

PHILIPS

The Philips MX100 Patient Monitoring System

Designed for Indonesia healthcare needs
Support timely clinical decisions and patient safety



The Philips MX100 Patient Monitoring System is designed for clinicians who require reliable patient data wherever care is delivered. Combining a multi-measurement module with a large touchscreen display and flexible mounting options, it delivers clear visibility of physiological parameters, streamlined waveform and trend review, and consistent monitoring workflows across every care area.

Designed Around the Way You Care



Intuitive 24-inch Display

A large 24-inch touchscreen displays up to 8 waveforms, with an additional 5 waveforms on the MX100's built-in 6.1-inch screen — ensuring full parameter visibility at the bedside and during transport.



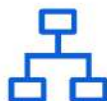
Scalable Measurements

Standard configuration includes ECG, NBP, SpO₂, dual IBP, and Temperature, with optional EtCO₂ and 12-lead ECG to match the clinical needs of each care area.



Clinical Decision Support Tools

Built-in tools help reduce cognitive load, recognise patient deterioration earlier, and provide timely feedback on therapeutic interventions.



Connected Workflow

Supports central monitoring and EMR integration for seamless, uninterrupted data flow across care teams.



Wall-Mounted Configuration

Note: Specifications, features, and availability may vary by configuration. This material is for informational purposes only and does not replace the Instructions for Use or applicable clinical protocols. Please contact your Philips representative or authorised Philips partner for further details.



Supports local healthcare capability with in-country Philips service teams and local spare-parts support.



Philips MX100 Patient Monitoring System

Technical Data Sheet

Physical specifications

Product	Max. weight	WxHxD
Philips MX100 	1.4 kg (3.1 lb) (incl. options, battery pack, and handle)	Without handle: 194 x 97 x 85 mm (7.6 x 3.8 x 3.3 in) With handle: 249 x 97 x 111 mm (9.8 x 3.8 x 4.4 in)

For the technical drawings, refer to “Technical drawings” on page 27.

Environmental specifications

Item	Condition	Range
Temperature range	Operating	0–40°C (32–104°F) or, 0–35°C (32–95°F) - when charging the battery, or - when using a Smart-hopping Interface or WLAN
	Storage	-20–60°C (-4–140°F)
Humidity range	Operating	15–95% RH non-condensing

Performance specifications

Altitude range	Storage	5–90% RH non-condensing
	Operating	-500–3,000 m (-1,640–9,842 ft)
	Storage	-500–4,600 m (-1,640–1,5091 ft)
Ingress protection	Monitor	



MX100 Patient Monitor

Power

Power consumption	• <12-W average • <20 W when on IntelliVue Dock
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Operating voltage	36–60 Vdc floating
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Current	1.3–0.7 A
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Frequency	50/60 Hz
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Display

Active matrix color LCD display with capacitive multi-touchscreen	
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Sweep speeds	6.25, 12.5, 25, and 50 mm/s
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Resolution	1024 x 480
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Useful screen	140 x 65 mm (5.5 x 2.6 in)
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Pixel pitch	0.14 x 0.14
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Indicators

Alarms off	Red or yellow LED with crossed out alarms symbol
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Alarms	Red/yellow/light blue (cyan) LED
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On/Standby/Error	Green/red LED integrated in power switch
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External power	Green LED
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Battery	Green (full), yellow (charging), red blinking (empty) LED
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Sounds

• Audible feedback for user input

• Prompt tone

• QRS tone, or SpO₂ modulation tone
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Sounds • Four different alarm sound types	
Display Wave Speeds	
Available for standard waves	6.25 mm/s, 12.5 mm/s, 25 mm/s, 50 mm/s with ±5% accuracy (guaranteed only for integrated displays)
Trends	
Resolution	12 or 16 numerics @ 12 seconds, 1 minute, 5 minute resolution
Information	Multiple choices of amount of numerics, resolution, and duration depending on trend option and application area
Alarm signal	
System delay	<4 seconds. The system alarm delay is the processing time that the system requires for any alarm to be indicated on the monitor, after the measurement has triggered the alarm
Delay for alarm availability on the network	<5 seconds This is the time required after an alarm indication on the monitor, until the alarm signal is available on the network, to the Patient Information Center, or for transmission to other systems
Pause duration	1, 2, 3 minutes or infinite, depending on configuration
Extended alarm pause	5 or 10 minutes
Sound pressure range	Minimum 0 dB(A) Maximum 45–85 dB(A)
Operator’s alarm log	
Information	All alarms/INOPs, main alarms on/off, alarm acknowledge, and time of occurrence
Capacity	300 items
Real-Time Clock	
Range	From: January 1, 1997, 00:00 to: December 31, 2080, 23:59
Accuracy	Better than 4 seconds per day

Real-Time Clock	
Hold Time when switched off	• If powered by AC: Infinite • With battery: Time is stored but a hold time is not specified, as storing a battery in an unused device for a longer period of time is not recommended • Without power or battery: At least 48 hours
Buffered memory	
Contents	Active settings, trends, patient data, real-time reports, events, review alarms
Hold Time when switched off	• If powered by AC: Infinite • With battery: Memory is buffered but a hold time is not specified, as storing a battery in an unused device for a longer period of time is not recommended • Without power: At least 4 hours
Internal battery (989803196521 or 989803222861)	
The battery is required for the operation of the monitor. The battery lifetime is 3 years from date of manufacture, or 500 charge/discharge cycles. For reference check the Accessories TDS for internal battery.	
Operating time (with a new, fully charged battery at 25°C)	Basic Mode: >5 hours • ECG/Resp • Philips FAST SpO₂ • NBP every 15 minutes • Brightness (auto mode off) set to optimum (4) Extended Mode: >3 hours. • ECG/Resp • Philips FAST SpO₂ • Dual Pressure • Temperature • NBP every 15 minutes • CO₂ • Wireless radio • Brightness (auto mode off) set to optimum (4)



Charge time	• When monitor is off: 3 hours approx. • When monitor is in use and connected to an IntelliVue Dock, without measurement extensions: 2.5 hours approx.
Restart time	After a power interruption, an ECG wave is shown on the display after a maximum of 30 seconds

Interface specifications

MX100 Patient Monitor

Measurement Link (MSL)

Connectors	Female MSL (proprietary)
Power	36–60 V input
Power sync	Unused
LAN signals	IEEE 802.3 10Base-T compliant
Serial signals	RS-422 compliant
Local signals	Provided for connecting measurement extensions
Local voltage	9–12.3 V - provided to power the measurement extensions: 867039, 867040, and 867041

Smart-Hopping IF 1.4/2.4 GHz	
Type	Internal WMTS/ISM adapter
Technology	Compatible with Philips Cellular Telemetry System (CTS), cellular infrastructure
Frequency band	• WMTS: 1395–1400 MHz and 1427–1432 MHz • ISM: 2400–2483 MHz
Modulation technique	GFSK
Effective Isotropically Radiated Power (EIRP)	Below 22 dBm (164 mW)

802.11 Wireless IF (Wireless Network Adapter)

Type	Internal wireless adapter
Technology	IEEE 802.11a/b/g/n/ac
Frequency band	2.4 GHz and 5 GHz ISM
USA	• 2.400–2.483 GHz • 5.15–5.35 GHz • 5.72–5.825 GHz
Europe	• 2.400–2.483 GHz • 5.15–5.35 GHz
	• 5.470–5.725 GHz
Japan	• 2.400–2.483 GHz • 5.15–5.25 GHz • 5.25–5.35 GHz • 5.470–5.725 GHz
China	• 2.400–2.483 GHz • 5.725–5.85 GHz
Modulation technique 802.11b/g/n	• DSSS (CCK, DQPSK, DBPSK) • OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
Modulation technique 802.11a/n	OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
Bandwidth	20 MHz (nominal)
Effective Isotropically Radiated Power (EIRP)	Below 20 dBm (100 mW) Power



Battery specifications

453564526811 Battery

Physical specifications

WxHxD69.6 x 72.3 x 21.6 mm
(2.7 x 2.8 x 0.8 in)

Weight0.2 kg (0.4 lb)

Performance specifications

Nominal voltage10.8 V

Rated capacity at discharge C/52,000 mAh (typically)

Continuous discharge capability4 A

Environmental specifications

Temperature range

- Discharge 0–65°C (32–149°F)
- Charge 0–60°C (32–140°F)
- Storage and Transport: -20–60°C (-4–140°F)

Humidity range

- Operating: 15–95% Relative Humidity (RH)
- Storage and Transport: 5–95% Relative Humidity (RH)

Battery typeLithium-ion, 10.8 V, 2,000 mAh

SafetyComplies with IEC 62133-2

Electromagnetic compatibilityComplies with the requirements for FCC Type B computing device, and EN 61000-4-2, and EN 61000-4-3

Communication standardComplies with the SMBus specification v1.1

Measurement specifications

ECG/Arrhythmia/ST/QT

Complies with:

- IEC 60601-2-25
- ANSI/AAMI/IEC 60601-2-25
- SNI IEC 60601-1:2014

ECG/Arrhythmia/ST performance specifications

Cardiotach

Range

- Adult/pedi: 15–300 bpm
- Neo: 15–350 bpm

Accuracy±1% of range

Resolution1 bpm

Sensitivity≥200 μV_{peak}

PVC rate

Range0–300 bpm

Resolution1 bpm

ST numeric

Range-20–20 mm

Accuracy±0.5 mm or 15% whichever is greater

Resolution0.1 mm

QT numeric

Range200–800 ms

Accuracy±30 ms

Resolution8 ms

QTc numeric

Range200–800 ms

Resolution1 ms

ΔQTc numeric

Range-600–600 ms



ΔQTc numeric	
Resolution	1 ms
QT-HR numeric	
Range - Adult	15–150 bpm
Range - Pedi/neo	15–180 bpm
Resolution	1 bpm
Sinus and SV rhythm ranges	
Brady	• Adult: 15–59 bpm • Pedi: 15–79 bpm • Neo: 15–89 bpm
Normal	• Adult: 60–100 bpm • Pedi: 80–160 bpm • Neo: 90–180 bpm
Tachy	• Adult: >100 bpm • Pedi: >160 bpm • Neo: >180 bpm
Bandwidth	
Diagnostic mode	Adult/neo/pedi: 0.05–150 Hz
Extended monitoring mode	Neo/pedi: 0.5–150 Hz
Monitoring mode	• Adult: 0.5–40 Hz • Neo/pedi: 0.5–55 Hz
Filter mode	Adult/neo/pedi: 0.5–20 Hz
Bandwidth - when ECG is transmitted from a telemetry device via a short-range radio	
Diagnostic mode	Adult/neo/pedi: 0.05–40 Hz
Extended monitoring mode	Adult/neo/pedi: 0.5–40 Hz
Monitoring mode	• Adult: 0.5–40 Hz • Neo/pedi: 0.5–40 Hz
Filter mode	Adult/neo/pedi: 0.5–20 Hz
Differential input impedance	
• >2 MΩ RA-LL leads (Resp) • >5 MΩ at all other leads (at 10 Hz including patient cable)	

Common mode rejection ratio	
• Diagnostic Mode: >86 dB (with a 51 kΩ/47 nF imbalance) • Filter Mode: >106 dB (with a 51 kΩ/47 nF imbalance)	
Electrode offset potential tolerance	
±500 mV	
Auxiliary current (leads off detection)	
• Active electrode: <100 nA • Reference electrode: <900 nA	
Input signal range	
±5 mV	
ECG/Arrhythmia/ST supplemental information	
Respiration excitation waveform	
Sinusoidal signal, <260 μA @ 40.5 kHz	
Noise suppression	
RL drive gain 44 dB maximum, maximum voltage 1.8 Vrms	
Time to alarm for tachycardia	
Vent tachycardia 1 mV _{pp} 206 bpm	• Gain 0.5: 5.4 seconds + 4 seconds • Gain 1.0: 3.9 seconds + 4 seconds • Gain 2.0: 3.7 seconds + 4 seconds
Vent tachycardia 2 mV _{pp} 195 bpm	• Gain 0.5: 3.2 seconds + 4 seconds • Gain 1.0: 3.5 seconds + 4 seconds • Gain 2.0: 3.1 seconds + 4 seconds
Tall T-wave rejection capability	
1.8 mV T-Wave amplitude	
Heart rate averaging method	
Three different methods are used:	
• Normally, heart rate is computed by averaging the 12 most recent R-R intervals • For runs of PVCs, up to eight R-R intervals are averaged to compute the HR • If each of three consecutive R-R intervals is >1,200 ms (that is, rate <50 bpm), then the four most recent R-R intervals are averaged to compute the HR	



Response time of heart rate meter to change in heart rate

HR change from 80–120 bpm:	• Range: 6.4–7.2 seconds • Average: 6.8 seconds
change from 80–40 bpm:	• Range: 5.6–6.4 seconds • Average: 6.0 seconds

Heart rate meter accuracy and response to irregular rhythm

- Ventricular Bigeminy: 80 bpm
- Slow Alternating Ventricular Bigeminy: 60 bpm
- Rapid Alternating Ventricular Bigeminy: 120 bpm
- Bidirectional Systoles: 90 bpm

Accuracy of input signal reproduction

Methods A and E (according to IEC 60601-2-25, clause 201.12.4.107.1.1.1) were used to establish overall system error and frequency response

Pacemaker pulse rejection performance

Rejection of pacemaker pulses with amplitudes from ±2 mV to ±700 mV and widths from 0.1 ms to 2.0 ms (Method B)

Pacemaker pulse rejection of fast ECG signals

2.2 V/s RTI (Paced Mode)

Minimum input slew rate

2.2 V/s RTI

ECG/Arrhythmia/ST alarm specifications

HR	
Range	15–300 bpm maximum delay: 10 seconds
Adjustment	Adult: • 1 bpm steps (15–40 bpm) • 5 bpm steps (40–300 bpm) Pedi/neo: • 1 bpm steps (15–50 bpm) • 5 bpm steps (50–300 bpm)

Extreme Tachy

Range	• Difference to high limit 0–50 bpm • Clamping at 150–300 bpm
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Extreme Tachy

Adjustment	• 5 bpm steps
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Extreme Brady

Range	• Difference to low limit 0–50 bpm • Clamping at 15–100 bpm
Adjustment	• 5 bpm steps

Run PVCs

Range	None, fixed setting of 2 PVCs
Adjustment	Not adjustable by user

PVCs Rate

Range	1–99 PVCs/minute
Adjustment	1 PVC

Vent Tach HR

Range	20–300 bpm
Adjustment	5 bpm

Vent Tach Run

Range	3–99 PVCs/minute
Adjustment	1 PVC

Vent Rhythm Run

Range	3–99 PVCs/minute
Adjustment	1 PVC

SVT HR

Range	120–300 bpm
Adjustment	5 bpm

SVT Run

Range	3–99 SV beats
Adjustment	1 SV beat

ST High

Range	-19.8–20 mm
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ST High	
Adjustment	0.2 mm

ST Low	
Range	-20–19.8 mm
Adjustment	0.2 mm

QTc High	
Range	200–800 ms
Adjustment	10 ms steps

ΔQTc High	
Range	30–200 ms
Adjustment	10 ms steps

Respiration

Respiration performance specifications

Respiration rate	
Range	- Adult/pedi: 0–120 rpm - Neo: 0–170 rpm
Accuracy	- At 0–120 rpm ±1 rpm - At 120–170 rpm ±2 rpm
Resolution	1 rpm

Bandwidth	
	0.3–2.5 Hz (-6 dB)

Noise	
	<25 mΩ (RMS) referred to the input

Respiration alarm specifications

High	
Range	- Adult/pedi: 10–100 rpm - Neo: 30–150 rpm
Adjustment	<20 rpm: 1 rpm steps ≥20 rpm: 5 rpm steps
Delay	Maximum 14 seconds

Low	
Range	- Adult/pedi: 0–95 rpm - Neo: 0–145 rpm

Adjustment	<20 rpm: 1 rpm steps ≥20 rpm: 5 rpm steps
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Delay	- For limits from 0 to 20 rpm: maximum 4 seconds - For limits above 20 rpm: maximum 14 seconds
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Apnea Alarm

Range	10–40 seconds
Adjustment	5 second steps

Philips FAST SpO₂

Complies with:

- ISO 80601-2-61
- EN ISO 80601-2-61

Measurement validation

The Philips FAST SpO₂ accuracy has been validated in human studies against arterial blood sample reference measured with a CO-oximeter. Pulse oximeter measurements are statistically distributed, only about two-thirds of the measurements can be expected to fall within the specified accuracy compared to CO-oximeter measurements.

The specified accuracy is the root-mean-square (RMS) difference between the measured values and the reference values.

Philips FAST SpO₂ performance specifications

Range and resolution

Range	0–100%
Resolution	1%

Perf

Range	0.02–30.0
Resolution	0.1, 0.01 for small values

With Philips Reusable Sensors

Accuracy 2% (70–100%)	- M1191B - M1191BL - M1192A
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With Philips Reusable Sensors	
Accuracy 3% (70–100%)	• M1193A • M1194A • M1195A • M1196A/S
With Philips Reusable Sensors with M1943A(L) Adapter Cable	
Accuracy 3% (70–100%)	• M1191T • M1192T • M1193T (Adult) • M1196T
Accuracy 4% (70–100%)	• M1193T (Neonate)
With Philips Disposable Sensors with M1943A(L) Adapter Cable	
Accuracy 2% (70–100%)	• M1132A • M1133A • M1134A (Adult/infant)
Accuracy 3% (70–100%)	• M1131A • M1133A • M1134A (Neonate)
With Nellcor Sensors with M1943A(L) Adapter Cable	
Accuracy 3% (70–100%)	• MAX-A • MAX-AL • MAX-P • MAX-I • MAX-N • D-25 • D-20 • I-20 • N-25 • OxiCliq¹ A, P, I, N
With Masimo Reusable Sensors with LNC MP10 Adapter Cable	
Accuracy 2% (70–100%)	• LNCS DCI • LNCS DCIP • LNCS YI (Adult/pedi/infant)
Accuracy 3% (70–100%)	• LNCS YI (Neonate)
Accuracy 3.5% (70–100%)	• LNCS TC-I
1. requires additional Nellcor OC3 adapter cable.	

With Masimo Disposable Sensors with LNC MP10 Adapter Cable	
Accuracy 2% (70–100%)	• LNCS Adtx • LNCS Adtx-3 • LNCS Pdtx • LNCS Pdtx-3 • LNCS Inf • LNCS Inf-3 • LNCS Neo (Adult) • LNCS Neo-3 (Adult)
Accuracy 3% (70–100%)	• LNCS Neo (Neonate) • LNCS Neo-3 (Neonate) • LNCS NeoPt • LNCS NeoPt-3
Pulse	
Range	30–300 bpm
Accuracy	±2% or 1 bpm, whichever is greater
Resolution	1 bpm
Sensors	
Wavelength range	500–1000 nm
Emitted light energy	≤15 mW
Numeric update rate	
Typical	1 second
Maximum	30 seconds Maximum with noninvasive blood pressure INOP suppression on: 60 seconds
Pulse oximeter calibration range	
70–100%	

Nellcor OxiMax SpO₂

- Complies with:
- ISO 80601-2-61
 - EN ISO 80601-2-61

Measurement validation

The Nellcor OxiMax SpO₂ accuracy has been validated in human studies against arterial blood sample reference measured with a CO-oximeter. Pulse oximeter measurements are statistically distributed, only about two-thirds of the measurements can be expected to fall within the specified accuracy compared to CO-oximeter measurements.



The specified accuracy is the root-mean-square (RMS) difference between the measured values and the reference values.

Pulse oximetry performance specifications

SpO ₂	
Measurement range	1–100%
Resolution	1%
Accuracy	See the Pulse Oximetry Accuracy Table
Low perfusion accuracy ¹	2% (70–100%)

Perf

Range	0.0–25.5
Resolution	0.1

Pulse

Range	25–300 bpm
Resolution	1 bpm
Accuracy	±3 bpm (20–250 bpm)
Low perfusion accuracy ¹	±3 bpm (20–250 bpm)

Sensors - with M1943NL Adapter Cable

Wavelength range ²	500–1000 nm
Emitted light energy	≤15 mW

Numeric update rate

Typical	1 second
Maximum	≤60 seconds

Pulse oximetry accuracy table

	SaO ₂ range: 70–100%		SaO ₂ range: 60–80%
Sensor	Adult/Infant	Neonate	Adult
MAX-A, MAX-AL	2%	n/a	3%

1. Specification applies to the performance of the device. Reading accuracy in the presence of low perfusion (detected IR pulse modulation amplitude 0.03–1.5%) was validated using signals supplied by a patient simulator. SpO₂ and pulse rate values were varied across the monitoring range over a range of weak signal conditions and compared to the known true saturation and pulse rate of the input signals.
2. Information about the wavelength range can be especially useful to clinicians (for instance, when photodynamic therapy is performed).

	SaO ₂ range: 70–100%		SaO ₂ range: 60–80%
Sensor	Adult/Infant	Neonate	Adult
MAX-N	2%	2%	3%
MAX-P	2%	n/a	3%
MAX-I	2%	n/a	3%
MAX-FAST	2%	n/a	3%
MAX-R ³	3.5%	n/a	n/a
SC-A	2%	n/a	n/a
SC-PR ⁴	n/a	2%	n/a
SC-NEO ²	n/a	2%	n/a
OxiCliq A	2.5%	n/a	n/a
OxiCliq P	2.5%	n/a	n/a
OxiCliq N ⁵	2.5%	3.5%	n/a
OxiCliq I	2.5%	n/a	n/a
D-YS ³	3%	4%	n/a
D-YS & D-YSE	3.5%	n/a	n/a
D-YSPD	3.5%	n/a	n/a
DS100A	3%	n/a	n/a
OXI-A/N ³	3%	4%	n/a
OXI-P/I	3%	n/a	n/a

Alarm specifications for Philips FAST SpO₂ and Nellcor OxiMax SpO₂

SpO ₂	
Range	• Adult: 50–100% • Pedi/neo: 30–100%

3. The accuracy specification has been determined between saturations of 80–100%.
4. SoftCare SC-PR-I, SC-NEO-I: Clinical functionality has been demonstrated on a population of hospitalized neonate and infant patients. The observed SpO₂ accuracy was 3.0% in a study of 57 patients with ages of 24 to 40 weeks, weight from 710–5000 grams, and 185 observations made spanning a range of 63–100% SaO₂ while monitored with Nellcor OxiMax N-595 pulse oximeters.
5. Neonatal accuracy: When sensors are used on neonatal subjects as recommended, the specified accuracy range is increased by ±1 digit, as compared to adult usage, to account for the theoretical effect on oximeter measurements of fetal hemoglobin in neonatal blood. For example, OxiCliq N accuracy on neonates is ±3.5 digits, rather than ±2.5.



SpO ₂	
Adjustment	1% steps
Delay	0–30 seconds (0, 1, 2, 3,... 30) + 4 seconds
Desat	
Range	• Adult: 50% to low alarm limit • Pedi/neo: 30% to low alarm limit
Adjustment	1% steps
Delay	0–30 seconds (0, 1, 2, 3,... 30) + 4 seconds
Pulse	
Range	30–300 bpm
Adjustment	Adult: • 1 bpm steps (30–40 bpm) • 5 bpm steps (40–300 bpm) Pedi/neo: • 1 bpm steps (30–50 bpm) • 5 bpm steps (50–300 bpm)
Delay	Maximum 14 seconds
Tachycardia	
Range	• Difference to high limit: 0–50 bpm • Clamping at 150–300 bpm
Adjustment	5 bpm steps
Delay	Maximum 14 seconds
Bradycardia	
Range	• Difference to low limit: 0–50 bpm • Clamping at 30–100 bpm
Adjustment	5 bpm steps
Delay	Maximum 14 seconds

Masimo rainbow SET SpO₂

- Complies with:
- ISO 80601-2-61
 - EN ISO 80601-2-61

General performance specifications SpO₂

- | | |
|---|---|
| Numeric update rate for SpO ₂ , Pulse Rate, and Perf | <ul style="list-style-type: none">• Typical: 1 second• Maximum: 30 seconds |
|---|---|

- | | |
|---------|---|
| Sensors | <ul style="list-style-type: none">• Emitted Light Energy ≤25 mW• Wavelength Range¹ 500–1,400 nm |
|---------|---|

Indications for use

The Masimo rainbow SET measurement is indicated for the noninvasive monitoring of functional oxygen saturation of arterial hemoglobin (SpO₂), pulse rate, carboxyhemoglobin saturation (SpCO), methemoglobin saturation (SpMet), total hemoglobin concentration (SpHb), and/or rainbow Acoustic Respiratory Rate (RRac). The Masimo rainbow SET measurement is indicated for use with adult, pediatric, and neonatal patients during both no motion and motion conditions, and for patients who are well or poorly perfused.

Operating conditions

In addition to the general specifications for operating conditions for the MX100 portable patient monitor, the following additional environmental limitations apply for the Masimo rainbow SET measurement:

Environmental limitations

- | | |
|-------------------------------------|--|
| Incandescent Light Intensity | ≤100 klx |
| Fluorescent Light Intensity | ≤10 klx |
| Fluorescent Light Frequency sensors | <ul style="list-style-type: none">• 50 Hz or 60 Hz ±1.0 Hz (LNCS)• 50 Hz or 60 Hz ±0.5 Hz (rainbow sensors) |

- | | |
|---|------------------------|
| Ambient Noise Level (Sound Pressure Level) (applies to acoustic respiration measurement only) | ≤65 dB, alarm tolerant |
|---|------------------------|

Measurement accuracy

The following accuracy specifications represent only the device’s portion of the integrated Masimo rainbow SET technology performance. The actual measurement performance and accuracy depends on the accessory used and can be limited by the accessory as specified in the sensor’s instructions for use.

Ensure you only use accessories that are specified and provide accuracy specifications applicable for your device.

1.Information about wavelength range can be especially useful to clinicians (for instance when photodynamic therapy is performed)



Measurement	Accuracy
SpO ₂ , No motion	• 60–80 ±3%, Adult/pedi/infant • 70–100 ±2%, Adult/pedi/infant, ±3% Neo
SpO ₂ , motion	70–100 ±3%, Adult/pedi/infant/neo
SpO ₂ , low perfusion	70–100 ±2%, Adult/pedi/infant/neo
Pulse Rate, no motion	25–240 ±3 bpm, Adult/pedi/infant/neo
Pulse Rate, motion	25–240 ±5 bpm, Adult/pedi/infant/neo
Pulse Rate, low perfusion	25–240 ±3 bpm, Adult/pedi/infant/neo
SpCO	1–40 ±3%, Adults/pedi/infant
SpMet	1–15 ±1%, Adult/pedi/infant/neo
SpHb	8–17 ±1 g/dl (arterial or venous), Adult/pedi
RRac	4–70 ±1 breath per minute, Adult/pedi (>10 kg)

Measurement range and resolution

SpO ₂	
Range	0–100%
Resolution	1%

Perf

Range	• 0.02–20 for disposable sensors • 0.05–20 for reusable sensors
Resolution	0.01

PVI

Range	0–100%
Resolution	1%

Pulse

Range	25–240 bpm
Resolution	1 bpm

SpCO	
Range	0–100%
Resolution	1%

SpMet	
Range	0–100%
Resolution	0.1%

SpHb	
Range	0–25 g/dl (0-15.5 mmol/l)
Resolution	0.1 g/dl (0.1 mmol/l)

SpOC	
Range	0–35 ml/dl
Resolution	1 ml/dl

RRac	
Range	4–70 rpm
Resolution	1 rpm

Alarm specifications

SpO ₂	
Range	• Adult: 50–100% • Pedi/neo: 30–100%
Adjustment	1% steps
Delay	0–30 seconds (0, 1, 2, 3,... 30) + 4 seconds

Desat	
Range	• Adult: 50–99% • Pedi/neo: 30–99%
Adjustment	1% steps
Delay	0–30 seconds (0, 1, 2, 3,... 30) + 4 seconds

SpMet	
Range	Adult/pedi/neo: 0–100%
Adjustment	• 0.1% steps (0–9.9%) • 1% steps (10–100%)



SpMet	
Delay	Maximum 4 seconds
SpCO	
Range	Adult/pedi/neo: 0–100%
Adjustment	1%
Delay	Maximum 4 seconds
SpHb	
Range	Adult/pedi/neo: 0–25 g/dl (0–15.5 mmol/l)
Adjustment	• 0.1 g/dl steps (0–9.9 g/dl) 0.1 mmol/l (0–9.9 mmol/l) • 0.5 g/dl steps (10–25 g/dl) • 0.5 mmol/l (10–15.5 mmol/l)
Delay	Maximum 4 seconds
SpOC	
Range	Adult/pedi/neo: 0–35 ml/dl
Adjustment	1 ml/dl steps
Delay	Maximum 4 seconds
Pulse ¹	
Range	Adult/pedi/neo: 30–300 bpm
Adjustment	Adult: • 1 bpm steps (30–40 bpm) • 5 bpm steps (40–300 bpm) Pedi/neo: • 1 bpm steps (30–50 bpm) • 5 bpm steps (50–300 bpm)
Delay	Maximum 14 seconds
Tachycardia	
Range	• Difference to high limit: 0–50 bpm • Clamping at 150–300 bpm
Adjustment	5 bpm steps
Delay	Maximum 14 seconds

1. The Masimo rainbow SET technology only provides pulse rate values up to 240 bpm. To get pulse rate alarms, set the high alarm limit below 240 bpm.

Bradycardia	
Range	• Difference to low limit: 0–50 bpm • Clamping at 30–100 bpm
Adjustment	5 bpm steps
Delay	Maximum 14 seconds
PVI	
Range	Adult/pedi/neo: 0–100%
Adjustment	1%
Delay	Maximum 4 seconds
RRac ²	
Range	• Adult/pedi: 0–100 rpm • Neo: 0–150 rpm
Adjustment	• 1 rpm steps below 20 rpm • 5 rpm steps above 20 rpm
Delay	0–60 seconds (0, 10, 15, 30, 60) + 4 seconds

RRac Pause Time	
	15, 20, 25, 30, 35, 40 seconds

Perf	
Range	Adult/pedi/neo: 0.02–20
Adjustment	• 0.01 steps (0.02–0.10) • 0.10 steps (0.10–1) • 1 step (1–20)
Delay	Maximum 4 seconds

3D Perf Delta			
% Decrease	Adjustment	Duration	Adjustment
10–100%	2%	1 min to 48 h, infinite	1 min, 5 min, 30 min, 1 h, 4 h, 8 h, 12 h, 24 h, 36 h, 48 h, infinite

2. The Masimo rainbow SET technology only provides respiration rate values from 4 rpm to 70 rpm. For respiration rate alarms, set the high alarm limit below 70 rpm and the low alarm limit above 4 rpm.



3D Desat Index

Delta Threshold

Range	2–10%
Adjustment	1%

Count

Range	1–25
Adjustment	1 step

Period

Range	1–4 hours
Adjustment	1 hour steps

Noninvasive blood pressure (NBP)

- Complies with:
- IEC 80601-2-30
 - EN 80601-2-30

NBP performance specifications

Systolic

Range	• Adult: 30–270 mmHg (4–36 kPa) • Pedi: 30–180 mmHg (4–24 kPa) • Neo: 30–130 mmHg (4–17 kPa)
-------	--

Diastolic

Range	• Adult: 10–245 mmHg (1.5–32 kPa) • Pedi: 10–150 mmHg (1.5–20 kPa) • Neo: 10–100 mmHg (1.5–13 kPa)
-------	--

Mean

Range	• Adult: 20–255 mmHg (2.5–34 kPa) • Pedi: 20–160 mmHg (2.5–21 kPa) • Neo: 20–120 mmHg (2.5–16 kPa)
-------	--

Pulse rate

Range	• Adult: 40–300 • Pedi: 40–300 • Neo: 40–300
-------	--

Accuracy

Max. Std. Deviation	8 mmHg (1.1 kPa)
---------------------	------------------

Accuracy

Max. Mean Error	±5 mmHg (±0.7 kPa)
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Pulse rate measurement

Accuracy	• 40–100 bpm: ±5 bpm • 101–200 bpm: ±5% of reading • 201–300 bpm: ±10% of reading (average over NBP measurement cycle)
----------	--

Measurement time

Typical at HR >60 bpm

Auto/Manual	• Adult: 30 seconds • Neo: 25 seconds • Stat: 20 seconds
Maximum time	• Adult/pedi: 180 seconds • Neo: 90 seconds

Cuff inflation time

Typical for normal adult cuff	<10 seconds
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Typical for neonatal cuff	<2 seconds
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Initial cuff inflation pressure

- Adult: 165 ±15 mmHg
- Pedi: 130 ±15 mmHg
- Neo: 100 ±15 mmHg

Maximum cuff pressure

- Adult/pedi: 300 mmHg
- Neo: 150 mmHg

Auto mode repetition times

1, 2, 2.5, 3, 5, 10, 15, 20, 30, 45 minutes, or 1, 2, 4, 8, 12, 24 hours

STAT mode cycle time

5 minutes



Venipuncture mode inflation	
Inflation pressure	• Adult: 20–120 mmHg (3–16 kPa) • Pedi: 20–80 mmHg (3–11 kPa) • Neo: 20–50 mmHg (3–7 kPa)
Automatic deflation	• Adult/pedi: after 170 seconds • Neo: after 85 seconds

Measurement validation

- Clinical investigation according to ISO 81060-2 with the auscultatory reference method:
- The 5th Korotkoff sound (K5) was used in adult/adolescent subjects and the 4th Korotkoff sound (K4) was used in pediatric subjects to determine the diastolic reference pressures.
 - The approximation $MAP = (2 \times DIA + SYS) / 3$ was used to calculate reference MAP (mean arterial pressure) values from the systolic and diastolic reference pressures.
- Clinical investigation according to ISO 81060-2 with the intra-arterial reference method:
- The radial artery was used for the intra-arterial reference measurement.
 - The MAP values displayed by the reference invasive blood pressure monitor were used as MAP reference values.
- Blood pressure recordings with any arrhythmias were excluded.

NBP alarm specifications

Systolic	
Range	• Adult: 30–270 mmHg (4–36 kPa) • Pedi: 30–180 mmHg (4–24 kPa) • Neo: 30–130 mmHg (4–17 kPa)
Adjustment	• 10–30 mmHg (1.5–4 kPa): 2 mmHg (0.5 kPa) • >30 mmHg (>4 kPa): 5 mmHg (1 kPa)

Diastolic	
Range	• Adult: 10–245 mmHg (1.5–32 kPa) • Pedi: 10–150 mmHg (1.5–20 kPa) • Neo: 10–100 mmHg (1.5–13 kPa)
Adjustment	• 10–30 mmHg (1.5–4 kPa): 2 mmHg (0.5 kPa) • >30 mmHg (>4 kPa): 5 mmHg (1 kPa)

Mean	
Range	• Adult: 20–255 mmHg (2.5–34 kPa) • Pedi: 20–160 mmHg (2.5–21 kPa) • Neo: 20–120 mmHg (2.5–16 kPa)

Mean	
Adjustment	• 10–30 mmHg (1.5–4 kPa): 2 mmHg (0.5 kPa) • >30 mmHg (>4 kPa): 5 mmHg (1 kPa)

NBP overpressure settings (not user adjustable)

Adult	>300 mmHg (40 kPa) >2 seconds
Pedi	>300 mmHg (40 kPa) >2 seconds
Neo	>150 mmHg (20 kPa) >2 seconds

Invasive pressure and pulse

- Supports up to two pressure transducers via one connector and one Y-cable.
- Complies with:
- IEC 60601-2-34
 - EN 60601-2-34

Invasive pressure performance specifications

Measurement range	
	-40–360 mmHg
Input sensitivity	
Sensitivity	5 μV/V/mmHg (37.5 μV/V/kPa)
Adjustment range	±10%

Transducers (compliant with ANSI/AAMI BP22) Load	
impedance	200–2000 Ω (resistive)
Output impedance	≤3,000 Ω (resistive)

Frequency response	
	DC to 12 Hz or 40 Hz

Zero adjustment	
Range	±200 mmHg (±26 kPa)
Accuracy	±1 mmHg (±0.1 kPa)
Drift	<0.1 mmHg/°C (0.013 kPa/°C)



Gain accuracy	
Accuracy	±1%
Drift	<0.05%/°C
Non-linearity and Hysteresis	Error of ≤ 0.4% FS (@CAL 200 mmHg)

Overall accuracy (including transducer)	
	±4% of reading or ±4 mmHg (±0.5 kPa), whichever is greater

Volume displacement of CPJ840J6	
	0.1 mm³/100 mmHg

Pulse rate	
Range	25–350 bpm
Accuracy	±1% full range
Resolution	1 bpm

Invasive pressure alarm specifications	
Pressure	
Range	-40–360 mmHg (-5.0–48 kPa)
Adjustment	-40–50 mmHg (-5–7 kPa): 2 mmHg (0.5 kPa) >50 mmHg (>7 kPa): 5 mmHg (1 kPa)
Delay	Maximum 12 seconds

Extreme High	
Range	Difference to high limit 0–25 mmHg (0–3.5 kPa)
Adjustment	5 mmHg steps (0.5 kPa)
Range	Clamping at -35–360 mmHg (4–48 kPa)
Adjustment	5 mmHg steps (1.0 kPa)
Delay	Maximum 12 seconds

Extreme Low	
Range	Difference to low limit 0–25 mmHg (0–3.5 kPa)
Adjustment	5 mmHg steps (0.5 kPa)

Extreme Low	
Range	Clamping at -40–355 mmHg (5–47 kPa)
Adjustment	5 mmHg steps (1.0 kPa)
Delay	Maximum 12 seconds

Pulse	
Range	25–300 bpm
Adjustment	Adult: 1 bpm steps (25–40 bpm) 5 bpm steps (40–300 bpm) Pedi/neo: 1 bpm steps (25–50 bpm) 5 bpm steps (50–300 bpm)
Delay	Maximum 14 seconds

Tachycardia	
Range	- Difference to high limit 0–50 bpm - Clamping at 150–300 bpm
Adjustment	5 bpm steps
Delay	Maximum 14 seconds

Bradycardia	
Range	- Difference to low limit 0–50 bpm - Clamping at 25–100 bpm
Adjustment	5 bpm steps
Delay	Maximum 14 seconds

Temperature

- Complies with:
- ISO 80601-2-56
 - EN ISO 80601-2-56

Temperature performance specifications

Temperature	
Range (absolute)	-1–45°C (30–113°F)
Range (differential)	±46°C (±115°F)
Resolution	0.1°C (0.1°F)
Accuracy	±0.1°C (±0.2°F)



Average time constant	
<10 seconds	
Temperature alarm specifications	
Temperature high/low alarms	
Range	-1–45°C (30–113°F)
Adjustment	• -1–30°C (30–86°F), 0.5°C (1.0°F) steps • 30–45°C (86–113°F), 0.1°C (0.2°F) steps

CO₂

Complies with:

- ISO 80601-2-55
- EN ISO 80601-2-55

Mainstream CO₂ performance specifications

CO ₂	
Range	0–150 mmHg (0–20 kPa)
Accuracy	After two minutes warm-up: • For values between 0 and 40 mmHg (0 and 5,3 kPa): ±2.0 mmHg (±0.27 kPa). • For values from 41–70 mmHg (5.4–9.3 kPa): ±5% of reading. • For values from 71–100 mmHg (9.4–13.3 kPa) ±8% of reading. • For values from 101–150 mmHg (13.4–20 kPa): ±10 % of reading the specifications are valid for standard gas mixtures, balance air, fully hydrated at 35°C, Pabs = 760 mmHg (101.3 kPa), flow rate = 2 l/min
Resolution	Numeric: 1.0 mmHg (0.1 kPa)
Stability:	
Short-term drift	±0.8 mmHg (0.11 kPa) over four hours
Long-term drift	Accuracy specification is maintained over a 120-hour period
awRR	
Range	2–150 rpm
Accuracy	±1 rpm

Warm-up time	
Two minutes with CO ₂ transducer attached for full accuracy specification	
Rise time	
<60 ms (with adult or infant reusable or disposable adapter)	
Total system response time	
<Rise Time + 1 second	

Sidestream CO₂ performance specifications

CO ₂	
Range	0–150 mmHg (0–20 kPa)
Accuracy	After two minutes warm-up: • For values between 0 and 40 mmHg (0 and 5,3 kPa): ±2.0 mmHg (±0.27 kPa). • For values from 41–70 mmHg (5.4–9.3 kPa): ±5% of reading. • For values from 71–100 mmHg (9.4–13.3 kPa) ±8% of reading. • For values from 101–150 mmHg (13.4–20 kPa): ±10% of reading. At respiration rates above 80 rpm, all ranges are ±12% of reading. The specifications are valid for gas mixtures of CO ₂ , balance N ₂ , dry gas at 760 mmHg (101.3 kPa) within specified operating temperature range.
Resolution	Numeric: 1.0 mmHg (0.1 kPa)
Stability:	
Short-term drift	±0.8 mmHg (0.11 kPa) over four hours
Long-term drift	Accuracy specification is maintained over a 120-hour period

awRR	
Range	2–150 rpm
Accuracy	±1 rpm



Warm-up time	
	Two minutes with CO ₂ sensor attached for full accuracy specification
Sample flow rate	
	50 ±10 ml/minute
Gas sampling delay	
	3 seconds
Total system response time	
	<gas sampling delay time + (rise time + 1 second)
CO ₂ alarm specifications	
etCO ₂ High	
Range	20–95 mmHg (2–13 kPa)
Adjustment	1 mmHg (0.1 kPa) steps
Delay	<14 seconds (excluding Total Sytem Response Time)
etCO ₂ Low	
Range	10–90 mmHg (1–12 kPa)
Adjustment	1 mmHg (0.1 kPa) steps
Delay	<14 seconds (excluding Total Sytem Response Time)
imCO ₂ High	
Range	2–20 mmHg (0.3–3 kPa)
Adjustment	1 mmHg (0.1 kPa) steps
Delay	<14 seconds (excluding Total Sytem Response Time)
awRR High	
Range	- Adult/pedi: 10–100 rpm - Neo: 30–150 rpm
Adjustment	<20 rpm: 1 rpm steps >20 rpm: 5 rpm steps
Delay	<14 seconds (excluding Total System Response Time)

awRR Low	
Range	- Adult/pedi: 0–95 rpm - Neo: 0–145 rpm
Adjustment	<20 rpm: 1 rpm steps >20 rpm: 5 rpm steps
Delay	- Settings <20 rpm: <4 seconds - Settings >20 rpm: <14 seconds (excluding Total Sytem Response Time)
Apnea delay	
Range	10–40 seconds
Adjustment	5 second steps
Delay	Set apnea delay time + 4 seconds (excluding Total Sytem Response Time)

Ordering information

Options

Some of the options listed in this technical data sheet may not be available in all countries.

Philips 867033 including:

- 1 x Lithium-ion Battery
- Carrying Handle
- IntelliVue Dock
- Timer, EASI and Hexad derived 12-lead ECG

Mandatory options

Waves	
3- wave capability	A03
4- wave capability	A04
5- wave capability	A05
Measurement options	
ECG, NBP, SpO ₂	B20
ECG, NBP, SpO ₂ , 2 x Press, Temp	B26
ECG, NBP, SpO ₂ , CO ₂ , 2 x Press, Temp	B27

1.CO₂ only available with Philips FAST SpO₂



SpO₂ technology	
Philips FAST SpO ₂	SP1
Masimo rainbow SET SpO ₂	SP5
Nellcor OxiMax SpO ₂	SP6

Add-on options

Clinical applications	
Extended ECG Capabilities - Full Arrhythmia Capability - C01 - ST/STE Map - C13 - QT Analysis - C51	CP2
Extended Alarming Capabilities - Alarm Visualization - C44 - Smart Alarm Delay - C45	CP4
Arrhythmia Functionality	CP6
Full Networking	C15
Parameter Histograms	C09
Conventional 12-Lead ECG	C12
Alarm Advisor	C46

Invasive pressure accessories	
Dual IBP Adapter - for use with existing Philips-compatible invasive pressure cables	K14

XDS functionality	
The XDS Software Option X90 bundles the following XDS functionality: • XDS Connectivity • XDS Remote Control • XDS Clinical Workstation • XDS Database	X90

Pulse oximetry options	
Masimo rainbow SpHb + SpOC	R01
Masimo rainbow SpCO	R02
Masimo rainbow SpMet	R03
Masimo rainbow PVI	R04

Pulse oximetry options	
SpHb + SpOC + PVI, includes: - Masimo rainbow SpHb + SpOC - R01 - Masimo rainbow PVI - R04	R11

SpHb + SpOC + PVI + SpMet + SpCO, includes: - Masimo rainbow SpHb + SpOC - R01 - Masimo rainbow SpCO - R02 - Masimo rainbow SpMet - R03	R12
- Masimo rainbow PVI - R04 Masimo rainbow Acoustic Monitoring	R21

Wireless interfaces	
802.11 Wireless IF	J35
Smart-hopping IF 1.4 GHz	J45
Smart-hopping IF 2.4 GHz	J47

Hardware add-ons	
Fix Clamp Mount	E20
Bed hanger Mount	E21

Add 1 Lithium-ion Battery (includes battery charger adapter)	E24
Rotatable Quick Claw Mount	E29
Out-of-hospital	E60
Sync Signal Cable	SN3

Software upgrade options (Philips 867035)

Rev T software	
Upgrade to SW Rev. T Base	SUT
Documentation for SW Rev. T	DCT

Rev R software	
Upgrade to SW Rev. R Base	SUR
Documentation for SW Rev. R	DCR
Downgrade to SW Rev. R Base	SDR

Rev P software	
Innovation SW Rev. P	R17
Upgrade to SW Rev. P Base	SUP



Rev P software	
Documentation for SW Rev. P	DCP
Downgrade to SW Rev. P Base	SDP
Rev N software	
Upgrade to SW Rev. N	SUN
Documentation for SW Rev. N	DCN
Downgrade to SW Rev. N	SDN
Rev M software	
Documentation for SW Rev. M	DCM
Downgrade to SW Rev. M	SDM
Add-on waveforms	
4- waves capability	A04
5- wave capability	A05
Clinical applications	
Extended ECG Capabilities	CP2
- Full Arrhythmia Capability - C01	
- ST/STE Map - C13	
- QT Analysis - C51	
- Hexad - C54	
Extended Alarming Capabilities	CP4
- Alarm Visualization - C44	
- Smart Alarm Delay - C45	
Arrhythmia Functionality	CP6
Parameter Histograms	C09
Full Networking	C15
Conventional 12-Lead ECG	C12
Alarm Advisor	C46
Pulse oximetry options	
Masimo rainbow SpHb + SpOC	R01
Masimo rainbow SpCO	R02
Masimo rainbow SpMet	R03
Masimo rainbow PVI	R04

Pulse oximetry options	
SpHb + SpOC + PVI, includes:	R11
- Masimo rainbow SpHb + SpOC - R01	
- Masimo rainbow PVI - R04	
SpHb + SpOC + PVI + SpMet + SpCO, includes:	R12
- Masimo rainbow SpHb + SpOC - R01	
- Masimo rainbow SpCO - R02	
- Masimo rainbow SpMet - R03	
- Masimo rainbow PVI - R04	
Masimo rainbow Acoustic Monitoring	
	R21
XDS functionality	
The XDS Software Option X90 bundles the following XDS functionality:	X90
• XDS Connectivity • XDS Remote Control • XDS Clinical Workstation • XDS Database	

Hardware upgrade options (Philips 867034)

Wireless interfaces	
802.11 Wireless IF	J35
Smart-hopping IF 1.4 GHz	J45
Smart-hopping IF 2.4 GHz	J47

Supplies and accessories

For information about supplies and accessories, see the separate “Philips IntelliVue Accessories” technical data sheet.

Documentation

All documentation is available in .pdf format on a documentation DVD that is shipped with the product. Additionally, a predefined number of printed Instructions for Use ships with each order.

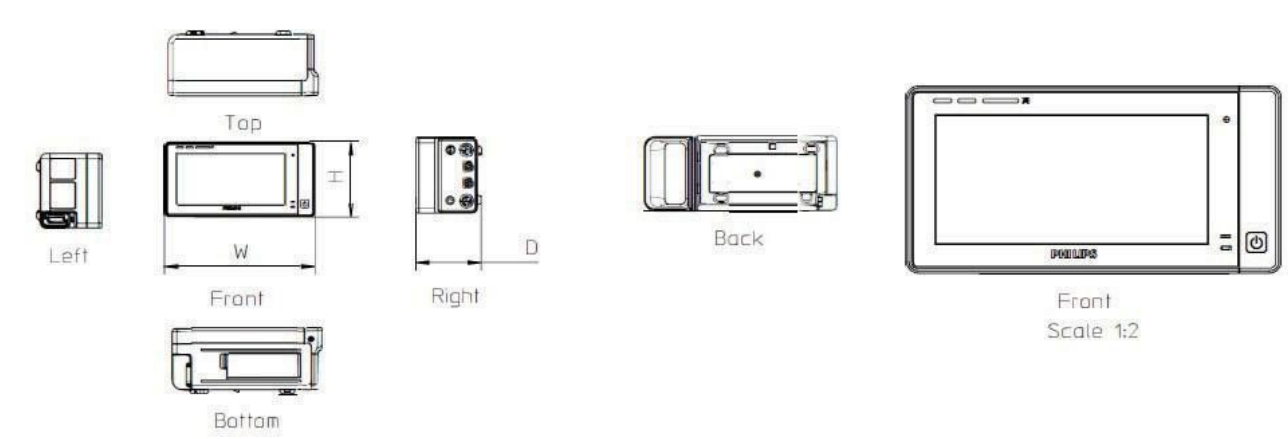
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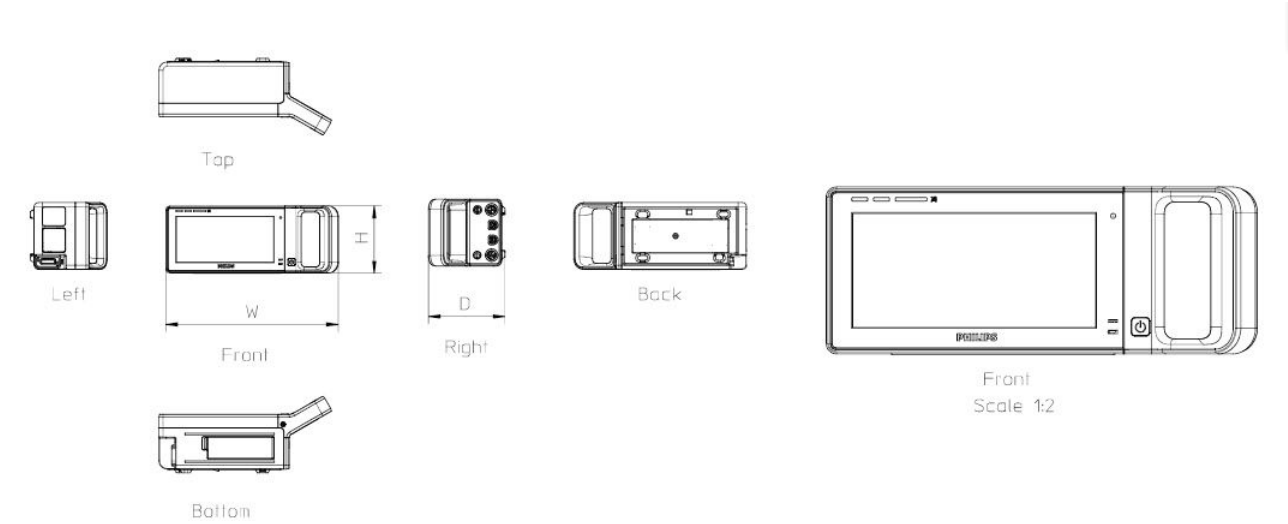


Technical drawings

Product	Max. weight	WxHxD
IntelliVue MX100	1.4 kg (3.1 lb) (incl. options, battery pack, and handle)	Without handle: 194 x 97 x 85 mm (7.6 x 3.8 x 3.3 in)



Product	Max. weight	WxHxD
IntelliVue MX100	1.4 kg (3.1 lb) (incl. options, battery pack, and handle)	With handle: 249 x 97 x 111 mm (9.8 x 3.8 x 4.4 in)





Touchscreen PC for Philips MX100 Patient Monitoring System

Specifications

Display 23.8 inches FHD IPS touch screen	Storage 64GB SSD
OS Windows 11 IoT Enterprise	I/O 2x USB port 3.0, 2x USB port 2.0
Processor Intel® Core™ i5	HDMI port, LAN port, Audio port
RAM 8 GB DDR4	Wireless LAN – 802.11. ac above. dual band





Wall Mount for Philips MX100 Patient Monitoring System

Specifications

Dimension	76 x 64 x 163 cm	Lifting Mechanism	Controlled by switch button (pivot arm lifting)
Load Capacity	25 kg	Material	Aluminium alloy
Mounting Hole Pattern	100 x 100 mm	Tilt Angle	+45° / -20°
Adjustability	Pitch angle, left-right direction, and lifting position are adjustable	Accessories	Cable hanger
Height Adjustment	Adjustable (Range: 30 cm)	Features	Easy cleaning Corrosion resistance





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How to reach us:
www.healthcare.philips.com

MAR 2026



Nama Produk	Philips MX100 Patient Monitoring System
No Rev	0
Tanggal	15/04/2026



PENANDAAN

Tipe Produk : Philips MX100 Patient Monitoring System

KEMENKES RI AKD

Serial No. : DE8090DZF4

Lot No. : 2026.001.MX100.001

Tipe Produk

No NIE Kemenkes RI AKD

Nomor Seri Produk

Nomor Lot Produksi



Diproduksi oleh:
PT. GRAHA TEKNO MEDIKA
Jl. Abdul Wahab No. 59, Cinangka,
Sawangan, Depok - Indonesia
Tel. +62 21-7494512
Fax. +62 21-7494512

Didistribusikan oleh:
PT. PHILIPS INDONESIA COMMERCIAL
Gedung Cibis Nine Lantai 10
Jl. TB Simatupang No. 2. 12560, Jakarta - Indonesia

Nama dan Alamat Pabrik &
Distributor



Pengidentifikasi perangkat unik

Tanggal Produksi

Nomor Referensi

Nomor Seri Produk

Nomor Service

Design by:



**Philips Medizin Systeme
Böblingen GmbH**
Hewlett-Packard-Str. 2
71034 Boeblingen
Germany

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Berat

Tidak Aman untuk MR

1.4kg



Posisi Penandaan Marking Plate Pada Alat



Bagian Samping kiri unit:



Bagian Belakang Unit:



Technical Specifications

Philips MX100 Patient Monitoring System Basic Wallmount

Type	: Philips MX100 Patient Monitoring System
Parameter	: NBP, SpO2, HR, RR, Temperature
Physical Specification	
Main Display	
Screen size	: 23.8 inch FHD IPS Touch Screen
Module Parameter	
Size (W x H X D) in mm (apprx)	: 249 x 97 x 111 mm
Display Rate	: Active matrix color LCD display with capacitive multi-touch screen
Screen	: Antimicrobial Corning® Gorilla® Glass
Resolution	: 1024 x 480
Weight (apprx.)	: Approx. 1.4 kg
Waves	: Yes
Battery	
Type	: Lithium - ion, 10.8 V, 2,000 mAh
Operating time (apprx)	: 3-4 jam
User Interface	
Smart key	: Yes and configurable
Trend review	: Yes
Measurement	
ECG	: EASI, QT Analysis and ST
HR Range	:
Adult/Pediatric	: 15 - 300 bpm
Neonatus	: 15 - 350 bpm
Accuracy	: ± 1 % of range
RESP	
Range	:
Adult/Pediatric	: 0 - 120 rpm
Neonatus	: 0 - 170 rpm
Methode	: Impedancemetry lead II or lead I
Accuracy	: 0 - 120 rpm ± 1 rpm 120 - 170 rpm ± 2 rpm
SpO2	: FAST SpO2
Range	: 0 - 100 %
Accuracy	: 2% (70 - 100%)
Technology	: Philips FAST SpO2
NIBP	
Methode	: Oscillometric with sequence mode
Mode	: Auto, Manual & STAT
Temperature	
Range	: -1 - 45° C
Resolution	: 0,1°C (0,1°F)
Accuracy	: ±0,1°C (±0,2°F)
Accessories (Adult)	
SPO2 sensor	: 1
ECG cable	: 1
Temperature probe	: 1
NIBP cuff	: 1
Bracket	: 1



Keterangan Nama Produk Tayang

PHILIPS MX100 Patient Monitor System Basic Wallmount

Produk **Philips MX100 Patient Monitoring System Basic Wallmount** mendapatkan penamaan "**Basic**" berdasarkan konfigurasi produk yang telah ditentukan, yaitu kemampuan untuk melakukan pengukuran basic parameter untuk memantau tanda vital pasien, meliputi:

1. **NBP** (Non-Invasive Blood Pressure)
2. **SpO₂** (Oxygen Saturation)
3. **HR** (Heart Rate)
4. **RR** (Respiratory Rate)
5. **Suhu** (Temperature)

Dengan cakupan pengukuran parameter **NBP, SpO₂, HR, RR, Suhu**, sesuai dengan **Brosur** yang dilampirkan.



Scalable Measurements

Standard configuration includes ECG, NBP, SpO₂, dual IBP, and Temperature, with optional EtCO₂ and 12-lead ECG to match the clinical needs of each care area.

Kata "**Wallmount**" pada nama produk menunjukkan bahwa perangkat dikonfigurasi untuk dipasang pada dinding sebagai media instalasi. Penamaan tersebut menjelaskan bentuk penempatan dan posisi penggunaan perangkat, sehingga membedakannya dari konfigurasi pemasangan lain seperti trolley atau bed rail mount, tanpa mengubah fungsi maupun kemampuan monitoring produk.



Wall-Mounted Configuration



PT PHILIPS INDONESIA COMMERCIAL

Cibis Nine 10th Floor Jl. TB Simatupang No. 2 Jakarta 12560, Indonesia, Tel: +6221-30095133, Fax: +6221-27808785
www.philips.co.id



Dengan demikian, penyebutan nama produk "**Philips IntelliVue MX100 Patient Monitoring System Basic Wallmount**" sepenuhnya didasarkan pada :

1. Konfigurasi parameter pengukuran yang tersedia, yaitu NBP, SpO₂, HR, RR, dan Suhu, sehingga menggunakan penamaan "**Basic**".
2. Konfigurasi pemasangan (mounting) perangkat menggunakan wallmount, sehingga menggunakan penamaan "**Wallmount**".

Dengan demikian, penamaan produk telah mencerminkan konfigurasi perangkat yang sebenarnya dan dapat dipertanggungjawabkan baik secara teknis maupun fungsional..



PT PHILIPS INDONESIA COMMERCIAL

Cibis Nine 10th Floor Jl. TB Simatupang No. 2 Jakarta 12560, Indonesia, Tel: +6221-30095133, Fax: +6221-27808785
www.philips.co.id

Technical Specifications

PHILIPS MX100 Patient Monitoring System Advance Wallmount

Type	: Philips MX100 Patient Monitoring System
Parameter	: NBP, SpO2, HR, RR, Temperature, 2xIBP & etCO2
Physical Spesification	
Main Display	
Screen size	: 23.8 inch FHD IPS Touch Screen
Size (W x H X D) in mm (apprx)	: 630 x 260 x 490 mm
Module Parameter	
Size (W x H X D) in mm (apprx)	: 249 x 97 x 111 mm
Display Rate	: Active matrix color LCD display with capacitive multi-touch screen
Screen	: Antimicrobial Corning® Gorilla® Glass
Resolution	: 1024 x 480
Weight (apprx.)	: Approx. 1.4 kg
Waves	: Yes
Battery	:
Type	: Lithium - ion, 10.8 V, 2,000 mAh
Operating time (apprx)	: 3-4 jam
Smart key	: Yes and configurable
Trend review	: Yes
Measurement	
ECG	: EASI, QT Analysis and ST
HR Range	:
Adult/Pediatric	: 15 - 300 bpm
Neonatus	: 15 - 350 bpm
Accuracy	: ± 1 % of range
RESP	:
Range	:
Adult/Pediatric	: 0 - 120 rpm
Neonatus	: 0 - 170 rpm
Methode	: Impedancemetry lead II or lead I
Accuracy	: 0 - 120 rpm ± 1 rpm 120 - 170 rpm ± 2 rpm
SpO2	: FAST SpO2
Range	: 0 - 100 %
Accuracy	: 2% (70 - 100%)
Technology	: Philips FAST SpO2
NIBP	:
Methode	: Oscillometric with sequence mode
Mode	: Auto, Manual & STAT
Temperature	
Range	: -1 - 45° C
Resolution	: 0,1°C (0,1°F)
Accuracy	: ± 0,1°C (±0,2°F)
etCO2	
Range	: 0 - 150 mmHg
Accuracy	: 0 - 40 mmHg : ± 2,2 mmHg
IBP	
Range	: -40 - 360 mmHg
Accuracy	: ±1%
Channel	: 2 channel
Accessories (Adult)	
SPO2 sensor	: 1
ECG cable	: 1
Temperature probe	: 1
NIBP cuff	: 1
etCO2 sensor	: 1
IBP extension	: 1
Wallmount	: 1



Keterangan Nama Produk Tayang

PHILIPS MX100 Patient Monitor System Advance Wallmount

Produk **PHILIPS MX100 Patient Monitoring System Advance Wallmount** mendapatkan penamaan "**Advance**" berdasarkan konfigurasi produk yang telah ditentukan, yaitu kemampuan untuk melakukan pengukuran basic parameter untuk memantau tanda vital pasien, meliputi:

1. **NBP** (Non-Invasive Blood Pressure)
2. **SpO₂** (Oxygen Saturation)
3. **HR** (Heart Rate)
4. **RR** (Respiratory Rate)
5. **Suhu** (Temperature)
6. **2IBP** (Invasive Pressure)
7. **ETCO₂** (End-Tidal Carbon Dioxide)

Dengan cakupan pengukuran parameter **NBP, SpO₂, HR, RR, Suhu, ETCO₂ dan 2IBP** sesuai dengan **Brosur** yang dilampirkan.



Scalable Measurements

Standard configuration includes ECG, NBP, SpO₂, dual IBP, and Temperature, with optional EtCO₂ and 12-lead ECG to match the clinical needs of each care area.

Kata "**Wallmount**" pada nama produk menunjukkan bahwa perangkat dikonfigurasi untuk dipasang pada dinding sebagai media instalasi. Penamaan tersebut menjelaskan bentuk penempatan dan posisi penggunaan perangkat, sehingga membedakannya dari konfigurasi pemasangan lain seperti wall mount atau bed rail mount, tanpa mengubah fungsi maupun kemampuan monitoring produk.



Wall-Mounted Configuration



PT PHILIPS INDONESIA COMMERCIAL

Cibis Nine 10th Floor Jl. TB Simatupang No. 2 Jakarta 12560, Indonesia, Tel: +6221-30095133, Fax: +6221-27808785
www.philips.co.id



Dengan demikian, penyebutan nama produk "**PHILIPS IntelliVue MX100 Patient Monitoring System Advance Wallmount**" sepenuhnya didasarkan pada :

1. Konfigurasi parameter pengukuran yang tersedia, yaitu NBP, SpO₂, HR, RR, Suhu ETCO₂ dan 2IBP, sehingga menggunakan penamaan "**Advance**".
2. Konfigurasi pemasangan (mounting) perangkat menggunakan wallmount, sehingga menggunakan penamaan "**Wallmount**".

Dengan demikian, penamaan produk telah mencerminkan konfigurasi perangkat yang sebenarnya dan dapat dipertanggungjawabkan baik secara teknis maupun fungsional..



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Technical Specifications

PHILIPS MX100 Patient Monitoring System Premium Wallmount

Type	: Philips MX100 Patient Monitoring System
Parameter	: NBP, SpO2, HR, RR, 2x Temperature, 3xIBP & etCO2
Physical Specification	
Main Display	
Screen size	: 23.8 inch FHD IPS Touch Screen
Size (W x H X D) in mm (apprx)	: 630 x 260 x 490 mm
Module Parameter	
Size (W x H X D) in mm (apprx)	: 249 x 97 x 111 mm
Display Rate	: Active matrix color LCD display with capacitive multi-touch screen
Screen	: Antimicrobial Corning® Gorilla® Glass
Resolution	: 1024 x 480
Weight (apprx.)	: Approx. 1.4 kg
Waves	: Yes
Battery	
Type	: Lithium - ion, 10.8 V, 2,000 mAh
Operating time (apprx)	: 3-4 jam
Smart key	: Yes and configurable
Trend review	: Yes
Measurement	
ECG	: EASI, QT Analysis and ST
HR Range	: Adult/Pediatric : 15 - 300 bpm Neonatus : 15 - 350 bpm
Accuracy	: ± 1 % of range
RESP	: Adult/Pediatric : 0 - 120 rpm Neonatus : 0 - 170 rpm
Range	: Methode : Impedancemetry lead II or lead I Accuracy : 0 - 120 rpm ± 1 rpm 120 - 170 rpm ± 2 rpm
SpO2	: FAST SpO2
Range	: 0 - 100 %
Accuracy	: 2% (70 - 100%)
Technology	: Philips FAST SpO2
NIBP	: Methode : Oscillometric with sequence mode Mode : Auto, Manual & STAT
Temperature	
Range	: -1 - 45° C
Resolution	: 0,1°C (0,1°F)
Accuracy	: ± 0,1°C (±0,2°F)
Channel	: 2 channel
etCO2	: Range : 0 - 150 mmHg Accuracy : 0 - 40 mmHg : ± 2,2 mmHg
IBP	: Range : -40 - 360 mmHg Accuracy : ±1% Channel : 3 channel
Accessories (Adult)	
SPO2 sensor	: 1
ECG cable	: 1
Temperature probe (Skin & Esophageal)	: @1
NIBP cuff	: 1
etCO2 sensor	: 1
IBP extension	: 1
Wallmount	: 1



Keterangan Nama Produk Tayang

PHILIPS MX100 Patient Monitor System Premium Wallmount

Produk **PHILIPS MX100 Patient Monitoring System Premium Wallmount** mendapatkan penamaan "**Premium**" berdasarkan konfigurasi produk yang telah ditentukan, yaitu kemampuan untuk melakukan pengukuran basic parameter untuk memantau tanda vital pasien, meliputi:

1. **NBP** (Non-Invasive Blood Pressure)
2. **SpO₂** (Oxygen Saturation)
3. **HR** (Heart Rate)
4. **RR** (Respiratory Rate)
5. **2x Suhu** (Temperature)
6. **3IBP** (Invasive Pressure)
7. **ETCO₂** (End-Tidal Carbon Dioxide)

Dengan cakupan pengukuran parameter **NBP, SpO₂, HR, RR, 2x Suhu, ETCO₂ dan 3IBP** sesuai dengan **Brosur** yang dilampirkan.



Scalable Measurements

Standard configuration includes ECG, NBP, SpO₂, dual IBP, and Temperature, with optional EtCO₂ and 12-lead ECG to match the clinical needs of each care area.

Kata "**Wallmount**" pada nama produk menunjukkan bahwa perangkat dikonfigurasi untuk dipasang pada dinding sebagai media instalasi. Penamaan tersebut menjelaskan bentuk penempatan dan posisi penggunaan perangkat, sehingga membedakannya dari konfigurasi pemasangan lain seperti wall mount atau bed rail mount, tanpa mengubah fungsi maupun kemampuan monitoring produk.



Wall-Mounted Configuration



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Dengan demikian, penyebutan nama produk "**PHILIPS IntelliVue MX100 Patient Monitoring System Premium Wallmount**" sepenuhnya didasarkan pada :

1. Konfigurasi parameter pengukuran yang tersedia, yaitu NBP, SpO₂, HR, RR, 2x Suhu ETCO₂ dan 3IBP, sehingga menggunakan penamaan "**Premium**".
2. Konfigurasi pemasangan (mounting) perangkat menggunakan wallmount, sehingga menggunakan penamaan "**Wallmount**".

Dengan demikian, penamaan produk telah mencerminkan konfigurasi perangkat yang sebenarnya dan dapat dipertanggungjawabkan baik secara teknis maupun fungsional..



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Berdasarkan Peraturan Menteri Kesehatan R.I Nomor 62 Tahun 2017 Tentang Izin Edar Alat Kesehatan, Alat Kesehatan Diagnostik In Vitro Dan Perbekalan Kesehatan Rumah Tangga dengan ini diberikan persetujuan untuk diedarkan dengan :

NOMOR IZIN EDAR

ALAT KESEHATAN

KEMENKES RI AKD 20501620365

Nama Dagang / Merek : **PHILIPS MX100 Patient Monitoring System**
Kelompok / Kelas Resiko : Elektromedik Non Radiasi / C
Kategori Produk : Peralatan Kardiologi
Sub Kategori : Peralatan Kardiologi Diagnostik
Jenis Produk : Arrhythmia detector and alarm (including ST-segment measurement and alarm)
Tipe / Ukuran : -
Kemasan : Unit
Nama Produsen / Pabrikan : PT GRAHA TEKNOMEDIKA, Jawa Barat
Nama Pendaftar : PT PHILIPS INDONESIA COMMERCIAL, DKI Jakarta
Atas dasar lisensi dari : -

Ketentuan

1. Persetujuan izin edar berlaku sampai dengan 02 Juli 2027.
2. Wajib menyampaikan laporan berkala dan laporan jika ada kejadian yang tidak diinginkan akibat penggunaan Alat Kesehatan tersebut di atas sesuai ketentuan berlaku.
3. Izin edar ini merupakan persetujuan perubahan jenis produk dari Nomor Izin Edar Alat Kesehatan KEMENKES RI AKD 20502620366 tanggal 06 Juli 2026. Dengan demikian izin edar sebelumnya dinyatakan tidak berlaku.
4. Produsen hanya boleh menyalurkan produknya melalui Penyalur Alat Kesehatan (PAK).
5. Apabila dikemudian hari ada pihak lain yang berhak atas merek dan/atau keagenan produk tersebut, pendaftar bersedia mengembalikan izin edar.
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7. Apabila di kemudian hari terdapat kekeliruan, maka persetujuan izin edar ini akan ditinjau kembali.

Jakarta, 23 Juli 2026



Ditandatangani Secara Elektronik Oleh:

Direktur Jenderal
Farmasi dan Alat Kesehatan
Dr. Dra. L. Rizka Andalusia, Apt., M.Pharm., MARS
NIP. 19680226 199403 2 004

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