

uMEC12 Vet

Veterinary Monitor



Physical Specifications

Size (W×H×Dt):	345mm x160mm x 255mm
Weight:	≤4kg, Standard parameters configuration, including a lithium battery
Display screen:	12.1" color LED, or touchscreen
Resolution:	800 x 600 pixels
Waveforms:	up to 11

ECG

Lead set:	3-lead: I, II, III 5-lead: I, II, III, aVR, aVL, aVF, V
Sweep speed:	6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s
Gain:	x 0.125, x 0.25, x 0.5, x 1, x 2, x 4, auto
Bandwidth:	Diagnostic mode: 0.05 to 150 Hz Monitor mode: 0.5 to 40 Hz Surgical mode: 1 to 20 Hz ST mode: 0.05 to 40 Hz
CMRR:	Diagnostic: > 90 dB Monitor, Surgical, ST mode: > 105 dB
Defib. protection:	Withstand 5000V (360J) defibrillation
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
Arr analysis:	Yes, multi-lead, 23 classifications
QT analysis:	Yes

Heart Rate

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

Respiration

Lead:	I or II
Range:	0 to 150 rpm
Accuracy:	7 to 150 rpm: ±2 rpm or ±2%, whichever is greater 0 to 6 rpm: Not specified
Resolution:	1 rpm
Sweep speed	3mm/s, 6.25mm/s, 12.5mm/s, 25mm/s, 50mm/s
NIBP resolution:	1 mmHg
Assisting Venous Puncture:	Yes



SpO₂

Range:	0 to 100 %
Resolution:	1%
Accuracy:	70 to 100%: ±3% 0% to 69%: Not specified.
Refreshing rate:	≤2s

PR

Range:	20 to 254 bpm (SpO ₂) 25 to 350 bpm (IBP) 30 to 300 bpm (NIBP)
Accuracy:	±3 bpm (SpO ₂) ±1 bpm or ±1 %, whichever is greater (IBP) ±3 bpm or ±3 %, whichever is greater (NIBP)
Refreshing rate:	≤2s

Temperature

Channels:	2
Range:	0 to 50 °C (32 to 122 °F)
Accuracy:	±0.1°C (without probe)
Resolution:	0.1°C

NIBP

Technique:	Oscillometry
Operation mode:	Manual, Auto, STAT, Sequence
Parameters:	Systolic, Diastolic, Mean
Systolic range:	>50lb or 23kg: 25 to 290 mmHg 21lb~50lb or 10kg~23kg: 25 to 240 mmHg <21lb or <10kg): 25 to 240 mmHg
Diastolic range:	>50lb or 23kg: 10 to 250 mmHg 21lb~50lb or 10kg~23kg: 10 to 200 mmHg <21lb or <10kg): 10 to 200 mmHg
Mean range:	>50lb or 23kg: 15 to 260 mmHg 21lb~50lb or 10kg~23kg: 15 to 215 mmHg <21lb or <10kg): 15 to 125 mmHg
Accuracy:	Max mean error: ± 5 mmHg Max standard deviation: 8 mmHg
NIBP:	1600 sets
Full disclosure:	48 hours at maximum

IBP

Channel:	up to 2 channels
Impedance range:	300 to 3000 Ω
Range:	-50 to 300 mmHg
Accuracy:	± 1 mmHg or ± 2 %, whichever is greater
Resolution	1 mmHg

C.O.

Technique:	Thermodilution
C.O. range:	0.1 to 20 L/min
C.O. accuracy:	± 0.1 L/min or $\pm 5\%$, whichever is greater
C.O. resolution	0.1 L/min
TB range:	23 to 43 °C (73.4 to 109.4 °F)
TI range:	0 to 27 °C (32 to 80.6 °F)
TB, TI accuracy:	± 0.1 °C (without sensor)
TB, TI resolution:	0.1 °C

CO₂

Method:	Sidestream
Sweep speed:	3 mm/s, 6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s
CO ₂ range:	0 to 20%
CO ₂ accuracy:	$\pm 0.1\%$ (<1%) $\pm 0.2\%$ (1 to 4.9%) $\pm 0.3\%$ (5 to 6.9%) $\pm 0.4\%$ (7 to 11.9%) $\pm 0.5\%$ (12 to 12.9%) $\pm (0.43\% + 8\% \text{rel})$ (13 to 20%) Unspecified (over 20%)
Sample flowrate:	90, 120 ml/min
Sample flowrate tolerance:	$\pm 15\%$ or ± 15 ml/min, whichever is greater.
Start-up time:	<90s
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
awRR range:	0 to 150 rpm
awRR precision:	< 60rpm: ± 1 rpm
Apnea time:	10s, 15s, 20s, 25s, 30s, 35s, 40s

Data Storage

Trends data	1200hrs (interval 10min), 120 hrs (interval 1 min), 4 hrs (interval 5 sec)
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Interfacing

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)
Wi-Fi support:	Yes, 5G/2.4G dual band
Barcode scanner:	Support
Network printer:	Support

Battery

Type:	1 Build-in chargeable Lithium-ion battery
Capacity:	2500mAh (5000mAh optional)
Run time:	4 hrs (2500mAh), 8 hrs (5000mAh)
Recharge time:	2500mAh: 4 hrs maximum (power off) 5000mAh: 8 hrs maximum (power off)

Recorder

Type:	Thermal array
Speed:	12.5mm/s, 25 mm/s, 50 mm/s
Trace:	3

Power Requirements

AC Voltage:	100 to 240 VAC, 50/60Hz
Current:	1.5 A

Environmental requirements

Temperature:	Operating: 0 to 40 °C (32 to 104 °F) Storage: -20 to 60 °C (-4 to 140 °F)
Humidity:	Operating: 15 to 95 % (non condensing) Storage: 10 to 95 % (non condensing)
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)

Some of functions marked with an asterisk may not be available. Please contact your local Mindray sales representative for the most current information.