

Technical Specifications

iMEC6 / iMEC7

Monitor size: 360mm x273 mm x 122mm
 Weight: 3.2kg, Standard parameters configuration, including a lithium battery and a recorder;
 3.6kg, standard and optional parameters configuration, including touchscreen, a lithium battery and a recorder

iMEC5

Monitor size: 268mm x210 mm x 114mm
 Weight: 2.6kg, Standard parameters configuration, including a lithium battery and a recorder;
 2.9kg, standard and optional parameters configuration, including touchscreen, a lithium battery and a recorder

Display

Type: iMEC 7: 12.1" color LCD
 iMEC 6: 10.4" color LCD
 iMEC 5: 8.4" color LCD
 Resolution: 800 x 600 pixels
 Waveforms: up to 8
 External display: 1 display through VGA

EKG

3-lead: I, II, III
 5-lead: I, II, III, aVR, aVL, aVF, V
 Gain: x0.125, x0.25, x0.5, x1, x2, x4, Auto
 Sweep speed: 6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s
 Bandwidth: Diagnostic Mode: 0.05-150Hz
 Monitor Mode: 0.5-40Hz
 Surgical Mode: 1-20Hz
 ST Mode: 0.05-40Hz

Defib.protection: Withstand 5000V (360J)defibrillation
 Recovery time: ≤10 s
 CMRR: Diagnostic Mode: ≥90dB
 Monitor Mode: ≥105dB
 Surgical Mode: ≥105dB
 ST Mode: ≥105dB

ST analysis: -2.0 to 2.0 mV
 Arr analysis: Yes

Heart Rate

Range: Adu: 15 to 300 bpm
 Ped: 15 to 350 bpm
 Neo: 15 to 350 bpm
 Resolution: 1 bpm
 Accuracy: ±1 bpm or ±1%, whichever is greater

Respiration

Range: Adu: 0 to 120 rpm
 Ped/Neo: 0 to 150 rpm
 Resolution: 1 rpm
 Accuracy: 7 to 150 rpm: ±2 rpm or ±2%, whichever is greater
 0 to 6 rpm: Not specified
 Lead: I or II (default: lead II)
 Sweep speed: 6.25 mm/s, 12.5 mm/s or 25 mm/s

SpO₂

Mindray/Nellcor Range: 0 to 100%
 Resolution: 1%
 Mindray accuracy: ±2% (70-100%, Adu/Ped, non-motion)
 ±3% (70-100%, Neo, non-motion)
 ±3% (70-100%, motion)
 Unspecified (0-69%)

Nellcor accuracy: Actual accuracy depends on probe. Refer to the operator's manual
 Refreshing rate: 1 s

Pulse rate

Range: Mindray SpO₂: 20 to 254 bpm
 Nellcor SpO₂: 20 to 300 bpm
 IBP Module: 25 to 350 bpm
 NIBP Module: 40 to 240 bpm
 Accuracy: Mindray SpO₂: ±3 bpm (non-motion)
 ±5 bpm (motion)
 Nellcor SpO₂: ±3 bpm (20-250 bpm)
 Unspecified (251-300 bpm)
 IBP Module: ±1 bpm or ±1%, whichever is greater
 NIBP Module: ±3 bpm or ±3%, whichever is greater

Resolution: 1 bpm
 Refreshing rate: 1 s

NIBP

Method: Automatic Oscillometric
 Operation mode: Manual, Auto, STAT
 Parameters: Systolic, Diastolic, Mean
 Systolic range: Adu: 40 to 270 mmHg
 Ped: 40 to 200 mmHg
 Neo: 40 to 135 mmHg

Diastolic range: Adu: 10 to 210 mmHg
 Ped: 10 to 150 mmHg
 Neo: 10 to 100 mmHg
 Mean range: Adu: 20 to 230 mmHg
 Ped: 20 to 165 mmHg
 Neo: 20 to 110 mmHg

Accuracy: Max mean error: ±5 mmHg
 Max standard deviation: 8 mmHg
 Resolution: 1 mmHg

Temperature

Range: 0 to 50°C (32 to 122 F)
 Resolution: 0.1°C
 Accuracy: ±0.1°C or ±0.2 F (without probe)
 Parameters: T1, T2 and TD

IBP

Channel: up to 2 channels
 Range: -50 to 300 mmHg
 Resolution: 1 mmHg
 Accuracy: ±2% or ±1 mmHg, whichever is greater (without sensor)
 Sensitivity: 5 uV/mmHg/V
 Impedance range: 300 to 3000Ω

C.O.

Method: Thermodilution
 Range: C.O.: 0.1 to 20 L/min
 TB: 23 to 43°C
 TI: 0 to 27°C
 Accuracy: C.O.: ±5% or ±0.1 L/min, whichever is greater
 TB, TI: ±0.1°C (without sensor)
 Resolution: C.O.: 0.1 L/min
 TB, TI: 0.1°C

Sidestream CO₂

CO₂ Range: 0 to 99 mmHg
 Accuracy: 0 to 40 mmHg: ±2 mmHg
 41 to 76 mmHg: ±5% of the reading
 77 to 99 mmHg: ±10% of the reading
 Sample flowrate: 70, 100 ml/min
 Accuracy: ±15% or ±15 ml/min, whichever is greater.
 Warm-up time: ISO accuracy mode: 45 s
 Full accuracy mode: 10 min
 AWRR range: 0 to 120 rpm
 AWRR precision: ±2 rpm
 Response time: When using neonatal watertrap and 2.5 m neonatal sampling line
 <4 s @ 100 ml/min
 <5 s @ 70 ml/min
 When using adult watertrap and 2.5 m adult sampling line
 <6 s @ 100 ml/min
 <7 s @ 70 ml/min

Apnea time:

10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s

Microstream CO₂

CO₂ Range: 0 to 99 mmHg
 Accuracy: 0 to 38 mmHg: ±2 mmHg
 39 to 99 mmHg: ±5% of reading +0.08% for every 1mmHg(above 38mmHg)
 Sample flowrate: 50ml/min
 Accuracy: .75/+15ml/min
 Initialization time: 30 s (typical)
 awRR range: 0 to 150 rpm
 awRR precision: 0 to 70 rpm: ±1 rpm
 71 to 120 rpm: ±2 rpm
 121 to 150 rpm: ±3 rpm
 Response time: 2.9 s (typical)
 Apnea time: 10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s

Mainstream CO₂

CO₂ Range: 0 to 150 mmHg
 Accuracy: 0 to 40 mmHg: ±2 mmHg
 41 to 70 mmHg: ±5% of the reading
 71 to 100 mmHg: ±8% of the reading
 101 to 150 mmHg: ±10% of the reading
 0 to 150 rpm
 ±1 rpm
 <60 ms

Data Storage

Trend data: 120 hrs (interval 1 min), 4 hrs (interval 5 sec), 1 hrs(interval 1 sec)
 Alarm events: 100 events and associated waveforms
 Arr. events: 100 Arr. events and associated waveforms
 NIBP: 1000 measurements
 Waveforms: Max. 48 hrs full disclosure waveforms(specific storage time depends on the type and numberof waveforms stored)

Battery

Type: Chargeable Lithium-Ion
 Number: 1
 Voltage: 11.1 VDC
 Capacity: 2600 mAh (4500 mAh optional)
 Run time: 2 hrs(2600 mAh)
 4 hrs(4500 mAh)
 Recharge time: 4.5 hrs maximum(2600 mAh)
 8 hrs maximum(4500 mAh)

Interfacing

Connectors: 1 AC power connector
 1 RJ45 network connector
 1 USB 2.0 connector
 1 VGA output connector
 1 multifunctional output connector (output ECG, IBP, nurse call and Defib. Synch. Signals)

Recorder

Type: Thermal array
 Speed: 25 mm/s, 50 mm/s
 Trace: 3

Power Requirements

AC Voltage: 100 to 240 VAC, 50/60Hz
 Current: 1.1 to 0.5 A



iMEC5/6/7 Patient Monitor

Patient Monitor for More Efficient Bedside Care

Mindray Building, Keji 12th Road South,
 High-tech Industrial Park, Nanshan, Shenzhen 518057, P.R. China
 Tel: +86 755 8188 8998 Fax: +86 755 26582680
 E-mail: intl-market@mindray.com www.mindray.com

Mindray is listed on the NYSE under the symbol "MR"

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 healthcare within reach

Exceptional Design and Cost-Effective Monitoring

"No-fan design" allows for a quiet care environment. Preventing dust collection and reduces the risk of airborne contamination.

Weighing from 2.6Kg to 3.6Kg with an integral **carry-handle**, the lightweight iMEC is ideal as a portable monitor.

The user-configurable **touch screen** is available in 8.4", 10.4" or 12.1" sizes, with 800 x 600 high-resolution and up to 8 traces.

Optional measurement capability of IBP, Cardiac Output and EtCO₂, to meet your advanced monitoring requirements

Li-ion battery allows for up to 4 hours of continuous monitoring.

Powerful data storage for up to 48 hours full-disclosure, 120 hours of tabular and graphic trends, 1,000 NIBP measurements and 100 alarm events.

Alarm light is visible from 360 degrees

Ergonomic buttons enable quick access to commonly used functions, such as alarm silence, alarm pause and start NIBP.

The integral 3-trace **thermal recorder** provides waveform and data reports for diagnostic support.

Quick keys help caregivers to rapidly access frequently used functions such as trend review, and alarm settings and useful display modes, including large fonts and mini-trends.

Reliable Technology for Improved Usability

Patient Care in One Touch

Through its simple and intuitive touch screen display, iMEC offers instant access to all functions and allows you to monitor your patients in a quicker and more convenient way.

Customizable hot keys provide shortcuts to the most frequently used functions, saving you time for patient care.

Quick and Easy Monitoring

A compact and light weight design make iMEC easy to carry while optional bedrail mounting allows for convenient in-hospital transport.

An optional rolling stand provides iMEC with maximum mobility. Both rolling stand and wall mount feature simple mounting and quick release.

iMEC's user-friendly interface is intuitive and easy to use.

- Dynamic mini-trends provide up to 8 hours of useful information on your patient's status.
- Large font display offers a clear view of all vital signs and allows you to monitor your patient from a distance.
- "View other bed" helps you to monitor other patients directly at the bedside on the iMEC without accessing the central station.

Auto detectable 3 or 5 lead ECG and self-adjusting ECG, SpO₂ and IBP waveforms allow you to spend more time on patient care and less time on operating the monitor.

The centralized alarm system enables you to quickly review and modify alarm settings.

The logical review of alarms, events, trends and full-disclosure data helps you to quickly and accurately assess a patient's situation.

With LAN and Wi-Fi capability, your iMEC can communicate with the HyperVisor VI Central Monitoring System both from the bedside and during transport.

Optimized Structural Design – Simplifying Upgrades and Maintenance

The iMEC is designed to simplify maintenance and make it easy to perform future upgrades.

Future software upgrades can be performed on one iMEC or multiple iMECs simultaneously through a standard RJ45 port.

The USB port allows you to transfer patient data to a PC and to copy your personalized user settings to different iMECs.

The maintenance-free Li-ion battery offers up to 4 hours continuous monitoring.



rolling stand for iMEC series patient monitor, part number 045-000670-00

