error: < ±5mmHg, Standard deviation: < 8mmHg
Cuff Deflation Technique:	Step bleed
Cuff Inflation:	Volume of 500cc to 300mmHg in <20sec
Over Pressure Protection:	Double safety protection (hardware and software)
Pulse Rate Range:	40-240bpm
Pulse Rate Accuracy:	±3bpm or ±3%, whichever is greater

Invasive Blood Pressure

Measurement Range:	-50 to 300mmHg
Resolution:	1mmHg
Accuracy:	1mmHg or ±2%, whichever is greater
Zero Offset Range:	±200mmHg
Excitation:	5VDC, ±2% Minimum load resistance will be 300Ω per transducer
Frequency Response:	DC to 12.5Hz ±1Hz, -3db
Waveform Scales:	ART: 0 to 300mmHg PA: -6 to 120mmHg CVP: -10 to 40mmHg RAP: -10 to 40mmHg LAP: -10 to 40mmHg ICP: -10 to 40mmHg IBP1/IBP2: -50 to 300mmHg

Pulse Rate from Invasive Blood Pressure

Measurement Range:	25-350bpm
Resolution:	1bpm
Accuracy:	25-200bpm: ±1bpm or ±1%, whichever is greater. 201-350bpm: ±2%

Pulse Oximetry

With Masimo SET® SpO₂

Measurement Range:	1-100%
Resolution:	1%
Accuracy:	±2% (70-100%, Adult/Pediatric, no motion) ±3% (70-100%, Neonate, no motion) ±3% (70-100%, Adult/Pediatric/Neonate, motion) 0-69% unspecified

Pulse Rate with Masimo SET® SpO₂

Measurement Range:	25-240bpm
Resolution:	1bpm
Accuracy:	±3bpm (no motion), ±5bpm (motion)



Pulse Oximetry (continued)

With Mindray™ SpO₂

Measurement Range:	0-100%
Resolution:	1%
Accuracy:	±2% (70-100%, Adult/Pediatric, no motion) ±3% (70-100%, Neonate, no motion) ±3% (70-100%, Adult/Pediatric/Neonate, motion) 0-69% unspecified

Pulse Rate with Mindray SpO₂

Measurement Range:	20-254bpm
Resolution:	1bpm
Accuracy:	±3bpm (no motion), ±5bpm (motion)

Temperature

Scale:	Selectable °C or °F
Channels:	2
Measurement Range:	0°C to 50°C (32°F to 122°F)
Resolution:	0.1°C
Accuracy:	±0.1°C (excluding sensor) ±0.2°C (including YSI 400 series sensor)
Measurement Time:	Body surface: <100sec (using YSI 400 series sensor) Body cavity: <80sec (using YSI 400 series sensor)

Data Storage

Trend Data:	96 hours at selectable resolutions: 1min, 5min, 10min 1 hour at selectable resolutions: 1sec, 5sec
Alarm Events:	70 alarm events and associated waveforms (selectable waveform lengths: 8sec, 16sec or 32sec)
NIBP Measurements:	800 (systolic, diastolic, mean pressure and measurement time)

Recorder

Type:	Thermal array
Speed:	25mm/sec

Battery

Type:	Rechargeable lithium ion
Run Time:	3 hours using a new, fully charged battery and monitoring ECG, SpO ₂ and NIBP measurements every 15min at 25°C
Recharge Time:	6.5 hours

Interfacing

Connectors:	1 AC power connector, 1 RJ45 network connector, 100 BASE-TX, 1 VGA connector, 15-PIN D-sub, 1 BNC connector, 1 equipotential grounding connector
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Physical Dimensions

Monitor Size:	24cm(H) x 26.1cm(W) x 17.1cm(D) 9.4"(H) x 10.3"(W) x 6.7"(D)
Monitor Weight:	Less than 5kg (11lbs) standard configuration (ECG, Resp, SpO ₂ , 2-Temperature, NIBP) with 1 lithium ion battery

Environmental

Operating Temperature:	0°C to 40°C
Storage Temperature:	-20°C to 60°C
Operating Humidity:	15% to 95%, non-condensing
Storage Humidity:	10% to 95%, non-condensing
Operating Altitude:	-500 to 4600m (-1640 to 15092ft)

Power Requirements

AC Voltage:	100-240VAC, 50/60Hz
Power:	110VA

Safety

Type of Protection:	Class I with internal electric power supply
Degree of Protection:	ECG/Resp/Temp/SpO ₂ /NIBP/IBP: CF
Protection Against Ingress of Fluids:	Not protected