

OMNIA Walking Tests

The most comprehensive solution to evaluate functional exercise capacity during walking tests



- ▶ Offline and Online modalities
- ▶ Standard 6MWT, ESWT, ISWT and custom protocols
- ▶ Titration test
- ▶ Plethysmographic pulse oximetry curve in real-time
- ▶ Perfusion Index for each SpO2 value
- ▶ Automatic QC
- ▶ Pace control during shuttle tests via audible signals
- ▶ ATS standard message for 6MWT
- ▶ Several predicted sets

The Walking tests module extends OMNIA functionalities to comprehensive solutions for walking and titration tests.

Walking and titration tests allow to evaluate exercise capacity, assess prognosis, evaluate treatment response in chronic respiratory diseases and determine the appropriate level of supplemental O2 required to prevent or attenuate subjects desaturation.

Both Offline and Online modalities are available to monitor main parameters (SpO2 and HR) progression. The Online modality can be performed with a laptop or tablet PC and allows the direct entry of markers and useful information on the software. A quality control check on each recorded value and the plethysmographic pulse oximetry curve provide a visual feedback ensuring high accuracy throughout all test execution.

The Offline modality allows to record test events (including laps, fatigue and blood pressure) on a tailored worksheet. Data can then be downloaded on OMNIA and integrated with the collected information at any time.

Custom protocols can be created in addition to the standard 6 Minute Walk Test (6MWT), Endurance Shuttle Walk Test (ESWT) and Incremental Shuttle Walk Test (ISWT).

The Walking tests module can be integrated in a complete diagnostic ecosystem powered by OMNIA, gathering all its benefits and functionalities.





Nonin® 3150 WristOx2 BLE Pulse Oximeter

Offline modality worksheet to take note of the parameters of interest

Technical Specifications

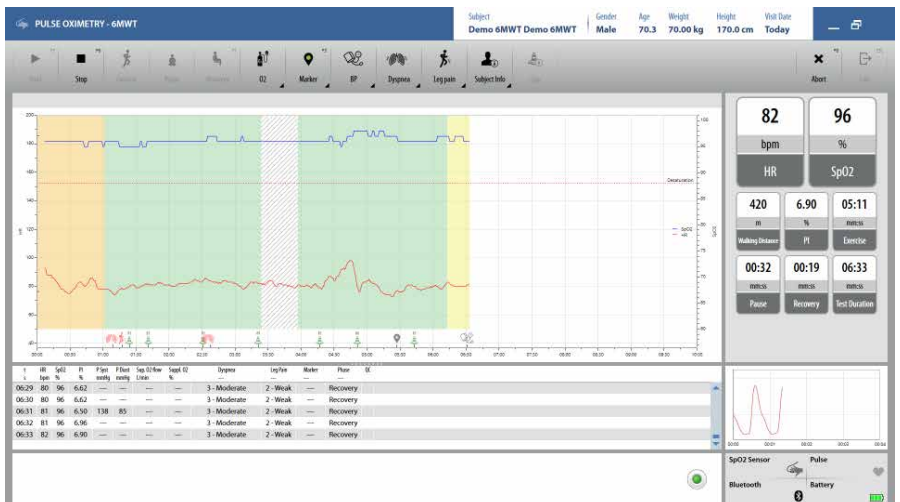
Product	Description	REF
OMNIA software	OMNIA w/ Hardware Key (media box)	C04160-01-11
Walking tests module	Walking tests/Titration module for OMNIA software	A-670-100-029
Compatible Pulse Oximeter	Description	REF
Model	Nonin® 3150 WristOx2 BLE Pulse Oximeter	A-661-600-018
Type	Bluetooth Low Energy	
Power Supply	2xAAA 1.5 V alkaline batteries	
SpO2 Range	0-100%	
HR Range	18-321 bpm	
Options and Accessories		REF
Bluetooth Antenna	Long Range Bluetooth 5.1 USB Adapter	A-661-509-002
OMNIA Features		
Measured parameters	SpO2, HR, Duration, Laps, Perfusion Index, Phase duration, Pause duration, Number of Phases, Number of Pauses, Battery status	
Entered parameters	Blood pressure, Leg pain (Borg scales), Dyspnea (Borg scales), mMRC, Supplemental O2 (type, delivery device, mode of transport), Walking aid, Walking limitations, PaO2 (HAST test), Number of completed laps, Final lap	
Calculated parameters	Baseline SpO2, Min SpO2, Average SpO2, Final SpO2, Max HR, Final HR, BODE Index, 6MWD, 6MWW, T(SpO2≤%), T(ΔSpO2>%)	
Protocol variables	walk path, Phases duration, lap increment, pause settings	
Modalities	Online, Offline (worksheet provided)	
Quality control	Perfusion Index, Phethysmographic pulse oximetry curve, data quality check	
Test duration	Unlimited	
Languages	English, Chinese (Traditional & Simplified), Czech, Danish, Dutch, French, German, Greek, Hebrew (interpretation only), Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Romanian, Russian, Spanish, Swedish, Turkish	
PC Requirements	Windows 8.x (32 bit, 64 bit), Windows 10 (32 bit, 64bit), Windows 11 (64bit)	
OS Requirements	CPU ≥ 2Ghz, RAM ≥ 4GB, HD ≥ 10GB for full installation, Monitor resolution ≥ 1366x768 pixel, ≥ 2 USB port	

Safety & Quality Standards

MDD (93/42 EEC)



Indications for use: Physician and professional healthcare facilities



Online modality allows to monitor SpO2 and HR trends

Bibliography:

- A. E. Holland et al. "An official European Respiratory Society/American Thoracic Society technical standard: field walking tests in chronic respiratory disease" *Eur Respir J* 2014; 44: 1428–1446.
- R. O. Crapo et al. "ATS Statement: Guidelines for the Six-Minute Walk Test" *Am J Respir Crit Care Med* 2002 Vol 166. pp 111–117.



COSMED
The Metabolic Company

COSMED Srl

Via dei Piani di Monte Savello 37
Albano Laziale - Rome 00041, Italy

+39 (06) 931-5492 Phone

+39 (06) 931-4580 Fax

info@cosmed.com | cosmed.com