

# M3B

## Patient Monitor

Version 1.1



### Main Unit Specification

#### Physical Specifications

Dimension	(174±2) mm(W) × (235±2) mm(H) × (189±2) mm(D)
Weight	≤3.5 kg (not including battery)

#### Power Supply

Power Supply	100 V to 240 V~, 50 Hz/60 Hz
Pmax	70 VA

#### Battery

Battery Type	Rechargeable lithium-ion battery	
Capacitance	2500 mAh, 5000 mAh	
Typical Working Period	2500 mAh	7 h
	5000 mAh	14 h
Maximum Rechargeable Period	2500 mAh	3.5 h
	5000 mAh	7 h

#### Display

Display screen	5.6-inch LCD
Resolution	640×480

#### Data Storage

Trend List	72 h, 1 min. resolution
Alarm List	800 groups

#### Recorder

Record Width	48 mm
Paper Speed	12.5 mm/s, 25 mm/s
Recording types	Current displayed parameter list recording
	Current displayed alarm list recording
	Real-time 8s waveform recording
	Recording of all the parameter of current patient ID

#### Interfaces and others

USB Port	1
Network Interface	1
Nurse Call	RJ-45 network interface
Wireless Network	Wi-Fi

#### EDAN Module SpO<sub>2</sub>

Measuring Range	0% to 100%
Resolution	1%
Data update period	1 s
Accuracy	Adult/Pediatric: ±2% (70% to 100% SpO <sub>2</sub> )

Undefined (0% to 69% SpO<sub>2</sub>)  
Neonatal: ±3% (70% to 100% SpO<sub>2</sub>)  
Undefined (0% to 69% SpO<sub>2</sub>)

#### PI (Perfusion Index)

Measuring Range	0-10
Resolution	1

#### Nellcor Module SpO<sub>2</sub>

Measuring Range	1% ~ 100%
Resolution	1%
Data update period	1 s
Accuracy	
DS-100A, OXI-A/N(Adult)	±3% (70% ~100% SpO <sub>2</sub> )
OXI-A/N(Neonate)	±4% (70% ~ 100% SpO <sub>2</sub> )

#### PR

##### PR (SpO<sub>2</sub>)

Measuring range	EDAN: 25 bpm to 300 bpm Nellcor: 0 bpm to 300 bpm
Accuracy	EDAN: ±2 bpm Nellcor: ±3 bpm (20 bpm to 250 bpm)
Resolution	EDAN: 1 bpm Nellcor: 1 bpm

##### PR (NIBP)

Measuring range	EDAN: 40 bpm to 240 bpm
Accuracy	±3 bpm or 3.5%, whichever is greater
Resolution	1 bpm

#### CO<sub>2</sub>

Applicable Patient Type	Adult, pediatric and neonatal patients
Technique	Infra-red Absorption Technique
Unit	mmHg, %, Kpa
Measuring Range	
EtCO <sub>2</sub>	0 mmHg ~ 150 mmHg
FiCO <sub>2</sub>	3 mmHg ~ 50 mmHg
AwRR	0 rpm ~ 150 rpm (Mainstream) 2 rpm ~ 150 rpm (Sidestream)
Resolution	
EtCO <sub>2</sub>	1 mmHg
FiCO <sub>2</sub>	1 mmHg
AwRR	1 rpm

<b>EtCO<sub>2</sub> Accuracy</b>	±2 mmHg, 0 to 40 mmHg ±5% of reading, (41 ~ 70) mmHg ±8% of reading, (71 ~ 100) mmHg ±10% of reading, (101 ~ 150) mmHg ±12% of reading, RR is over 80 rpm (Sidestream) There will be no degradation in performance due to Respiration Rate. (mainstream)
<b>AwRR Accuracy</b>	±1 rpm
<b>Sample Gas Flowrate</b>	50 ±10 ml/min
<b>CO<sub>2</sub> Rise Time / Response Time (Mainstream)</b>	< 60 ms
<b>Sensor Response time (Sidestream)</b>	<3s (including transport time and rise time)
<b>Barometric pressure compensation</b>	User setup
<b>Apnea Alarm Delay</b>	10 s, 15 s, 20 s (Default), 25 s, 30 s, 35 s, 40 s, 45 s

### Safety Specifications

<b>Compliant with Standards</b>	IEC 60601-1: 2005+A1:2012; IEC 60601-1-2:2014; EN 60601-1: 2006+A1:2013; EN 60601-1-2: 2015; ISO 80601-2-61: 2011; ISO 80601-2-55: 2011; IEC 60601-2-49: 2011
<b>Anti-electroshock Type</b>	Class I equipment and internal powered equipment
<b>Anti-electroshock Degree</b>	BF: SpO <sub>2</sub> , CO <sub>2</sub>
<b>Ingress Protection</b>	IPX1

### Environmental Specifications

<b>Temperature</b>	Working: +0°C to +40°C (32°F ~ 104°F) Transport and Storage: -20°C to +55°C (-4°F ~ 131°F)
<b>Humidity</b>	Working: 15%RH to 95%RH (non-condensing) Transport and Storage: 15%RH to 95%RH (non-condensing)
<b>Altitude</b>	Working: 86 kPa to 106 kPa Transport and Storage: 70 kPa to 106 kPa