

Technical Specifications

uMEC10	315mm x 155 mm x 220mm	Parameters:	T1, T2 and TD
Monitor size:	≤3.5kg, Standard parameters configuration, including alithium battery and a recorder	Range:	0 to 50°C (32 to 122 °F)
Weight:		Resolution:	0.1°C
		Accuracy:	±0.1°C or ±0.2 °F (without probe)
uMEC12	345mm x160mm x 255mm	IBP (for uMEC 12 only)	
Monitor size:	≤4kg, Standard parameters configuration,including alithium battery and a recorder	Channel:	up to 2 channels
Weight:		Range:	-50 to 300 mmHg
		Resolution:	1 mmHg
		Accuracy:	±2% or ±1 mmHg, whichever is greater (without sensor)
		Sensitivity:	5 μV/mmHg
		Impedance range:	300 to 3000Ω
Display		C.O. (for uMEC 12 only)	
Type:	uMEC10: 10.4" color LED uMEC12: 12.1" color LED	Method:	Thermodilution
Resolution:	800 x 600 pixels	C.O.: 0.1 to 20 L/min	
Waveforms:	uMEC10: up to 7 uMEC12: up to 8	Range:	TB: 23 to 43°C Ti: 0 to 27°C
External display:	1 display through VGA	Accuracy:	C.O.: ±5% or ±0.1 L /min, whichever is greater TB, Ti: ±0.1°C (without sensor)
ECG		Resolution:	C.O.: 0.1 L/min TB, Ti: 0.1°C
Lead set:	3-lead: I, II, III 5-lead: I, II, III, aVR, aVL, aVF, V	CO (for uMEC 12 only)	
Gain:	Automatic 3/5 – lead recognition	Mode:	Sidestream, Low flow
Sweep speed:	x0.125, x0.25, x0.5, x1, x2, x4, Auto	Range:	0 to 20% (0-152mmHg under standard atmospheric pressure)
Bandwidth:	6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s	Accuracy:	±0.1% (<1%) ±0.2% (1 to 4.9%) ±0.3% (5 to 6.9%) ±0.4% (7 to 11.9%) ±0.5% (12 to 12.9%) ±(0.43%-8%rel) (13 to 20%) Unspecified (over 20%)
	Monitor Mode: 0.5-40Hz Surgical Mode: 1-20Hz ST Mode: 0.05-40Hz	Sample flowrate:	90, 120 ml/min (Sidestream) 50 ml/min (Low flow)
Defib.protection:	Withstand 5000V (360J)defibrillation	Sample flowrate Accuracy:	±15% or ±15 ml/min, whichever is greater.
Recovery time:	<10 s	Start-up time:	<90s
CMRR:	Diagnostic Mode: >90dB Monitor, Surgical, ST Mode: >105dB	Response time:	When using adult water trap and 2.5 m adult sampling line <5.5 s @120 ml/min When using neonatal water trap and 2.5 m neonatal sampling line <4.5 s @ 90 ml/min When using low flow accessories <5 s @ 50 ml/min
ST analysis:	Range:-2.0 to 2.0 mV Accuracy: ±0.02 mV or ±10%, whichever is greater (-0.8 to +0.8 mV) Resolution: 0.01mV	AWRR range:	0 to 150 rpm
Arr analysis:	Yes, multi-lead, 24 classifications	AWRR precision:	<60rpm: ±1 60-150 rpm: ±2
QT analysis:	Yes	Apnea time:	10 s, 15 s, 20 s, 25 s, 30 s, 35 s, 40 s
Heart Rate		Data Storage	
Range:	Adu: 15 to 300 bpm Ped/Neo: 15 to 350 bpm	Trend data:	1200hrs (interval 10min), 120 hrs (interval 1 min), 4 hrs (interval 5 sec)
Resolution:	1 bpm	Alarm events:	1800 events and associated waveforms
Accuracy:	±1 bpm or ±1%, whichever is greater	Arr. events:	128 Arr. events and associated waveforms
HR analysis:	Yes	NIBP:	1600 measurements
		Waveforms:	Max. 48 hrs full disclosure waveforms
Respiration		Battery	
Range:	Adu: 0 to 120 rpm Ped/Neo: 0 to 150 rpm	Type:	1 Build-in chargeable Lithium-ion battery
Resolution:	1 rpm	Voltage:	11.1 VDC
Accuracy:	7 to 150 rpm: ±2 rpm or ±2%, whichever is greater 0 to 6 rpm: Not specified	Capacity:	2500 mAh (5000 mAh optional)
Lead:	I or II	Run time:	4 hrs(2500 mAh), 8 hrs (5000 mAh)
Sweep speed:	3mm/s, 6.25 mm/s, 12.5 mm/s, 25 mm/s or 50mm/s	Recharge time:	2500 mAh:4 hrsmaximum (power off) 8 hrsmaximum (power off)
SpO₂		Interfacing	
Range:	0 to 100%	Connectors:	1 AC power connector 1 RJ45 network connector 2 USB 2.0 connector 1 VGA output connector 1 multifunctional output connector (output ECG,nurse call and Defib. Synch. Signals)
Resolution:	1%	WiFi support:	Yes, 5G/2.4G dual band
Accuracy:	±2% (70-100%, Adu/Ped) ±3% (70-100%, Neo) Unspecified (0-69%)	Barcode Scanner:	Support
Refreshing rate:	≤2 s	Network printer:	Support
Pulse Rate		Recorder	
Range:	20 to 300 bpm (from SpO ₂) 30 to 300 bpm (from NIBP) 25 to 350 bpm (from IBP)	Type:	Thermal array
Accuracy:	±3 bpm (from SpO ₂) ±3bpm or ±3%, whichever is greater (from NIBP) ±1 bpm or ±1%, whichever is greater (from IBP)	Speed:	12.5mm/s, 25 mm/s, 50 mm/s
Resolution:	1 bpm	Trace:	3
Refreshing rate:	≤2 s	Power Requirements	
NIBP		AC Voltage:	100 to 240 VAC, 50/60Hz
Method:	Automatic Oscillometric	Current:	1.5 A
Operation mode:	Manual, Auto, STAT	Environmental Requirements	
Parameters:	Systolic, Diastolic, Mean	Temperature:	Operating: 0 to 40°C(32 to 104 °F) Storage: -20 to 60°C (-4 to 140 °F)
Systolic range:	Adu: 25 to 290 mmHg Ped: 25 to 240 mmHg Neo: 25 to 140 mmHg	Humidity: Operating:	15 to 95 % (non condensing)
Diastolic range:	Adu: 10 to 250 mmHg Ped: 10 to 200 mmHg Neo: 10 to 115 mmHg	Storage:	10 to 95 % (non condensing)
Mean range:	Adu: 15 to 260 mmHg Ped: 15 to 215 mmHg Neo: 15 to 125 mmHg	Barometric:	Operating: 427.5 to 805.5 mmHg (57.0 to 107.4 kPa) Storage: 120 to 805.5 mmHg (16.0 to 107.4 kPa)
Accuracy:	Max mean error:±5 mmHg		
Max standard deviation:	8 mmHg		
Resolution:	1 mmHg		
NIBP analysis:	Yes		
Temperature			
Channel:	1-ch (uMEC10), 2-ch (uMEC12)		

*Not all of the functions are available in all geographies, please contact with local Mindray sales representative for more information.



uMEC Patient Monitor

Taking high cost out of quality healthcare

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

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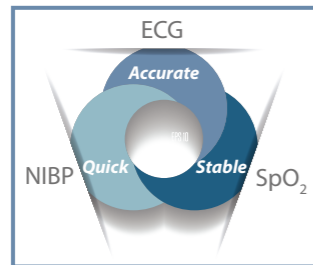
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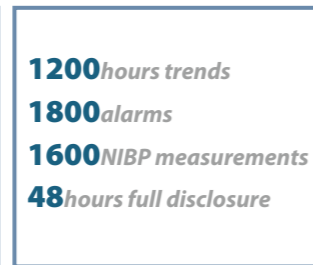
Advanced Performance

With Mindray's 25-year experience in patient monitoring, uMEC series patient monitors cater to clinical needs by offering precise and stable measurement of essential parameters. When monitoring is reliable, you can naturally be more confident with your clinical decisions.

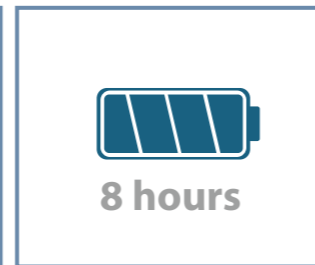
- Mindray's patented Multi-lead ECG Algorithm greatly improves the accuracy of measurement and reduces false alarms
- NIBP quick-measurement technique reduces the discomfort caused by cuff inflation, especially for patients suffering from hypertension or hypotension
- Anti-interference SpO₂ algorithm provides accurate measurement even when the patient is mobile
- Large capacity for data storage enables comprehensive review of patient's history data, and external USB storage devices are also supported
- 8-hour continuous runtime with one Lithium-ion battery



Essentially advanced measurements



Huge data capacity



Long battery working time



Easy to Use

As an user-friendly patient monitor, uMEC helps to simplify workflow and improve efficiency. The monitor provides very intuitive user interface to help faster and easier applications even for new users. Caregivers need less time for training, and get more time for patient care.

- 10.4 inch/12.1 inch high resolution LED screen
- Supports various monitoring screen layouts for different clinical needs, including large font, full/half screen 7-lead monitoring, view other bed, etc.
- Default settings satisfy general clinical requirements, no need to adjust the settings before using and helps you get started quickly
- Statistics for heart rate changes and ambulatory blood pressure monitoring, making ups and downs visible
- Less than 3.5kg weight with battery makes it very portable
- Unique accessory cabinet makes accessories management effective
- One piece design makes cleaning easier



HR/BP Analysis



User-friendly Interfaces



Unique accessory cabinet



High Durability

To be effective in different environment, uMEC has passed strict electrical safety tests and reliability tests. It is extremely durable and has a long life span.

- Working temperature is 0~40°C, unaffected by extremes
- 0.75 m drop-protection and IPX1 water resistance
- Strong plastic housing resists aging and yellowing, with high corrosion resistance
- Low power consumption and fanless design makes it environmentally friendly and reduces the risk of cross contamination
- Mindray accessories are highly reliable with quality material and production technique



High-quality Accessories



Drop protection



Compatible with multiple cleaning agents