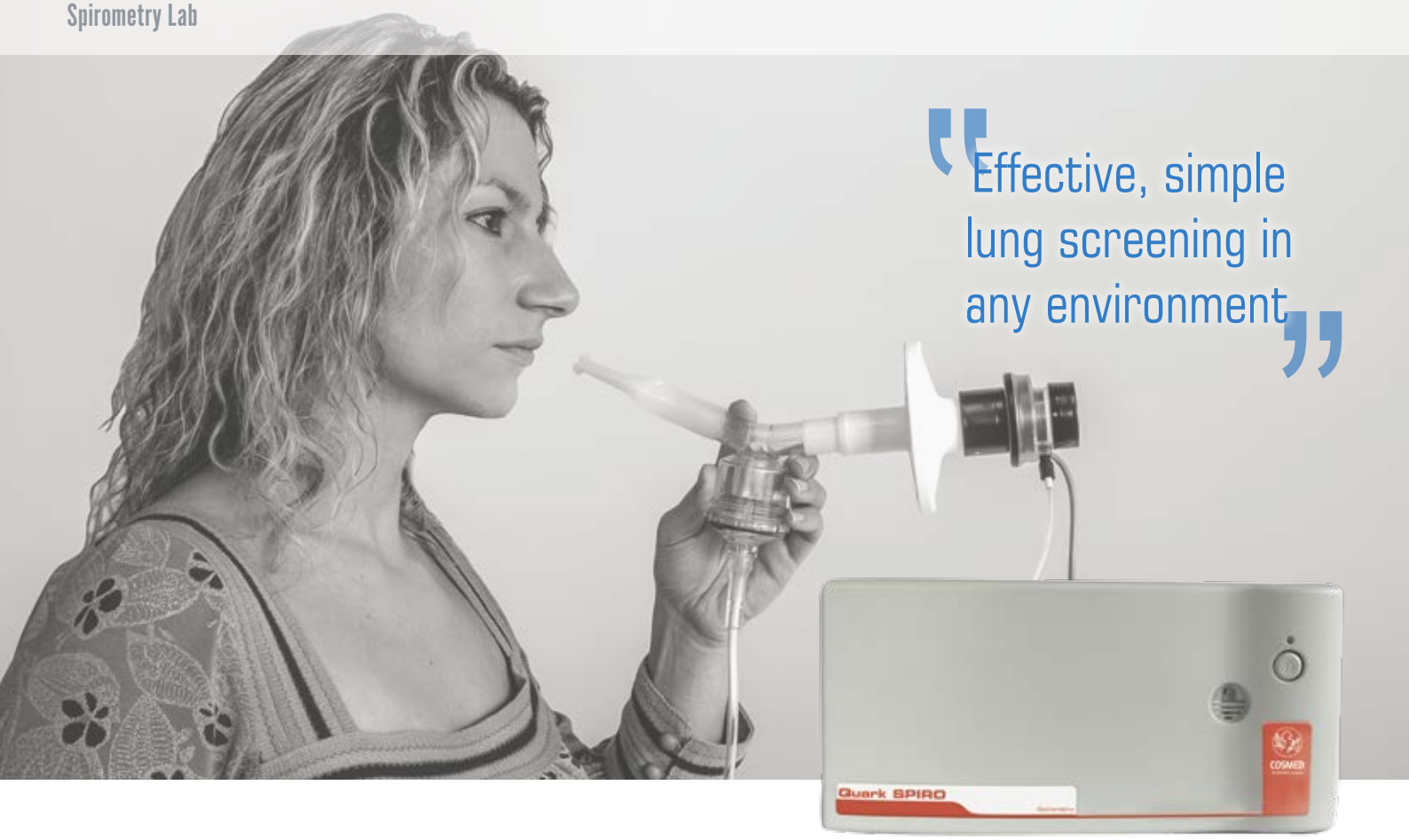
Quark SPIRO

Spirometry Lab



"Effective, simple lung screening in any environment"

- Full Spirometry testing (FVC, SVC, MVV, Pre/Post BD)
- Choice of different flowmeter configurations (PNT or turbine)
- User friendly software and advanced features with new generation OMNIA Suite
- Integrated dosimeter for accurate and easy bronchial challenge tests (optional)
- Airway resistance by Interrupter Technique (optional)
- Integrated SpO_2 monitor (optional)
- Meet latest ATS/ERS standards

Modular Spirometry Laboratory with additional bronchial challenge and airways resistance tests

Quark SPIRO is a modern modular laboratory for complete spirometry testing, with easy-to-add advanced test features like integrated dosimeter, pulse oximetry and airway resistance.

Low maintenance costs, no need for technical expertise and user-friendly software, make Quark Spiro the perfect tool for accurate, frequent and reliable spirometry tests in any hospital department or physician's office.

Latest technology in flowmeters (available choice between turbine or pneumotach) and other hardware components guarantee accurate measurements and fast test procedures.

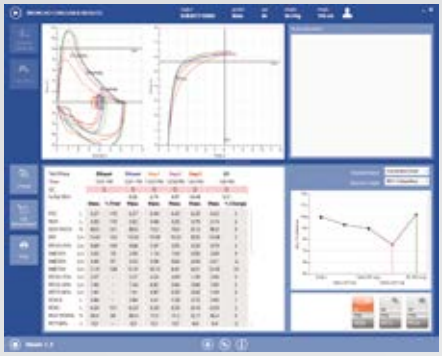
Quark Spiro is powered by OMNIA, the new software generation from COSMED. OMNIA is a powerful software, easy and intuitive thanks to its innovative user interface which has a native touch-screen design. OMNIA features enhance networking capabilities as well as full integration with any additional COSMED products (spirometers, cardiopulmonary exercise testing etc.).

OMNIA encompasses all the latest industry standards for spirometry tests, including the 2005 ATS/ERS Consensus Statement on the "Standardization of the measurement of spirometry" and the 2012 Global Lung Initiative (GLI) predicted sets.

COSMED
The Metabolic Company

Validation articles

- *Hans Rudolph Inc. 2012 "Third Party Validation: Quark PFT with X9 PNT for Spirometry and DLCO Measurements"*
- *Crapo R. O. (LDS Hospital) 2004 "Validation of COSMED turbine vs ATS 24 standard volume-time waveforms "*
- *More scientific studies on* www.cosmed.com/bibliography



Technical Specifications

Product	Description	REF
Quark Spiro	Stationary Spirometry Laboratory	C09071-01-99
Standard packaging	Unit, PC software, user manual, antibacterial filter, USB cable, power cable, nose clips.	
Standard Tests (Spirometry)		
Tests	Forced Vital Capacity (FVC) Pre/Post, Slow Vital Capacity (SVC) Pre/Post, Maximum Voluntary Ventilation (MVV), Bronchochallenge - Bronchial Dilator/Constrictor test	
Measured Parameters (partial listing)	FVC • IVC • VC • MVV • VT • FEV1 • FEV6 • FEV1/FEV6 • FEV6/FVC • PEF • PIF • FEV1/FVC • FEF 25-75 • FEV1/VC% • %FEV1 • MEF25% • MEF50% • MEF75% • FET 100% • Lung Age • ERV • IRV • VE • Rf • ti • te • ti/t.tot • VT/ti • Best FVC • Best FEV1 • IC	
Predicted Values (partial listing)	2012 Global Lung initiative (GLI), ERS 1993 (ECCS 1983), NHANES III, Knudson 83, ECCS 1971, ITS, Zapletal, LAM, Pneumobil, Gutierrez (Chile), Multicèntrico Barcelona, Thai 2000, Austria (Forche), Crapo 1981 user defined predicted calculations.	
Automatic Interpretation	ATS/ERS 2005 (Spirometry), GOLD COPD, ATS/ERS 2005 (Obstruction Reversibility based on FVC Post BD), ATS/ERS 2007 (Obstruction Reversibility based on Rocc)	
Flowmeter	**X9 PNT**	**Turbine Ø-28mm (optional)**
Part Number	C03246-01-11	C03248-02-11
Type	Lilly multiuse pneumotach	Bidirectional Digital Turbine
Flow Range	0-14 l/s	0-16 l/s
Accuracy	±2% or 20 ml/s (flow)	± 2% or 20 ml/s (flow) ± 2% or 200 ml/min (ventil.)
Resistance	<1cmH_2O/l/s @ 14 l/s	<0.6 cmH_2O /l/s @ 14l/s
Ventilation range	NA	0-300 l/min
Hardware		
Dimensions & Weight	33 x 41 x 16 cm / 6 Kg	
Interface ports	USB, RS-232	
Electrical requirements	100-240V ± 10% 50/60 Hz	
Environmental conditions	Temperature 0-50 °C (32 - 122 °F); Barometer 400-800 mmHg; Humidity 0-100%	
Software	**OMNIA**	
Available languages	Italian, English, Spanish, French, German, Portuguese, Greek, Dutch, Turkish, Russian, Chinese (Traditional), Chinese (Simplified), Korean, Romanian, Czech, Norwegian	
PC Configuration	I3 or higher processor speed. Compatible with Windows 7, 8, 8.1, 10 (32 or 64 bit). RAM 4GB (8GB recommended). HD with 4GB of free space (plus tools)	
Optional Modules	**Description**	**REF**
Rocc	Enables the measurement of respiratory resistance with interrupter technique (Rocc, RoccEX, RoccIN, Gav, etc.)	C02700-01-11
Integrated Dosimeter	The module provides a DeVilbiss 646 nebulizer, powered by dry compressed air (required medical air/gas for drug inhalation) and connected to the flowmeter with dedicated tubing	C03250-01-11
Pulse Oximetry	Oximeter (Xpod) requires probe Oximeter ipod (w/ finger probe)	C02600-01-05 C02390-01-05
Accessories	**Description**	**REF**
Large Medical Cart	3 cylinder holder (230 or 120 VAC)	C02900-01-04 (230) C02900-02-04 (120)
Table arm support	flexible arm for holding Smart Valve	C02870-01-05
Safety & Quality Standards		
MDD (93/42 EEC); FDA 510(k); EN 60601-1 (safety) / EN 60601-1-2 (EMC) Complies with ATS/ERS 2005 guidelines		

CE 0476

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

To know more: