



"For Every Breath You Take"

Advanced Spirometry, Advanced Care

Multipath Ultrasonic Digital Spirometry



SpiroSonic devices feature user-friendly, research quality spirometry at affordable costs. Based on multi-path digital ultrasonic flow monitoring, our spirometers are the result of years of research, technological development and innovation.

- **Accurate** – multi-path digital ultrasonic technology for improved outcomes
- **Simple to use** – digital voice guided operation
- **Automatic calibration**
- **Easy to disinfect** – no moving parts
- **Low flow resistance** – suitable for children, severe asthma and COPD
- **Diagnostic decision support** system for clinicians
- Interfaces with proprietary **SpiroReporter** software (PC)
- Simple **connectivity** to EMRs and APPs (mobile and tablet)
- Unique **solutions** for clinicians and researchers, and personal care
- Specialised for **assessment** of COPD, asthma, occupational lung disease and monitoring of pulmonary therapeutic compliance, and sleep disordered breathing

SpiroSonic devices are highly accurate and simple to use with automatic calibration.

The devices can be coupled with PC, tablet or mobile software and applications to provide remote tele-monitoring of pulmonary disease.



SpiroSonic App and SpiroReporter

Archive, review, examine, analyse, trend, report & share spirometry results.



SpiroSonic AIR

The SpiroSonic AIR is a portable digital Home Care Solution which can be internet connected to provide expert medical support anywhere and anytime. The AIR has wireless Bluetooth 4.0 connectivity and is coupled to the SpiroSonic App on a mobile or tablet device enabling digital archiving, analysis, monitoring and reporting.



SpiroSonic FLO

The SpiroSonic FLO directly couples with the PC-based proprietary SpiroReporter via USB, enabling archiving, analysis, trend analysis and customized reporting.

SpiroSonic SMART

The SpiroSonic SMART is a standalone, touchscreen spirometer that provides high accuracy measurement, analysis and reporting of pulmonary function with optional Bluetooth connectivity. The SMART has a database to accommodate 4000 measurements and features on board tutorial and examination feedback. The SMART is simple to use and interfaces to the SpiroReporter for digital archiving and trend monitoring, or directly into an EMR.



SpiroSonic spirometers provide diagnostic decision support and automatic interpretation.

300 million people suffer from asthma and COPD worldwide. Asthma is the most common chronic disease in children.

Asthma

Asthma is a chronic disease characterized by recurrent attacks of breathlessness and wheezing, which vary in severity and frequency. Asthma occurs in ~10-15% of all children and adults and is under-diagnosed and under-treated. This may result in restriction of an individuals' activities for a lifetime. Improved testing improves diagnosis and management, and spirometry is the preferred testing and monitoring technology.

COPD

Chronic obstructive pulmonary disease (COPD) is a serious, progressive and disabling condition that limits airflow in the lungs. COPD occurs in ~10% of all adults worldwide, and WHO predicts it will become the third leading cause of death by 2030.

Occupational Lung Disease

Occupational lung diseases includes conditions associated with workplace exposures to microscopic airborne dusts and vapors, which act as irritants, carcinogens, or immunological agents in the lungs and can cause lung cancer, COPD, silicosis, asbestosis, and pneumoconiosis. Clinically this leads to impaired lung function and chronic shortness of breath and restricted activity. In 2000, WHO estimated that worldwide risk factors in the workplace were responsible for 13 percent of COPD, 11 percent of asthma, and 9 percent of lung cancer.

Spirometry can simply and accurately assess lung function by measuring how much (volume) and at what speed (flow) air can be inhaled and exhaled. Automated prediction formulas can be applied to allow diagnosis of pulmonary disease from spirometry. SpiroSonic ultrasonic spirometers provide a highly accurate simple digital diagnosis and monitoring solution for all pulmonary conditions.

Pulmonary Function Tests

FVC	Forced vital capacity
VC	Vital capacity
MVV	Maximum voluntary ventilation

Parameters Measured include

FVC	Forced vital capacity
FEV1	Forced expiratory volume in 1 second
FEV1/FVC	FEV1/FVC ratio
FEV6	Forced expiratory volume measured at 6 seconds after commencement of expiration
FEV1/FEV6	Ratio of FEV6 exhaled in 6 seconds
PEF	Peak expiratory flow
FEF	Forced Expiratory Flow - Rate of flow at various points of FVC 25%, 50%, 75%
FIF	Forced Inspiratory Flow - Rate of flow at various points of FVC 25%, 50%, 75%
FEF2575	Forced Expiratory Flow during the middle half, 25-75%, of the FVC

For the complete list of parameters per device, visit www.uscom.com.au