



The **Philips Tempus Pro** is an advanced vital signs patient monitor with multiple capabilities. The Tempus Pro provides a full range of vital signs monitoring as well as ultrasound and video laryngoscope capabilities. It has a large color display with multiple waveform configurations. The Tempus Pro system is lightweight (6.2 lbs) and highly durable with an IP66 rating.

Features

- 10 hour internal battery life.
- Fully integrated communications capability enables the transmission of all medical and vital signs data, voice and video transmission in real time using military radios.
- Easy-to-use touchscreen display that can be used with a gloved hand.
- Displays ultrasound and video laryngoscope images on the color display.
- Wifi, Bluetooth, GSM, and GPS.



Specifications

Dimensions

Height: 8.4" (21.4 cm)
Width: 10.1" (25.9 cm)
Depth: 3.9" (10 cm)
Weight: 6.2 lbs (2.8 kg)

Display

Color 6.5 " VGA screen
130 klux daylight readable display
Multiple user-selectable display formats
High-contrast mode
NVG friendly
Device can be set to an appropriate viewing angle with the integral foot
Rear of the Tempus Pro houses the RapidPak clip which enables easy deployment and storage of sensors and cables

ECG Monitor

3/5 Lead monitoring via standard snap-on electrodes
Heart rate range: 30-300 BPM
12 Lead acquisition / Interpretation
Input impedance: >100 M Ω
Dynamic range: ± 5 mV ac
Accuracy: $\pm 3\%$
DC offset: ± 300 mV dc
Frequency Response: 0.05 Hz to 175 Hz ± 3 dB
Sample rate: 500 Hz
Common mode rejection: 95 dB minimum, additional filters include mains, muscle and low and high pass
Arrhythmia monitoring

Impedance Respiration

Range: 3 - 150 RPM
Accuracy: ± 2 RPM or $\pm 2\%$ whichever is greater

Non-Invasive Blood Pressure

Accuracy: ± 3 mmHg or $\pm 2\%$ (whichever is greater)
Adult range: 20 – 260 mmHg
Child range: 20 – 250 mmHg
Neonate range: 20-140 mmHg
Available Cuffs: Neonate disposable 1-5, Infant, Child, Child long, Adult, Adult Long, Large Adult, Large Adult Long, Thigh



Specifications Continued

Pulse Oximetry

Range: 1 – 100%

Accuracy (adults/child): no motion or low perfusion ± 2 digits 70-100%, motion ± 3 digits 70-100%,

Accuracy (neonate): motion, no motion and low perfusion ± 3 digits 70-100%

Perfusion index: 0.02-20%

Response: <1 second delay

Masimo SET Rainbow technology

Pleth Variability Index (PVI) v

Pulse Rate Range: 25 – 239 BPM

Pulse Rate Accuracy (all ages): no motion ≤ 3 digits, motion ≤ 5 digits

Haemoglobin

Range: 0 - 25 g/dl

Accuracy (Adults/Infants/Paediatrics): 8 - 17 g/dL ± 1 g/dl

Methaemoglobin

Range: 0 - 99.9%

Accuracy (Adults/Infants/Paediatrics Neonates): 1 - 15% ± 1 %

Carboxyhaemoglobin

Range: 0 - 99.9%

Accuracy (Adults/Infants/Paediatrics): 1 - 40% ± 3 %

Total oxygen content: Range 0 – 35ml of O₂/dl of blood

Capnometry

Respiration Rate

Range: 1 - 149 BPM

Accuracy: 0-70 BPM ± 1 BPM, 71-121 BPM ± 2 BPM, 122-149 BPM ± 3 BPM

Microstream ETCO₂

Range: 0 – 150 mmHg

Flow rate: 50 ml/min -7.5 + 15 ml/min

Uses Oridion Microstream technology

Accuracy: 0-38 mmHg ± 2 mmHg, 39-150 mmHg ± 5 % of reading +0.08% per 1 mmHg over 38 mmHg

Contact Temperature

2 channel YSI 400 series compatible

Measurement range: 20-45 °C

Resolution: 0.1 °C (0.2 °F)

Accuracy: ± 0.1 °C

Integral Digital Camera

Color 3.2M pixel camera

Takes still pictures or video using the H264 algorithm (bandwidth dependent)

Images are included in the patient record



Specifications Continued

Invasive Pressure

2 channels, 5 μ V/V/mmHg

Response: 0-20 Hz (-3 dB)

Filters: 50/100/150 Hz & 50-60 Hz notch

Range: -99 – 310 mmHg

Accuracy: \pm 2% or \pm 2 mmHg

Bridge: 180 Ω minimum

Expandable up to 4 channels via USB module

Military Trauma Record

Electronic trauma record (TCCC, AF 3899Lix etc.)

User-friendly interface

Semi-automatic patient record completion

Operable with a gloved hand

Data output is compatible with military AHLTA-T records system

Record can be passed from device to device to accompany the patient through the echelons of care

Data can be output as .PDF for attachment into electronic patient record systems

Record can be transmitted over military radios for real-time decision support

Ultrasound

Optional Interson Ultrasound Probes General Purpose 3.5 MHz and Line Placement 7.5 MHz

Video Laryngoscopy

Optional Karl Storz C-MAC Video Laryngoscope Imager and Single Use Blades

