



The Welch Allyn Propaq® LT

Continuous Monitoring for Ambulatory, Bedside, and Transport Applications



The Propaq LT is specially designed to extend continuous monitoring capabilities to care areas where technical complexity or cost made it impossible in the past.

Frontline caregivers all over the world are caring for growing numbers of more acutely ill patients. At the same time, a critical shortage of clinicians face increasing requirements for higher care standards and regulations. How will today's healthcare providers meet these increasing challenges? With advancements in technology that offer new paradigms of care. The Propaq LT marks such an advancement.

For a little more than half the price of a traditional bedside monitor, the Propaq LT allows caregivers to extend continuous monitoring to areas never covered before. Appropriate for transport, ambulatory, and bedside monitoring applications, the Propaq LT has the versatility to meet your needs. Its simple and highly intuitive user interface allows highly skilled or less skilled clinical staff to operate the monitor with ease. The Propaq LT can even be uniquely configured for a particular care area. With all this, the new Propaq LT is the perfect solution for today's fast-paced frontline hospital environment.

Our most compact, rugged, and versatile Propaq monitor to date, the Propaq LT features:

- A compact design weighing less than 1 kilo, about the size of the average paperback book
- Shock resistance of up to 75 g, enough to withstand a 1.8 m drop
- Heart rate, 3- or 5-lead ECG, SpO₂, NIBP, respiration
- Neonatal, paediatric, and adult patient modes
- Masimo SET® motion-tolerant SpO₂ or Nellcor® SpO₂
- Highly intuitive, easy-to-use, user interface:
 - Custom configurable to user care area
 - Operates in spot-check and/or continuous monitoring modes
 - Direct-action operation with camcorder-type controls
 - Three display modes to accommodate varying user skill-sets
- Colour Transflective LCD, viewable indoors and outdoors
- 24-hour tabular and graphical trending
- Stores up to 20 full-disclosure data snapshots
- Transfers trends and snapshots to PC for printing
- Wireless connectivity option to Acuity® Central Station via FlexNet™
- Smartcuf® NIBP
- U.S. Military flight-certified for fixed- and rotary-wing aircraft

WelchAllyn®

Advancing Frontline Care™

Propaq LT Specifications

General

- Available in two configurations:
 - Standalone: model 802LT0N
 - Networked via wireless radio: model 802LTRN
- Adult, paediatric and neonatal patient modes
- Electrosurgery interference suppression (ESIS): all channels except impedance respiration
- All channels electronically isolated

ECG

- Automatic 3- and 5-lead monitoring and cable type detection
- Selectable leads: I, II, III, aVR, VL, VF, V
- Lead fault detection and autoconfigure
- Bandwidth:
 - Adult: 0.5 to 80 Hz monitor mode; 0.05 to 80 Hz extended mode
 - Paediatric/neonate: 0.5 to 80 Hz monitor mode; 0.05 to 80 Hz extended mode
- Hypertronics connector
- Heart rate measurement range: 25 to 300bpm (display)
- Heart rate accuracy: ± 3 bpm or 3%
- Pacer detection and display
- Electrosurgery and defibrillator protected
- Sweep speed: 25 mm/sec; (6.25 mm/sec respiration only)
- User-selectable size (mV/cm): 8, 4, 2, 1, 0.5, 0.2
- QRS tone: med/low/off
- 3.0 sec waveform duration at 25 mm/sec for single waveform; 6.0 sec waveform duration at 25 mm/sec for cascading waveform
- QRS detector range:
 - Adult or paediatric mode: 0.22 to 5.0 mV (RTI)
 - Neonatal mode: 0.1 to 5.0 mV
 - Neonatal width: 40 to 120 msec
 - Paediatric width: 40 to 120 msec
 - Adult width: 70 to 120 msec

NIBP

- Oscillometric method
- Automatic (intervals between 1 to 60min) and manual modes
- Quick-action NIBP start/stop button
- TurboCuf: 5min of repeated NIBP readings
- Systolic, diastolic and mean display
- On-screen manometer
- Store and view up to 150 readings
- Standard cuff sizes:
 - Neonates #1 to #5, infant, child, small adult, adult, large adult, thigh
- Cuff overpressure protection
- Typical measurement time: 30 to 45 sec
- Smartcuf® motion-tolerant NIBP technology
- Blood pressure range:
 - Adult:
 - Systolic: 30 to 260 mmHg
 - Diastolic: 20 to 235 mmHg
 - Mean: 20 to 255 mmHg
 - Paediatric:
 - Systolic: 30 to 160 mmHg
 - Diastolic: 15 to 130 mmHg
 - Mean: 15 to 140 mmHg
 - Neonate:
 - Systolic: 25 to 120 mmHg
 - Diastolic: 10 to 105 mmHg
 - Mean: 10 to 110 mmHg
- Blood pressure target inflation
 - Adult: 160 mmHg
 - Paediatric: 120 mmHg
 - Neonate: 90 mmHg
- Pulse rate accuracy: ± 3 bpm or 3%
- Pulse rate range: 30 to 220 bpm

SpO₂ (Masimo)

- Masimo SET® technology
- Perfusion Index and Signal IQ display
- Sensitivity modes: Normal, MAX, APOD
- Masimo SET® sensors
- Waveform and pulse amplitude meter
- Pulse tone pitch indicator
- Saturation range: 1 to 100%
- Probe accuracy: 25 to 41 °C
- No motion:

Adult/Paediatric:	70 to 100% ± 2 digits
	0 to 69% unspecified
Neonatal:	70 to 100% ± 3 digits
	0 to 69% unspecified
- During motion:

Adult/Paediatric/Neonatal:	70 to 100% ± 3 digits
	0 to 69% unspecified

- Pulse rate measurement range: (Adult/Paediatric/Neonatal):

No motion:	26 to 239 bpm
During motion:	26 to 239 bpm
- Pulse rate accuracy:

No motion:	± 3 digits
During motion:	± 5 digits

SpO₂ (Nellcor)

- Nellcor® OxiMax® sensors
- Waveform and pulse amplitude meter
- Normal, fast and slow response modes
- Saturation range: 1 to 100%
- Accuracy: (Probe: 70 to 100%, 28 to 42 °C)
 - Adult/Paediatric digit: ± 2 counts
 - Neonate digit: ± 3 counts
- Pulse rate accuracy: no motion: ± 3 bpm
- Pulse rate range: 25 to 300 bpm

Respiration

- Breath rate source: impedance pneumography
- Two user-selectable leads: RA-LA, RA-LL
- Automatic cardiovascular artifact (CVA) rejection
- Respiration rate range:
 - Adult/Paediatric modes: 2 to 150 br/m
 - Neonate mode: 3 to 150 br/m
- Respiration detection threshold: 175 milliohms or 2X CVA, whichever is greater
- Respiration rate accuracy: ± 2 br/m or $\pm 2\%$
- Sweep speed: 6.25 mm/sec

Physical

- Monitor
 - Height: 137.1 mm
 - Width: 190.5 mm
 - Depth: 53.3 mm
 - Weight: 904.3 g with FlexNet radio; 765 g without radio
- Charging station
 - Height: 144.7 mm
 - Width: 193 mm
 - Depth: 152.4 mm
 - Weight: 680.3 g
- Colour display
- 3.5 in colour transfective LCD
- Viewable in direct sunlight

Environmental

- Operating temperature: 0 to 40 °C
- Operating relative humidity: 5 to 95%, noncondensing
- Monitor operating altitude: -610 to 4,572 m
- Cradle operating altitude: 152 to 4,572 m
- Shipping/storage temperature: -20 to 60 °C
- Shock: 75 g
- Vibration, Random and Sinusoidal: designed to meet RTCA/DO-160D, categories section 8 modified
- Electromagnetic compatibility (EMC): per IEC 601-1-2
- Drip-proof per IEC 529, level IPX1

Power

- Rechargeable lithium ion internal battery pack
 - External recharger
 - Input voltage: 12 to 28 VDC
 - AC power adapter: 110 and 220 V, DC vehicle conversion
 - Operating time on battery, typical*: ECG/Resp only: 24 hours; ECG/Resp, SpO₂ and NIBP: 8 hours
 - Battery recharge time: < 3 hours
- Performance may vary based on monitor configuration and battery condition*
- * Fully charged, new battery at 25°C, NIBP every 15 minutes, display and backlight operating in power save mode.

Communications

- PC Utility
 - USB interface via charging station
 - Supports Microsoft Windows XP/2000 and later
 - Autoprint utility allows printing of tabular trends and snapshots to connected laser printer
- Acuity® Central Station Wireless FlexNet™ Network
 - 802.11a, 5 GHz
 - Able to operate on shared 802.11a/b/g network

Alarms

- All parameters: upper/lower limits specific to patient mode
- Factory default or programmable settings for all patient modes
- Alarm indicator: red
- Alarm(s) off indicator: yellow
- Audible alarm tone: high/med/low
- Alarm silence/reset: 90 sec
- One-button "Param-set" for adjusting specific parameter alarm limits, programmable
- Equipment alert: yellow

Trends

- Tabular numeric and graphical formats
- All parameters trended/viewable
- Resolution: non-NIBP trends entered every 1 min
- NIBP trends entered after each reading
- Duration: 24 hr non-NIBP trends; up to 150 NIBP readings
- Page up/down trend view
- Up to 20 data snapshots (7 sec behind and 14 sec ahead of snapshot event) of displayed data captured

Certifications/Standards

- Complies with all relevant AAMI, IEC, EN, CSA, and UL standards. CE marked according to the European Medical Device Directive. CSA certificate of compliance for use in the U.S. and Canada

Warranty

- Monitor and recharger: two years
- Accessories: 90 days
- Extended warranties available

All specifications subject to change without notice.



All Propaq vital signs monitors come standard with Smartcuf technology, a new standard in NIBP accuracy. This patented software offers industry-leading performance and accuracy in the presence of motion artifact.



This monitor is approved for use during all phases of flight aboard U.S. Army aircraft. MIL STD 461E
Army: CE101, CE102, CS101, CS114, CS115, CS116, RE102, RS103



Only Masimo SET SpO₂ sensors, including LNCS series of cables and NR value disposable sensors, should be used with Masimo pulse oximetry. Masimo, Masimo SET, LNCS and NR are registered trademarks of Masimo Corporation.



Only Nellcor® OxiMax® pulse oximetry sensors, should be used with the Nellcor pulse oximetry option. Nellcor and OxiMax® are registered trademarks of Nellcor Puritan Bennett, Inc.

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