

# Propaq® M

The Propaq You Trust Just Got Better



**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 SpO<sub>2</sub>, SpCO, SpMet, SpHb, SpOC, PI, and PVI
- Available with optional integrated printer.

## ADVANCING RESUSCITATION. TODAY.®

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## 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 SpO<sub>2</sub>

**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  
**SpO<sub>2</sub> 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 O<sub>2</sub>/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® etCO<sub>2</sub> 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, SpO<sub>2</sub>, EtCO<sub>2</sub>, 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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Printed in the U.S.A. MCN MP 1611 0029

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