



# Ohmeda TruSat Pulse Oximeter

For wherever your patients take you

## Features

The first of its kind — Ohmeda TruSat® offers clinicians a real-world oximetry solution.

- Featuring TruSignal™ Enhanced SpO<sub>2</sub> for improved performance during clinical motion and low perfusion
- Same proven durability as in the Ohmeda TuffSat® handheld oximeter
- Up to 30 hours of uninterrupted battery life (up to 20 hours with TD option) and a fast, full-battery recharge in only 3.5 hours.  
*Note: Continuous use of backlight can significantly affect the battery life.*
- Small, lightweight design, only 2.75 lb. (1.24 kg)
- Featuring PI<sub>r</sub>® (relative perfusion index measurement) — a quick, easy-to-use, clinical tool for a dynamic numeric reflection of perfusion at the sensor site
- Simple, three-button operation and intuitive menus
- Trend memory option stores up to 48 hours of data, recording a data point every four seconds
- Highly visible, backlit screen with large, easy-to-read numerics
- Alarm limits always visible and saved between uses
- Pulse bar waveform
- Color choices include yellow and white
- A full, three-year warranty



## Performance Specifications

Unless otherwise indicated, all specifications are nominal and are subject to change without notice.

### Measurement

#### General

Pulse oximetry sensors:	Ohmeda OxyTip+® sensors only
Method:	Red and infrared light absorption:
Red LED wavelength range:	650 to 670 nm
Infrared (IR) LED wavelength range:	930 to 950 nm
Average power:	1 mW

#### SpO<sub>2</sub>

Calibrated for functional oxygen saturation

Calibration range: 70 to 100%

Measurement and display range: 1 to 100%

Display resolution: 1%

First reading (full accuracy): 10 seconds

Accuracy, Arms (root mean square of paired values; previously represented by  $\pm 1$  standard deviation):

70 to 100%  $\pm 2$  digits (without motion)  
70 to 100%  $\pm 3$  digits (during clinical patient motion<sup>1</sup>)  
70 to 100%  $\pm 2$  digits (during low perfusion)  
Below 70% unspecified

NOTE: SpO<sub>2</sub> measurement accuracy is based on deep hypoxia studies using OxyTip+ sensors on volunteer subjects. Arterial blood samples were analyzed simultaneously on multiple CO-oximeters.

NOTE: Accuracy may vary for some sensors; always check the instructions for the sensor.

#### Pulse rate

Measurement and display range: 30 to 250 beats per minute (bpm)

Display resolution: 1 bpm

First reading (full accuracy): 15 seconds

Accuracy ( $\pm 1$  standard deviation):

Without motion: 30 to 250 bpm:  $\pm 2$  bpm or  $\pm 2\%$ , whichever is greater

During motion: 30 to 250 bpm:  $\pm 5$  bpm

During low perfusion: 30 to 250 bpm:  $\pm 3$  bpm

#### PI<sub>r</sub> (relative perfusion index measurement)

Measurement and display range: 0.01 to 9.99

Display resolution: 0.01 PI<sub>r</sub>

### Monitor

#### General

Lock function: Locks/unlocks alarm limits, alarm audio ON/OFF, volume settings, and backlight

#### Display

Liquid crystal display (LCD)

Pleththysmographic pulse bar (pleth bar): Ten-segment column that pulsates to indicate the pulse rate and signal strength (perfusion).

Display update time: SpO<sub>2</sub>, pulse rate, and PI<sub>r</sub> values: 1 second  $\pm 0.25$  second

Plethysmographic pulse bar: 20 Hz minimum (.05 second)

Backlight LED: ON or OFF

#### Audio

Pulse rate beep: Tone rises as oxygen saturation increases and falls as it decreases

Adjustable volume: 4-segment on-screen control

Pulse beep volume: 0 (OFF), 1, 2, 3, or 4 shaded segments

Alarm volume: 1 (low), 2, 3, or 4 shaded segments

Volume intensity at distance of 1 m (3.28 ft): 45 dB minimum to 85 dB maximum

1. Applicability: OxyTip+ Adult/Pediatric and All Fit sensors

## Alarms

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Visual and audible indicators for physiological alarms (SpO<sub>2</sub> and pulse rate limit alarms) and technical alarms (sensor condition, button stuck, battery condition, and internal malfunction)

### Alarm limit settings:

Range:	Factory setting:
High SpO <sub>2</sub> : 51 to 100% or OFF (—)	OFF
Low SpO <sub>2</sub> : 50 to 99% or OFF (—)	85
High pulse rate: 30 to 235 bpm or OFF (—)	130
Low pulse rate: 30 to 235 bpm or OFF (—)	40

Alarm indicator:	Red/yellow LED:
High priority alarms	Flashing red
Medium priority alarms	Flashing yellow
Low priority alarms	Yellow ON

NOTE: The related measurement flashes ON/OFF.

Audible alarm tone:	Pattern varies according to alarm type and priority
Alarm silence button:	120 seconds or indefinitely
Alarm silence indicator:	Screen icon

## AC mains power

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Type:	Power supply (AC to DC converter)
AC power input:	100-240 V, 0.5 A, 50-60 Hz
Output to monitor:	12 VDC, 1.25 A, 15 watt
Power indicator (green LED):	ON while monitor is connected to AC power
Line power filter (monitor setting):	50 Hz or 60 Hz

## Battery power

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Type: Internal, rechargeable, nickel metal hydride (NiMH), 3 AH, 12VDC, 150 mA

Capacity, fully charged, operating at room temperature:

Without Trend Download option: 30 hours

With Trend Download option: 20 hours

NOTE: Continuous use of the backlight reduces the time approximately 50%.

Charging time (full capacity): 3.5 hours typical

Automatic power off to conserve battery: 20 minutes after monitoring stops

Battery indicator: 4-segment screen icon; shaded segments represent battery charge (0 = low or depleted; 4 shaded = fully charged)

## Environmental Conditions

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	Operating	Transport and Storage
Temperature:	10 to 40°C/ 50 to 104°F	-40 to 70°C/ -40 to 158°F
Relative humidity, noncondensing:	20 to 95%	5 to 95%
Atmospheric pressure:	1060 to 697 kPa	1060 to 188 kPa
Approximate elevation:	-378 to 3048 m (-1240 to 10,000 ft)	-378 m to 12.2 km (-1240 to 40,000 ft)

## Dimensions and weight

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Width/Depth/Height (including handle):	21.8 x 11.5 x 10.3 cm/ 8.5 x 4.5 x 4 inches
Weight:	1.25 kg/2.7 lb 1.47 kg/3.2 lb with Trend Download option

## Trend Download options

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Trend data storage:	48 hours with a data storage resolution of 1 data point every 4 seconds
RS-232 serial port:	DIN 6 circular connector 19.2 K baud, 8 data bits, 1 start bit, 1 stop bit Handshaking (RTS, CTS), full duplex, no parity

## Ordering Information

Please use the following codes when ordering:

<i>Ohmeda TruSat</i>	<i>Order code</i>
Yellow	6051-0000-190
White	6051-0000-192
Yellow with TD software	6051-0000-191
White with TD software	6051-0000-193
External printer	6002-0000-158
Printer paper	6002-0000-200
Carrying case, nylon	6050-0006-585
Pole mount	6050-0007-197
OxyTip+ Interconnect cable	OXY-MC3
OxyTip+ Integrated Finger sensor	OXY-F4-MC
OxyTip+ Integrated Ear sensor	OXY-E4-MC

Please note, monitor does not include country specific power cord or User's manual. These items have to be ordered with separate item codes. Please ask Customer Service for the power cord and User's manual appropriate for your country.

For detailed information on the use of this product, always refer to the User Guide accompanying the device.

GE Healthcare  
P.O. Box 900, FIN-00031 GE, Finland  
Tel. +358 10 394 11  
Fax +358 9 146 3310

[www.gehealthcare.com](http://www.gehealthcare.com)



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