

pulse oximetry



DL3000 SpO₂ Simulator

setting the standard in
simulation and analysis

- Tests and assesses SpO₂ monitors and probes from a wide range of manufacturers, covering the individual manufacturer's technologies.
- Configuration of up to 84 R-curve selections available. Standard R-curves preconfigured.
- Accurate ratios and resolutions, exceeding the specifications of monitors under test.
- Fast and accurate visual alignment of unique 'patented' physiological test finger with the SpO₂ probe under test. Test finger DOES NOT require adaptor cables for use with different manufacturer's monitors.
- SpO₂ and pulse rate (SpO₂ and/or ECG derived) parameters are easily adjusted.
- Simulates external artifacts and a range of patient conditions and physiologies.
- Portable, compact unit which is both mains and battery powered.
- DL3000M/ES SpO₂ probe analyser module available to test probe passive components and to test and assess light levels of red and infrared emitters.



 VIAMED

DL3000 SpO₂ Simulator

Modes of operation

Simulation, engineering, artifact, evaluation

SpO₂ values

Range for clinical applications	60-100%
Range of % values	60, 65, 70, 75, 80, 85, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100
Accuracy	+/- 0.3% (worst case, with matched R-curve)
Resolution	0.05% (worst case, ie. 1/20% at 60% SpO ₂)

Pulse rate

Range	40-200 BPM
Rate values	40, 60, 80, 100, 120, 140, 160, 180, 200
Accuracy	+/- 1%
ECG output	1 mV Synchronised with SpO ₂ pulse (+/- 1%)
Output	4 mm sockets RA (red), LA (yellow) RL (black), LL (green) and C (white)

R-curves

R-curve spaces available
Standard configuration of up to 84 (≥32 pre-set)

Standard R-curve selection includes monitors from the following companies:

BCI, Criticare, Critikon, Datascope, Datex, Elmed, Ivy Biomedical, Kontron, Marquette, Masimo, MDE, Minolta, Nellcor, Nonin, Ohmeda, Palco, S&W, Sensormedics, Simed, Welch Allyn...



Plethysmographic amplitude

Range of pulse amplitude 0-200% of nominal
'Tissue perfusion' (AC parameters) and/or quiescent parameters (DC parameters)

Resolution	1%
Accuracy	+/- 1%

Motion artifact

Amplitude range	0-200% of infra-red pulse amplitude
Resolution	0.05% of pulse amplitude
Artifact	Variable

Rechargeable battery

12V, 1.2 Ah (approximately > 3 hours usage)

Standard AC-DC adaptor

Input 230 V AC, 50 Hz, 100 mA (UK) or 115 V AC, 50 Hz, 100 mA (EU) or 115 V AC, 50 Hz, 100 mA (North America)

Output 18 V DC, 500 mA, 9 VA

DL3000M/ES module, general options

The SpO₂ probe analyser module can be used to assess degradation of probes, for fault finding and planned preventative maintenance.

The module tests probes passive components, and tests and assesses light levels of red and infrared emitters.

Standard module designed for use with Nellcor and Ohmeda probes. The DL300M/ES module connects to DL3000 via the system interface.

Please contact Viamed for availability of other module configurations and adaptor cables for other SpO₂ probe/monitor manufacturers.

Dimensions

Height	85 mm
Width	230 mm
Depth	180 mm
Weight	2.05 kg

Ordering information

Part number	Model	Description
0013000	DL3000	SpO ₂ simulator, UK version
0013011	DL3000	SpO ₂ simulator, EU version
0013012	DL3000	SpO ₂ simulator, North American version
0013009	DL3000CC	Carrying case for SpO ₂ simulator
0013001	DL3000M/ES	SpO ₂ probe analysis module For use with Nellcor and Ohmeda compatible finger probes
0013002	DL3000DAC	Datascope adaptor cable for use with SpO ₂ probe analysis module

Specifications subject to change.

Please contact Viamed for further specifications and information.

All manufacturer's trademarks and registered names recognised.

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