

Propaq® M

The Propaq You Trust Just Got Better



Medical Simulator
EMERGENCY RESPONSE

ZOLL®



Propaq M, your trusted transport monitor, relied upon to go where you go and do what you need it to do.

Propaq M:

- Robust communications options: integrated Wi-Fi, Bluetooth® with USB cellular modem, and Ethernet capabilities.
- Large display, capable of showing four, six, or 12 waveforms and all clinical parameters on one screen.
- Only transport monitor with a defibrillator and pacer version.
- Four pounds lighter than similar vital signs transport monitors.
- Only transport monitor to offer three invasive pressure channels, necessary to monitor critical patients during long transports.
- First transport monitor to achieve an IP55 ingress protection rating, indicating protection from jets of water and extremely fine sand/dust.
- Backwards compatible with most existing accessories for all older Propaq monitors.
- Available with full Masimo rainbow® SET SpO₂, SpCO, SpMet, SpHb, SpOC, PI, and PVI
- Available with optional integrated printer.

**ADVANCING
RESUSCITATION.
TODAY.®**

Specifications

Display

Type: Bright, Color, LCD TFT
Brightness: User adjustable
Resolution: 640 x 480 pixels
Waveform Traces: 4, 6, or 12 waveforms
Display Modes: Standard, high contrast, NVG (night vision goggle) friendly
Waveform Durations: 4.8, 9.5 seconds

ECG

Cable Detection: Automatic 3-, 5-, 12-lead
Input: 3-lead cable, 5-lead cable, 12-lead cable
Cable Compatibility: Propaq Encore, Propaq CS
Leads: I, II, III, AVR, AVL, AVF, V1 – V6
Bandwidth: (User Selectable)
 0.67 – 20 Hz Limited mode
 0.67 – 40 Hz Monitor mode
 0.25 – 40 Hz Filtered diagnostic mode
 0.05 – 150 Hz Diagnostic mode
Heart Rate Range: 30 – 300 BPM
Heart Rate Accuracy: ± 3 BPM or 3%
Pacer Detection and Display
Electrosurgery Interference Suppression ESU and Defibrillation Protected
ECG Sizes: 0.125, 0.25, 0.5, 1, 2, 4 cm/mv, and auto-ranging
Sweep Speed: 25, 50 mm/sec
Common Mode Rejection: Complies with AAMI EC13-2002 section 4.2.9.10

Patient Modes

User Selectable: Adult, Pediatric, Neonate. Automatically sets configurable defaults for alarm limits, defibrillation energy, and NIBP settings.

Trends (on-screen)

Tabular numeric format
 All parameters trended/viewable
Trend Intervals: 1, 5, 10, 15, 30, 60 minutes
Duration: 24 hours at 1-minute intervals
Snapshots: Minimum of 32 display data captures (12 seconds of pre- and post- button press); quick access trend display via display button

Printer

Waveforms Printed: 1, 2, or 3
Print Speeds: 25 mm/sec or 50 mm/sec
Print Modes: Manual or automatic (user configurable)
On/Off Control: Front panel or paddle
Paper Delay: 6 seconds
Frequency Response: Same as the monitor's settings
Paper Width: 80 mm

Masimo® SET SpO₂

Saturation Range: 1 – 100%
Saturation Accuracy:
 Oxygen saturation during no-motion conditions:
 Adults, Pediatrics: 70 – 100%, ± 2 digits
 0 – 69%, unspecified
 Neonates: 70 – 100%, ± 3 digits
 0 – 69%, unspecified
 Oxygen saturation during motion conditions:
 Adults, Pediatrics: 70 – 100%, ± 3 digits
 0 – 69%, unspecified
 Neonates: 70 – 100%, ± 3 digits
 0 – 69%, unspecified
 Oxygen saturation during low-perfusion conditions:
 Adults, Pediatrics: 70 – 100%, ± 2 digits
 0 – 69%, unspecified
 Neonates: 70 – 100%, ± 3 digits
 0 – 69%, unspecified
Pulse Rate Range: 25 – 240 bpm
 Pulse rate during no-motion conditions:
 Adults, Pediatrics,
 Neonates: 25 – 240 ± 3 digits

Pulse rate during motion conditions
 Adults, Pediatrics,
 Neonates: 25 – 240 ± 5 digits
SpO₂ Average time setting:
 4, 8 (default), 16 seconds

Masimo rainbow® SET SpCO®

Range: 0 – 99%
Accuracy: 1 – 40% ± 3 digits

Masimo rainbow® SET SpMet®

Range: 0 – 99%
Accuracy: 1 – 15% ± 1 digits

Masimo rainbow® SET SpHb®

Measurement Range: 0 – 25 g/dL
Accuracy (Adults/Infants/Pediatrics):
 8 – 17 g/dL +/- 1 g/dL
Resolution (SpHb g/dL): 0.1 g/dL

Masimo rainbow® SET SpOC™

Measurement Range: 0 – 35 mL of O₂/dL of blood
Resolution: 0.1 ml/dL

Masimo Pleth Variability Index (PVI®)

Measurement Range: 0 – 100%
Resolution: 1%

Masimo Perfusion Index (PI)

Measurement Range: 0.02 – 20%
Resolution: 0.1%

Noninvasive Blood Pressure (NIBP)

Smartcuf® and SureBP® NIBP technology
Measurement Intervals: Automatic 1-, 2-, 3-, 5-, 10-, 15-, 30-, 60-minute, and manual
 quick-action NIBP Start/Stop button
TurboCuf: 5 min of repeated NIBP readings
Typical Measurement Time:
 30 – 45 sec (on deflation)
 15 – 30 sec — Sure BP (on inflation)
Standard Cuff Sizes: Neonate #1 – #5, Infant, Child, Sm Adult, Adult Long, Lg Adult, Thigh

Default Cuff Inflation Pressure:

Adult: 160 mmHg
 Pediatric: 120 mmHg
 Neonate: 90 mmHg

Pressure Measurement Range:

Systolic: 20 – 260 mmHg
 Diastolic: 10 – 220 mmHg
 Mean: 13 – 230 mmHg

Maximum Cuff Inflation Pressure:

Adult: 270 mmHg
 Pediatric: 170 mmHg
 Neonate: 130 mmHg

Microstream® etCO₂ Measurement Technology

Range:
 0 – 150 mmHg
Accuracy (mmHg):
 0 – 38: ± 2 mmHg
 39 – 150: ± 5% + .08% mmHg >38
Respiration Range: 0 – 150 breaths per minute
Respiration Rate Accuracy:
 0 – 70 bpm: ± 1 bpm
 71 – 120 bpm: ± 2 bpm
 121 – 150 bpm: ± 3 bpm
Flow Rate: 50 ml/min -7.5 + 15 ml/min

ECG Impedance Respiration

User-Selectable Leads: RA-LA, RA-LL

Breath Rate Range:

Adult/Pediatric modes: 2 – 150 breaths per minute
 Neonate mode: 3 – 150 breaths per minute

Respiration Rate Accuracy: ± 2 breaths/min or ± 2%

Sweep Speed: 3.13, 6.25, 12.5 mm/sec
Displayed Data: Numeric breath rate, impedance waveform
Alarm Setting: High, low, and no breath rate alarm

Invasive Pressure

Three channels
Pressure Range: -30 – 300 mmHg
Pulse Rate Measurement Range:
 25 – 250 BPM

Formats: S/D, S/D (M), (M)/S/D, (M) user selectable

User-Selectable Labels: P1, P2, P3, ABP, AO, ART, CVP, BAP, FAP, LAP, PAP, RAP, UAP, UVP, ICP

Transducer Requirements: 5 µV/V/mmHg

Zero Adjustment: ± 200 mmHg

Numeric Pressure Accuracy: ± 2 mmHg or 2% reading, whichever is greater of reading, plus transducer error

Transducer Connector: Standard 6-pin AAMI

Temperature

Two YSI 400/700 series-compatible channels

Range: 0° – 50°C (32° – 122°F)

Units: °C or °F

Display: T1, T2, and delta temp

Accuracy: ± 0.1°C (± 0.06°F) from 10 – 50°C (50° – 122°F) ± 0.2°C (± 0.11°F) from 0° – 10°C (32 – 50°F)

Power

Rechargeable, user replaceable, lithium ion

Operating Time: 7.5 hours (display brightness at 30%, ECG, SpO₂, EtCO₂, IPx3, temp x2 and NIBP every 15 min)

Battery:

Size: 178 mm x 93 mm x 30 mm
 Weight: 1.4 lbs
 Battery Indicators: 5 battery capacity LED indicators, fault indicator, recalibration indicator
 Recharge Rate: 4 hours to 100%

AC Power Adapter: 100 – 240 VAC 50, 60, 400 Hz (@110V)

General

Weight:
 8.5 lbs. with battery
 9.9 lbs. with battery and printer

Dimensions:

8.9" x 10.4" x 7.0"
 with printer 8.9" x 10.4" x 7.9"
 without handle 8.9" x 8.7" x 6.5"

Environmental

Operating Temperature: 0° – 50°C, -26° to 60°C for 6 hours, per MIL STD 810G Method 501.5, Procedure III, and Method 502.5 Procedure II

Operating Relative Humidity:
 15% – 95%, NC

Operating Altitude: Up to 15,000 ft

Transport/Storage Temperature:
 -30° – 70°C

Shock: 75G per MIL STD 810G

Drop:

1 meter per MIL STD 810G, 26 drops,
 2 meter per IEC 60601-1

Vibration: MIL STD 810G

Enclosure Protection: (IEC 60529)

Solid Foreign Object: IP5X
 Water Ingress: IPX5

Specifications subject to change without notice.

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