



COMPANY PROFILE

Uscom Limited was founded in 2000 and is an ASX listed innovative medical technology company specialising in development and marketing of premier non-invasive cardiovascular and pulmonary medical devices.

Our core business is the development of medical measurement devices and data communication and evaluation software for the international market of non-invasive pulmonary and circulatory devices.

In 2015, Thor Laboratories Ltd. was acquired by Uscom and became part of a global network with Uscom offices in Sydney, Beijing, Singapore, London, Los Angeles and Budapest.

Uscom Europe has not only retained its SME character, but also its national integrity, as the development department is staffed by Hungarian engineers with a degree in engineering, working on the implementation of new ideas. Since the merger into the group Professor Rob Phillips, Uscom Chairman and CEO, oversees the operations of Uscom Europe from the company's headquarters in Sydney, and Mr Zoltán Zsótér as the COO based in the Budapest office manages the Uscom Europe operations.

Uscom SpiroSonic devices are non-invasive lung function testing devices based on ultrasound technology, mainly for the early diagnosis and monitoring of Asthma, COPD and Post-COVID symptoms. SpiroSonic spirometers and the development of innovative solutions for these products are manufactured at the Budapest site in Hungary. Innovative features include: automated internal calibration, easy to disinfect sensor, intelligent medical decision support system and multi-lingual speech function. Based on feedback from our partners, we are continuously optimising our products and IT services.

In addition to accuracy, the SpiroSonic ultrasound sensors have no moving parts, no pressure mesh, no turbines, making the system more robust than older technologies on the market. The SpiroSonic devices with digital technology are ideally suited to cloud based recording and telemetric assessment allowing remote clinician led management and improved patient compliance using self administered therapy. With a choice of wired or Bluetooth technology SpiroSonic devices are designed for day-to-day use in hospitals, private clinics and for home care.

Uscom devices are premium resolution, non-invasive devices which deploy innovative and practice leading technologies already approved or submitted for FDA, CE, NMPA and TGA regulatory approval and marketing into global distribution networks.

As a manufacturing company in the medical devices market, we are looking for specialist distributors who can promote and support our devices to healthcare institutions, and their patients on a wide scale through commercial and professional cooperation and network coverage.

Further detailed information regarding Uscom and our products can be found on the following websites: **spirosonic.com** and **uscom.com.au**.

Advanced Spirometry, Advanced Care.

SpiroSonic ultrasonic spirometers provide a highly accurate, simple digital diagnosis and monitoring solution for all sufferers with lung disease.

SPIROSONIC SUITE

SpiroSonic devices offer user-friendly, premium quality spirometry at affordable costs. Our proprietary PureFlow ultrasonic flow sensor technology provides extremely accurate measurements without moving parts and a single, continuous flow tube.



ULTRASONIC SPIROMETRY

Asthma, COPD and occupational lung disease are common and increasing pulmonary conditions which can be effectively diagnosed and managed with simple and accurate spirometry. Digital ultrasonic spirometry provides a cost-effective monitor for all pulmonary conditions.

SpiroSonic SMART
Advanced touchscreen spirometer

SpiroSonic AIR
State-of-the-art wireless spirometer

SpiroSonic FLO
USB spirometer with PC software



SpiroReporter
Advanced PC spirometry



Accessories
Sensors, filters & disposables



SpiroSonic App
Easy-to-use app for Android

ABOUT USCOM

Uscom is an ASX-listed, Sydney headquartered medical device company specializing in the R&D and manufacture of high fidelity pulmonary and cardiovascular medical devices.



Uscom Europe has been developing ultrasonic spirometers for over 25 years. We strive to create the best, most user-friendly devices to more efficiently support helping patients with respiratory diseases.



	AIR	SMART	FLO
Device type	Wireless Spirometer	Stand-alone Spirometer	PC Spirometer
Dimensions of the device	45x73x95 mm	37x80x92 mm	28x61x94 mm
Dimensions of the flow tube	Ø30x125 mm	Ø30x165 mm	Ø30x165 mm
Weight	142 grams	184 grams	122 grams
Built-in display	✗	320x240 pixels	✗
Carrying case	Included	Included	Included
Real-time measurement on pc	✓	✓	✓
Real-time measurement on mobile devices	✓	✗	✗
Power supply	Rechargeable battery (Internal 3.7 V Li-Ion battery)	Rechargeable battery (Internal 3.7 V Li-Ion battery)	USB Socket of PC
Battery charger	Included (Qi wireless)	Included	Not Required
Post BD	✓	✓	✓
Memory capacity	Uses PC/phone memory	more than 4000 patients and/or measurements	Uses PC Memory
Included software	SpiroSonic App	SpiroReporter*	SpiroReporter
Printing	via SpiroReporter or App	via USB interface / Bluetooth*	via SpiroReporter
Connectivity	Bluetooth 4.0 Low Energy	USB	USB
USB to printer	✗	✓	✗
USB to PC	✗	✓	✓
Bluetooth to PC	✓	✗	✗
Parameters evaluated by the device	✗	ELA, ERV, ET, EV, FEF25, FEF2550, FEF2575, FEF50, FEF5075, FEF75, FET, FEV1, FEV1/FVC, FEV3, FEV6, FIT, FIV1, FIV1/FVC, FIVC, FVC, IC, IRV, IVC, MVV, PEF, PEFT, PIF, RR, TE, TE/TI, TI, TV, TV/TI, VC, VE	✗
Evaluated parameters on SpiroReporter PC software	AEX, ELA, EOTV05, EOTV1, ERV, EV, EV%FVC, FEF25, FEF50, FEF50/FIF50, FEF50%FIF50, FEF75, FET, FEV05, FEV05%FVC, FEV075, FEV075/FVC, FEV1, FEV1%FEV6, FEV1%FVC, FEV1%FVC, FEV1%VC, FEV3, FEV3%FVC, FEV6, FEV1/FVC, FIF25, FIF50, FIF75, FIT, FIV1, FIV1%FVC, FIVC, FVC, IC, IRV, IVC, MMEF2550, MMEF2575, MMEF5075, MVV, PEF, PEFT, PIF, RR, TE, TE/TI, TI, tr, TV, TV/TI, VC, VE, VPEF, ZeroTime		
Evaluated parameters on SpiroSonic App	ELA, EOTV05, EOTV1, EV, FEF25, FEF50, FEF75, FET, FEV05, FEV075, FEV075%FVC, FEV1, FEV1%FEV6, FEV1%FVC, FEV1%FVC, FEV3, FEV3%FVC, FEV6, FIF25, FIF50, FIF75, FIV1, FIV1%FVC, FIVC, FVC, MMEF2550, MMEF2575, PEF, PEFT, PIF, ZeroTime		
Flow/volume measurement system	PureFlow technology	PureFlow technology	PureFlow technology
Measurement principle	PureFlow ultrasonic multiple-path	PureFlow ultrasonic multiple-path	PureFlow ultrasonic multiple-path

*optional

SpiroSonic AIR

Digital multi-path ultrasonic spirometer with wireless connectivity to your smartphone and computer

“For every
breath
you take.”



Asthma, COPD, Occupational Lung Disease and Home Care

Asthma, COPD and occupational lung disease are common and increasing pulmonary conditions which can be effectively diagnosed and managed with simple and accurate spirometry. Digital ultrasonic spirometry provides a cost effective monitor for all pulmonary conditions.



Accurate, Portable and Simple Digital Pulmonary Monitoring

Digital ultrasonic spirometry - with its low resistance flow dynamics - is ideal for use with small children and provides accurate monitoring even for the elderly and sick with poor lung function. The sealed flow tube design also allows for more effective cleaning and disinfection.



The Global Standard of Pulmonary Care

Digital ultrasound is the most accurate method of measuring lung function, and the SpiroSonic AIR provides affordable lung function analysis to best diagnose and monitor pulmonary disease and the effectiveness of therapy. The SpiroSonic AIR also provides diagnostic support based on predictive lung function performance algorithms.



The Digital Home Care Solution







The SpiroSonic AIR has Bluetooth 4.0 Low Energy connectivity and is coupled to the SpiroSonic App. It can be connected to the SpiroReporter software to provide archiving, trend analysis, audio diagnostic support and report generation. The SpiroSonic AIR can be internet connected to provide expert medical support anywhere and anytime.

SpiroSonic AIR's user-friendly digital interface and extremely low flow resistance makes it suitable for children, elderly and sick patients with asthma, COPD and O.L.D. and can be used in the clinic or in the home.

SpiroSonic AIR

Research quality wireless ultrasonic spirometer

FEATURES

-  Accurate digital multipath ultrasonic technology
-  Automatic internal calibration
-  Durable design, intuitive operation
-  Diagnostic decision support system via SpiroSonic App
-  IEC 60601-11-1 certification - Ready for home-care use
-  Low flow resistance - suitable for children, elderly and sick patients

SPECIFICATION

Volume Accuracy	± 2.5% or 50 mL whichever is greater
Flow Accuracy	± 2.5% or 50 mL/s whichever is greater
Resolution	3 mL/sec
Maximum Volume	± 20 L
Flow Range	± 14 L/sec
Sample Rate	100 Hz
Flow Tube Dimensions	Ø30 × 125 mm
Device dimensions	45 × 73 × 95 mm
Device Weight	142 g
Communication	Bluetooth 4.0 Low Energy
Power Supply	Internal 3.7 V Li-Ion battery (rechargeable via standard Qi wireless chargers - included)
Standard pulmonary function parameters (evaluated by SpiroSonic Android app)	ELA, EOTV05, EOTV1, EV, FEF25, FEF50, FEF75, FET, FEV05, FEV075, FEV075%FVC, FEV1, FEV1%FEV6, FEV1%FVC, FEV1%FVC, FEV3, FEV3%FVC, FEV6, FIF25, FIF50, FIF75, FIV1, FIV1%FVC, FVC, FVC, MMEF2550, MMEF2575, PEF, PEFT, PIF, ZeroTime



ACCESSORIES

SpiroSonic App

Digital spirometry for phones

- ✓ Intuitive interface
- ✓ Database sync with PC



SpiroReporter

Full-featured pulmonary diagnostics for PC

- ✓ Automatic interpretation module
- ✓ Complete stress testing procedures

Wireless Printer

Bluetooth 4.0 thermoprinter

- ✓ Direct printing via SpiroSonic app



SpiroSonic FLO

Ultrasonic spirometry partnered with SpiroReporter software for a complete PC solution



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you take.”



Asthma, COPD and Occupational Lung Disease

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Accurate, Portable and Simple Digital Pulmonary Monitoring

Digital ultrasonic spirometry - with its low resistance flow dynamics - is ideal for use with small children and provides accurate monitoring even for the elderly and sick with poor lung function. The sealed flow tube design also allows for more effective cleaning and disinfection.



The Global Standard of Pulmonary Care

Digital ultrasound is the most accurate method of measuring lung function, and the SpiroSonic FLO provides affordable lung function analysis to best diagnose and monitor pulmonary disease and the effectiveness of therapy.



Complete Solution for PC-based Ultrasonic Spirometry







SpiroReporter is an innovative software solution that provides a digital platform to archive patient examinations and images, trend progress over time, analyse spirometry outputs and generate summary reports.

SpiroSonic FLO delivers accurate spirometry through advanced multi-path ultrasonic digital technology. Its extremely low resistance to flow makes it suitable for children, elderly and sick patients with asthma, COPD and O.L.D.

SpiroSonic FLO

Research quality ultrasonic spirometer with USB

FEATURES

-  Accurate digital multipath ultrasonic technology
-  Automatic internal calibration
-  Low flow resistance – suitable for children, elderly and sick patients
-  Diagnostic decision support system with SpiroReporter
-  Digital voice guided operation with SpiroReporter
-  Simple and effective disinfection

SPECIFICATION

Volume Accuracy	± 2.5% or 50 mL whichever is greater
Flow Accuracy	± 2.5% or 50 mL/s whichever is greater
Resolution	3 mL/sec
Maximum Volume	± 20 L
Flow Range	± 14 L/sec
Sample Rate	100 Hz
Flow Tube Dimensions	Ø30 × 165 mm
Device Dimensions	28 × 61 × 94 mm
Device Weight	122 g
Communication	Connection to PC via USB (Type A)
Power Supply	USB 5V (USB socket of PC)

Standard pulmonary function parameters (evaluated by SpiroReporter)

AEX, ELA, EOTV05, EOTV1, ERV, EV, EV%FVC, FEF25, FEF50, FEF50/FIF50, FEF50%FIF50, FEF75, FET, FEV05, FEV05%FVC, FEV075, FEV075/FVC, FEV1, FEV1%FEV6, FEV1%FVC, FEV1%FVC, FEV1%VC, FEV3, FEV3%FVC, FEV6, FEV1/FVC, FIF25, FIF50, FIF75, FIT, FIV1, FIV1%FVC, FVC, FVC, IC, IRV, IVC, MMEF2550, MMEF2575, MMEF5075, MVV, PEF, PEFT, PIF, RR, TE, TE/TI, TI, tR, TV, TV/TI, VC, VE, VPEF, ZeroTime

SOFTWARE

SpiroReporter

All-inclusive spirometry software solution that provides measuring, archiving, analysis, trend analysis, reporting, exporting and much more

- ✓ Multiple predictive algorithms
- ✓ Pediatric incentive screen
- ✓ Automatic interpretation module
- ✓ Pharmaceutical testing subsystem
- ✓ Optional Pulse Oximetry (SpO₂)
- ✓ All standard medical interfaces (HL7, GDT, BDT, XML)
- ✓ Complete stress testing procedures
- ✓ Complete integration package with driver communication support DLL and example source code (optional)



To learn more about the Uscom premium spirometers, please visit spirosonic.com



SpiroSonic SMART

Advanced ultrasonic digital spirometry in a portable, touch-screen solution



“For every breath you take.”



Asthma, COPD and Occupational Lung Disease

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Accurate, Portable and Simple Digital Pulmonary Monitoring

Digital ultrasonic spirometry - with its low resistance flow dynamics - is ideal for use with small children and provides accurate monitoring even for the elderly and sick with poor lung function. The sealed flow tube design also allows for more effective cleaning and disinfection.



The Global Standard of Pulmonary Care

Digital ultrasound is the most accurate method of measuring lung function, and the SpiroSonic SMART provides affordable lung function analysis to best diagnose and monitor pulmonary disease and the effectiveness of therapy.



All-In-One Solution for Advanced Spirometry Measurements









SpiroSonic SMART measures and evaluates over 35 parameters - rivaling complex PC based systems. The reports can be directly printed from the device by using a compatible wireless or USB printer.

Uscom SpiroSonic SMART brings advanced ultrasonic digital spirometry in a portable, touchscreen spirometer. SpiroSonic SMART is specialized for the assessment of asthma, COPD, and screening for O.L.D.

SpiroSonic SMART

Research quality ultrasonic spirometer with touchscreen

FEATURES

-  Accurate digital multipath ultrasonic technology
-  Automatic internal calibration
-  Low flow resistance – suitable for children, elderly and sick patients
-  Diagnostic decision support system
-  Digital voice guided operation, interactive patient instructions
-  Simple and effective disinfection
-  Multilingual measurement tutorial
-  Direct report printing from the device

ACCESSORIES

Thermal printer

Bluetooth 4.0 thermoprinter
✓ Direct printing from SMART



Pulse Oxymetry (SpO₂)

Small and portable USB oximeter
✓ Integrates with SMART
✓ High precision measuring circuit



USB Weather Station

Environmental condition sensor
✓ Automatically sets environmental conditions in SMART



SPECIFICATION

Volume Accuracy	± 2.5% or 50 mL whichever is greater
Flow Accuracy	± 2.5% or 50 mL/s whichever is greater
Resolution	3 mL/sec
Maximum Volume	± 20 L
Flow Range	± 14 L/sec
Sample Rate	100 Hz
Flow Tube Dimensions	Ø30 × 165 mm
Device Dimensions	37 × 80 × 92 mm
Device Weight	184 g
Display	QVGA 262k color touchscreen
Memory	4000+ measurements
Communication	Connection to PC via USB (mini Type B) Connection to printer via USB (Type A) or Bluetooth (optional)
Power Supply	Internal 3,7 V Li-Ion battery (rechargeable via 5V 500 mA mini USB charger)
Standard pulmonary function parameters (evaluated by the device)	ELA, ERV, ET, EV, FEF25, FEF2550, FEF2575, FEF50, FEF5075, FEF75, FET, FEV1, FEV1/FVC, FEV3, FEV6, FIT, FIV1, FIV1/FIVC, FIVC, FVC, IC, IRV, IVC, MVV, PEF, PEFT, PIF, RR, TE, TE/TI, TI, TV, TV/TI, VC, VE
Voice interpretation module is available in the following languages	U.S. English, French, German, Italian, Spanish, Chinese, Austrian, Hungarian, Croatian, Korean, Australian, Traditional Chinese

SOFTWARE

SpiroReporter

Full-featured pulmonary diagnostics software for synchronizing patient database, reports and archiving
✓ All standard medical interfaces (HL7, GDT, BDT, XML)
✓ Complete stress testing procedures



To learn more about the Uscom premium spirometers, please visit
spirosonic.com

