

microQuark

PC-based Spirometer



“Effective, simple lung screening in any environment”



- Full spirometry testing (FVC, SVC, MVV, Pre-Post BD, Bronchochallenge)
- Plug-and-play technology
- Independently validated turbine flowmeter by LDS Hospital using the ATS 24 standard volume-time waveforms
- User-friendly, beautiful software interface providing comprehensive graphical and text interpretation
- Compatible with Win 8 PRO (32/64), Win 7 (32/64), Win Vista (32/64)
- Full Networking (SQL) and multi-language environment
- Meet latest ATS/ERS standards

Directly connected to a USB port turns any PC into a spirometer

microQuark is the new PC-based spirometer from COSMED that, thanks to its compact and lightweight size (77gr), is the perfect solution for performing spirometry tests everywhere and in any conditions.

microQuark can be used with any PC, either desktop or laptop, by simply installing the application software and connecting the USB cable to the USB socket of the computer. Fast, simple and cost effective spirometry screening is now available to all users.

microQuark incorporates the well proven COSMED bidirectional digital turbine technology, which is extremely accurate and reliable in any conditions.

Performing spirometry tests is extremely easy and intuitive with microQuark and OMNIA, the new generation software developed by COSMED, which is included in the standard package. OMNIA is user-friendly thanks to its modern interface and includes innovative and beautiful pediatric incentivitation for spirometry tests with selectable effort grade.

OMNIA allows easy navigation and access to all main features and tests almost without any training. Compatibility with Windows 8 and touch-screen ready interface make OMNIA the most modern software in the industry.

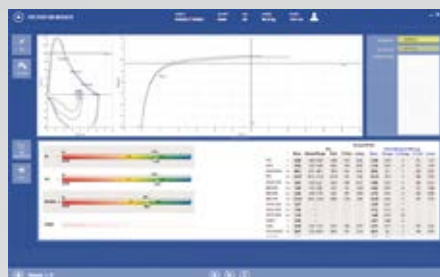
OMNIA encompasses all the latest industry standards for spirometry tests, including the 2005 ATS/ERS Consensus Statement on the “Standardization of the measurement of spirometry” and the 2012 Global Lung Initiative (GLI) predicted sets.



COSMED
The Metabolic Company

Validation articles

- 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
microQuark	USB PC-based Spirometer	C09061-01-99
Standard packaging	Main Unit, PC software (OMNIA), adult paper mouthpieces, pediatric paper mouthpieces, pediatric adapter, carrying case, conic mouthpiece, 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), Multicentrico 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)	
Hardware		
Dimensions & Weight	150 x 45 x 53 mm / 77 gr	
Interfaces	USB	
Power supply	via USB	
Flowmeter	Turbine Ø-28mm	
Type	Bidirectional Digital Turbine	
Resolution	12 ml	
Ventilation Range	0-300 l/min	
Flow Range	0-16 l/s	
Accuracy	± 2% or 20 ml/s	
Resistance	<0.8 cmH ₂ O /l/s @ 14l/s	
Software		
Available languages	English, Italian, French, German, Spanish, Dutch, Russian, Chinese, Portuguese, Turkish, Greek, Romanian, Korean, Czech, Polish	
Required PC Configuration	1.4 GHz or faster processor speed. Compatible with Vista (32/64), Windows 7 (32/64), Windows 8 (32/64). RAM 4GB (8GB recommended). 500 MB of free disk space	
Options & Accessories		
Calibration syringe	3L syringe for accuracy check of flow volume measurements	C00600-01-11
Consumables		
Antibacterial filters	Single-use filters to prevent bacterial and viral cross contamination (box contains 50 pcs)	A-182-300-004
Nose clips	Clips for performing spirometry tests (box contains 5 pcs)	C00441-01-98
Paper mouthpieces	For spirometry testing (box contains 500 pcs)	C01805-01-98 (adult) C01814-01-98 (pediatric)
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		



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:

