

# SECULIFE SP BASE

## Digital Pulse Oximetry Simulator

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- Testing of patient monitors
- Simulation of various combinations of oxygen saturations, heart rates, and perfusion indices via pulses of infrared and red light
- Operation and settings via color touchscreen
- Synchronization with the settings of SECULIFE PS300 patient simulators
- 2 % accuracy for SpO<sub>2</sub>
- 1 % accuracy for heart rate



### Applications

The SECULIFE SP BASE is a digital SpO<sub>2</sub> simulator with many features. It is small and lightweight, yet very powerful. A bright, 2.4" color touchscreen, coupled with an intuitive menu structure, allows for easy access and viewing of all setup and function parameters.

For comfortable testing of your SpO<sub>2</sub> monitor, the SECULIFE SP BASE offers 5 preset combinations of SpO<sub>2</sub> %, heart rate, and perfusion index.

In manual mode, the user can select individual combinations of SpO<sub>2</sub> %, heart rate, and perfusion index. SpO<sub>2</sub> is selectable from six values with 2 % accuracy. Heart Rate is selectable from 10 values with 1 % accuracy. Three Perfusion index values are also available.

The SECULIFE SP BASE can be powered by its two internal AA batteries, or using the provided cable from the auxiliary port on your patient simulators, any USB port or the provided universal AC adapter. In battery powered operation, the battery life is 10 hours of full operation with full backlight intensity.

The SECULIFE SP BASE is also designed as an accessory for the patient simulator SECULIFE PS300. SECULIFE SP BASE adds the simulation of SpO<sub>2</sub> to the patient simulator's range of parameters.

### Features

- Small, handheld, lightweight, robust
- Intuitive user interface
- Color touchscreen
- Preset & manual mode
- 6 Saturation levels from 80–99 %
- Heart rates from 30–245 BPM
- Adjustable perfusion index
- Supports multiple manufacturer types
- Power supply by battery or AC adapter

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## Digital Pulse Oximetry Simulator

### Technical Data

#### Mechanical Design

Housing (W × H × D)	Approx. 6.35 x 9.53 x 2.54 cm (without finger)
Weight	Approx. 170 g (with batteries)
Display	Color touchscreen, 6 cm

#### Ambient Conditions

Operating temperature:	+15 ... +40 °C
Storage temperature:	-20 ... +60 °C
Relative humidity:	max. 80 %, no condensation allowed
Elevation:	Not specified
Place of use	Indoor use only

#### Power Supply

Battery	LR6 AA alkaline battery Voltage: 1.5 V Capacity: 2900 mAh Battery life: 10 h (full backlight)
USB plug-in power supply unit	Input: 100 ... 240 V AC, 50/60 Hz, 0.18 A Output: 5 V DC, 1 A

#### Electromagnetic Compatibility

Interference emission:	EN 61325-1:2013 class A
Interference immunity:	EN 61325-1:2013

#### Data Interfaces

Connection	Micro USB
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### Characteristic Values

SpO <sub>2</sub>	80, 85, 90, 95, 98, 99 %
SpO <sub>2</sub> Accuracy	2 %
Heart Rate	30, 40, 60, 80, 100, 120, 140, 150, 245 BPM
Rate Accuracy	1 %
Perfusion index	0.2 %, 2.0 %, 10 %
Supported manufacturer Type	Nellcor, Masimo, Nonin, Nihon Kohden, Mindray, GE-Ohmeda, Philips/HP, BCI

### Features Included

Simulation Modes	Manual mode
	5 factory presets

### Relevant Standards

The instrument has been manufactured and tested in accordance with the following safety regulations:

2014/30/EU	Electromagnetic compatibility (EMC)
2014/35/EU	Low voltage (LVD)
IEC 61 010-1 EN 61 010-1 VDE 0411-1	Safety requirements for electrical equipment for measurement, control and laboratory use – General requirements
DIN EN 61 326-1 VDE 0843-20-1	Electrical equipment for measurement, control and laboratory use – EMC requirements – Part 1: General requirements
EN 60 529 VDE 0470 Teil 1	Test instruments and test procedures Degrees of protection provided by enclosures (IP code)
EN 61000-3-2	Electromagnetic compatibility (EMC). Part 3-2: Limits. Limits for harmonic current emissions (equipment input current = 16 A per phase)
EN 61000-3-3	Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current = 16 A per phase and not subject to conditional connection

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### Scope of Delivery

- 1 SECULIFE SP BASE
- 1 USB plug-in power supply unit incl. international adapters US/Japan, Euro, GB, China/AUS/NZL
- 1 Cable micro-USB to USB-A
- 1 Cable micro-USB to PS2
- 2 LR6 AA batteries
- 1 Carrying case
- 1 Information CD
- 1 Factory calibration certificate

### Order Information

Description	Type	Article number
SECULIFE SP BASE	Digital Pulse Oximetry Simulator	M696B


For additional information regarding accessories please refer to

- Measuring Instruments and Testers catalog
- [www.gossenmetrawatt.com](http://www.gossenmetrawatt.com)

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