



**National  
Asthma  
Council** AUSTRALIA

# **Spirometer buyers' guide**

## Compliance with international standards

All listed spirometers meet the 2005 joint American Thoracic Society and European Respiratory Society (ATS/ERS) performance standard. The 2019 ATS/ERS joint official statement on the standardisation of spirometry<sup>i</sup> introduced new requirements for the manufacture of spirometers, which include user-support features as well as accuracy and performance standards. Buyers should check with distributors which features are included before purchase.

## Distributors

List of Australian distributors on page 17.

## Abbreviations

BTPS	Body temperature and pressure saturated with water vapour
FEV <sub>1</sub>	Forced expiratory volume in one second
FVC	Forced vital capacity
FEV <sub>1</sub> /FVC	Ratio of Forced expiratory volume in one second to forced vital capacity
GDT	Device data transfer (a German standard for the exchange of data between medical information systems and medical devices)
GLI-2012	Global Lung Initiative 2012 reference dataset <sup>ii</sup>
HL7	Health Level 7 international standards (for exchange of data)
LLN	Lower limit of normal range for relevant population (cut-point for the bottom 5% of normal variation) adjusted for sex, age and height
MS	Microsoft
PC	Personal computer
PEF	Peak expiratory flow
SQL	Structured query language
USB	Universal serial bus cable

i Graham BL, Steenbruggen I, Miller MR *et al*. Standardization of spirometry 2019 update. An official American Thoracic Society and European Respiratory Society technical statement. *Am J Respir Crit Care Med* 2019; 200: e70-e88.

ii Quanjer PH, Stanojevic S, Cole TJ *et al*. Multi-ethnic reference values for spirometry for the 3-95 year age range: the global lung function 2012 equations. *Eur Respir J* 2012; 40: 1324-43.

## Comparison of spirometer features

SPIROMETER MODEL	Alpha	Alpha Touch with Spirotrac S/W	CPFS/D USB Spirometer
Manufacturer	VITALOGRAPH	VITALOGRAPH	MGC Diagnostics
Unit type	Desktop (standalone or via computer)	Desktop (standalone or via computer)	Desktop (computer required)
Power source	Battery and mains	Battery and mains	via USB
Sensor type	Fleisch pneumotachograph	Fleisch pneumotachograph	Bidirectional Pitot tube pneumotachograph
Computer required	Yes (to use Vitalograph Reports & print to pdf)	Yes (to use Vitalograph Spirotrac software)	Yes (via USB)
Separate external printer required	No	No	Yes
All BTPS data obtained automatically	Yes (inbuilt sensor)	Yes (inbuilt sensor)	Yes
Weight of unit	2.0 kg	2.0 kg	0.56 kg
Warranty period	1 year	1 year	1 year
Data storage capacity (patients)	9 on device	10,000 on device	Infinite*
Database type	N/A	MS SQL	MS SQL
Automatic clinical interpretation	Yes (via Vitalograph Reports)	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	No	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	Yes	Yes	Yes
Reference equations can be added	Yes	Yes	Yes
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes	Yes	Yes
Predicted flow-volume curve printed	Yes	Yes	Yes
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Yes (+ others)
Curves displayed in real time	No	Yes	Yes
Volume-time & flow-volume curves printable	Yes	Yes	Yes
Final and printed reports customisable	No	Yes	Yes
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes	Yes	Yes
Daily calibration required	No	No	Yes
Calibration automatically adjusted	No	Yes	Yes

SPIROMETER MODEL	Alpha	Alpha Touch with Spirotrac S/W	CPFS/D USB Spirometer
Infection control features	Disposable mouthpiece Disposable filter	Disposable mouthpiece Disposable filter	Disposable barrier filter
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$2,514	\$2,900	\$3,500
Disposables cost per patient (ex GST)	Mouthpiece \$0.50 Bacterial viral filter \$1.45	Mouthpiece \$0.50 Bacterial viral filter \$1.45	Bacterial filter \$1.30 Filter+noseclip \$1.55
Other features	Quick and easy to use	Touchscreen  Optional upgrade to Spirotrac® software (enables automatic data exchange with electronic medical record systems via HL7 or GDT transfer protocols)	Laboratory standard  Full weather station built in  High precision  Bundled with BreezeSuite software  Exports all results

\*Limited by computer data storage capacity

SPIROMETER MODEL	Datospir Micro	Datospir Touch Easy	Datospir Touch Diagnostic
Manufacturer	SibelMed	SibelMed	SibelMed
Unit type	Handheld (standalone)	Desktop (standalone)	Desktop (standalone)
Power source	Batteries (rechargeable)	Battery or mains	Battery or mains
Sensor type	Turbine	Fleisch/Lilly pneumotach or turbine	Fleisch/Lilly pneumotach or turbine
Computer required	No	No	No
Separate external printer required	Yes	No	No
All BTPS data obtained automatically	No	No	No
Weight of unit	0.25 kg	1.7 kg	1.7 kg
Warranty period	1 year	1 year	1 year
Data storage capacity (patients)	10,000 tests on device	3000 on device	3000 on device
Database type	Dbase III & MS Access	Dbase III & MS Access	Dbase III & MS Access
Automatic clinical interpretation	Yes	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	No	No	No
Reference equations can be added	Yes	Yes	Yes
Predicted values adjusted for ethnicity	Yes	Yes	Yes

SPIROMETER MODEL	Datospir Micro	Datospir Touch Easy	Datospir Touch Diagnostic
LLN included in report	Yes	Yes	Yes
Predicted flow-volume curve printed	Yes	Yes	Yes
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Yes (+ others)
Curves displayed in real time	Yes	Yes	Yes
Volume-time & flow-volume curves printable	Yes	Yes	Yes
Final and printed reports customisable	Yes	Yes	Yes
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes	Yes	Yes
Daily calibration required	Yes	Yes	Yes
Calibration automatically adjusted	Yes	Yes	Yes
Infection control features	Disposable filter	Disposable filter	Disposable filter
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$1,995	\$2,495	\$2,995
Disposables cost per patient (ex GST)	Mouthpiece \$0.25 Filter \$2.64	Mouthpiece \$0.25 Lilly transducer \$2.12 Filter \$2.64	Mouthpiece \$0.25 Lilly transducer \$2.12 Filter \$2.64
Other features	Paediatric incentives Bluetooth, USB connectivity Pulse oximetry (optional) Home mode studies	Two operating modes Paediatric incentives Bluetooth, USB connectivity Pulse oximetry (optional)	Three operating modes Paediatric incentives Bluetooth, USB connectivity Pulse oximetry (optional)

SPIROMETER MODEL	Easy on-PC	EasyOne Air	In2itive with Spirotrac S/W
Manufacturer	ndd, Zurich, Switzerland	ndd, Zurich, Switzerland	VITALOGRAPH
Unit type	Handheld (computer required)	Handheld (standalone)	Handheld (standalone or via computer)
Power source	Battery (rechargeable)	Battery (rechargeable)	Battery
Sensor type	Ultrasonic	Ultrasonic	Fleisch pneumotachograph
Computer required	Yes	No	Yes
Separate external printer required	Yes	Yes (supplied on request)	Yes
BTPS data obtained automatically	Yes	Yes	Yes
Weight of unit	0.170 kg	0.300 kg	0.230 kg

SPIROMETER MODEL	Easy on-PC	EasyOne Air	In2itive with Spirotrac S/W
Warranty period	1 year	1 year	1 year
Data storage capacity (patients)	>10,000 tests on device	Infinite*	Infinite*
Database type	SQLite	MS SQL Server	MS SQL
Automatic clinical interpretation	Yes	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	Yes	Yes	Yes
Reference equations can be added	Yes	Yes	Yes
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes	Yes	Yes
Predicted flow-volume curve printed	Yes	Yes	Yes
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Yes (+ others)
Curves displayed in real time	Yes	Yes	Yes
Volume-time & flow-volume curves printable	Yes	Yes	Yes
Final and printed reports customisable	Yes	Yes	Yes
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes (shows trend graph)	Yes (shows trend graph)	Yes
Daily calibration required	No	No	No
Calibration automatically adjusted	Adjustment not required	Adjustment not required	Yes
Infection control features	Disposable filter	Disposable filter	Disposable mouthpiece Disposable filter
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$2,600	\$3,600	\$3,950
Disposables cost per patient (ex GST)	Filter \$3.20	Filter \$3.20	Mouthpiece \$0.50 Filter \$1.45
Other features			Full spirometry, data integration and mobility in a small lightweight handheld spirometer  Optional upgrade to Spirotrac® software (enables automatic data exchange with electronic medical record systems via HL7 or GDT transfer protocols)

SPIROMETER MODEL	Medikro Primo	Medikro Pro	MICRO
Manufacturer	Medikro	Medikro	VITALOGRAPH
Unit type	Desktop (computer required)	Desktop (computer required)	Handheld (computer required)
Power source	via USB	via USB	Battery
Sensor type	Differential pressure	Differential pressure	Fleisch pneumotachograph
Computer required	Yes (supply optional)	Yes (supply optional)	Yes
Separate external printer required	No	No	Yes
BTPS data obtained automatically	No	Yes	Yes
Weight of unit	0.4 kg	0.4 kg	0.25 kg
Warranty period	Lifetime	Lifetime	1 year
Data storage capacity (patients)	Infinite*	Infinite*	450 on device
Database type	SQL and local	SQL and local	N/A
Automatic clinical interpretation	Yes	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	No
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	Yes	Yes	Yes
Reference equations can be added	No	No	Yes
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes	Yes	Yes
Predicted flow-volume curve printed	Yes	Yes	Yes
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Yes (+ others)
Curves displayed in real time	Yes	Yes	No
Volume-time & flow-volume curves printable	Yes	Yes	Yes
Final and printed reports customisable	Yes	Yes	No
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes	Yes	No
Daily calibration required	No	No	No
Calibration automatically adjusted	Yes	Yes	No
Infection control features	Disposable pre-calibrated flow transducer	Disposable pre-calibrated flow transducer	Disposable mouthpiece Disposable filter
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$1500	\$2000	\$1,130

SPIROMETER MODEL	Medikro Primo	Medikro Pro	MICRO
Disposables cost per patient (ex GST)	\$3	\$3	Mouthpiece \$0.50 Filter \$1.45
Other features	Lifetime warranty on hardware	Lifetime warranty on hardware	Small, portable and lightweight

\*Limited by computer data storage capacity

SPIROMETER MODEL	MICRO 6000 Spirometer	microQuark	MIR MiniSpir Light
Manufacturer	Medisoft®	COSMED	MIR srl Medical International Research
Unit type	Desktop (computer required)	Handheld (computer required)	Handheld (computer required)
Power source	Mains power	via USB	via USB
Sensor type	Lilly pneumotachograph	Turbine	Turbine
Computer required	Yes (via USB)	Yes	Yes
Separate external printer required	Yes	Yes	Yes
BTPS data obtained automatically	Yes	Yes	Yes
Weight of unit	1.9 kg	0.08 kg	0.065 kg
Warranty period	1 year	2 years	1 year
Data storage capacity (patients)	Infinite*	Infinite*	Infinite*
Database type	SQL	SQL	MS Access
Automatic clinical interpretation	Yes	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	Yes	Yes	Yes
Reference equations can be added	Yes	Yes	No
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes	Yes	Yes
Predicted flow-volume curve printed	Yes	Yes	Yes
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Yes (+ others)
Curves displayed in real time	Yes	Yes	Yes
Volume-time & flow-volume curves printable	Yes	Yes	Yes



SPIROMETER MODEL	MICRO 6000 Spirometer	microQuark	MIR MiniSpir Light
Final and printed reports customisable	Yes	Yes	Yes
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes	Yes	Yes
Daily calibration required	Yes	No	No
Calibration automatically adjusted	Yes	Yes	No
Infection control features	Disposable filter	Disposable filter	Disposable sensor
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$5,500	\$1,850	\$999
Disposables cost per patient (ex GST)	Single bacterial filter \$1.30 Filter + nose-clip \$1.55	Filter \$2.90	2.91
Other features	Laboratory standard Full weather station built in High precision Bundled with Exp'Air Patient database software Exports all results	Includes COSMED FT software, an easy-to-use but fully configurable respiratory function testing platform Small unit Reliable	

\*Limited by computer data storage capacity

SPIROMETER MODEL	MIR MiniSpir New	MIR Spirobank II Advanced	MIR Spirobank II Basic
Manufacturer	MIR srl Medical International Research	MIR srl Medical International Research	MIR srl Medical International Research
Unit type	Handheld (computer required)	Handheld (standalone)	Handheld (standalone)
Power source	via USB	Batteries (rechargeable)	Batteries (rechargeable)
Sensor type	Turbine	Turbine	Turbine
Computer required	Yes	No	No
Separate external printer required	Yes	Yes	Yes
BTPS data obtained automatically	Yes	Yes	Yes
Weight of unit	0.065 kg	0.140 kg	0.140 kg
Warranty period	1 year	1 year	1 year
Data storage capacity (patients)	Infinite*	10,000 tests on device	10,000 tests on device
Database type	MS Access	MS Access	MS Access
Automatic clinical interpretation	Yes	Yes	Yes

SPIROMETER MODEL	MIR MiniSpir New	MIR Spirobank II Advanced	MIR Spirobank II Basic
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	No
GLI-2012 available	Yes	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Reference equations can be added	No	No	No
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Predicted flow-volume curve printed	Yes	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Not FEV <sub>1</sub> /FVC
Curves displayed in real time	Yes	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Volume-time & flow-volume curves printable	Yes	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Final and printed reports customisable	Yes	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Post-bronchodilator change reported	Yes	Yes	No
Report can incorporate results of previous tests	Yes (shows trends)	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Daily calibration required	No	No	No
Calibration automatically adjusted	No	No	No
Infection control features	Disposable sensor	Disposable sensor	Disposable sensor
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$1,275	\$1,999	\$1,499
Disposables cost per patient (ex GST)	\$2.91	2.91	2.91

\*Limited by computer data storage capacity

SPIROMETER MODEL	MIR Spirobank II Smart BLE	MIR Spirodoc	MIR Spirolab
Manufacturer	MIR srl Medical International Research	MIR srl Medical International Research	MIR srl Medical International Research
Unit type	Handheld (standalone)	Handheld (standalone)	Desktop (standalone)
Power source	Batteries (rechargeable)	Batteries (rechargeable)	Batteries (rechargeable)
Sensor type	Turbine	Turbine	Turbine
Computer required	No	No	No
Separate external printer required	Yes	Yes	No
BTPS data obtained automatically	Yes	Yes	Yes
Weight of unit	0.140 kg	0.116 kg	1.45 kg
Warranty period	1 year	1 year	1 year
Data storage capacity (patients)	10,000 tests on device	10,000 tests on device	10,000 tests on device
Database type	MS Access	MS Access	MS Access
Automatic clinical interpretation	Yes	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	Yes	Yes (via computer, not in standalone mode)	Yes
Reference equations can be added	No	No	Yes
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)	Yes
Predicted flow-volume curve printed	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes	Yes	Yes
Curves displayed in real time	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)	Yes
Volume-time & flow-volume curves printable	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)	Yes
Final and printed reports customisable	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)	Yes
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)	Yes (via computer, not in standalone mode)
Daily calibration required	No	No	No
Calibration automatically adjusted	Yes	No	No
Infection control features	Disposable sensor	Disposable sensor	Disposable sensor

SPIROMETER MODEL	MIR Spirobank II Smart BLE	MIR Spirodoc	MIR Spirolab
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$1,799	\$1,499	\$2,499
Disposables cost per patient (ex GST)	2.91	2.91	2.91

SPIROMETER MODEL	Pneumotrac with Spiotrac S/W	Pony FX	SpiroConnect
Manufacturer	VITALOGRAPH	COSMED	MedChip Solutions, UK
Unit type	Handheld (computer required)	Desktop (standalone or via computer)	Handheld (computer required)
Power source	USB-powered	Batter (rechargeable)	Batteries
Sensor type	Fleisch pneumotachograph	Turbine	Turbine
Computer required	Yes	No	Yes
Separate external printer required	Yes	No	Yes
BTPS data obtained automatically	Yes	Yes	No
Weight of unit	0.450 kg	1.2 kg	0.2 kg
Warranty period	1 year	2 years	2 years
Data storage capacity (patients)	Infinite*	Infinite*	Infinite*
Database type	MS SQL	SQL	SQLite
Automatic clinical interpretation	Yes	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	Yes	Yes	Yes
Reference equations can be added	Yes	Yes	No
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes	Yes	Yes
Predicted flow-volume curve printed	Yes	Yes	Yes
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Yes (+ others)
Curves displayed in real time	Yes	Yes	Yes
Volume-time & flow-volume curves printable	Yes	Yes	Yes
Final and printed reports customisable	Yes	Yes	No

SPIROMETER MODEL	Pneumotrac with Spitotrac S/W	Pony FX	SpiroConnect
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes	Yes	Yes
Daily calibration required	No	No	No
Calibration automatically adjusted	Yes	Yes	No
Infection control features	Disposable mouthpiece Disposable filter	Disposable barrier filter	Disposable barrier filter Disinfectable sensor
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$1,984	\$3,250	\$1,500
Disposables cost per patient (ex GST)	Mouthpiece \$0.50 Filter \$1.45	Filter \$2.90	Single bacterial filter \$1.30 Filter + nose-clip \$1.55 Cardboard mouthpiece available
Other features	Lightweight Optional upgrade to Spirotrac® Software (enables automatic data exchange with electronic medical record systems via HL7 or GDT transfer protocols)	Integrated colour screen and printer Optional oximeter, airways resistance measurement Paediatric incentives to encourage maximal effort Bronchial challenge testing	Extremely portable with wireless Bluetooth communication Accurate at low flows PC, Android tablet and mobile device software Extremely stable flow sensor that does not require routine calibration Incentive screen to encourage maximal effort

\*Limited by computer data storage capacity

SPIROMETER MODEL	SpiroScout	SpiroSonic Flo	SpiroSonic Smart
Manufacturer	Ganshorn	Uscom	Uscom
Unit type	Desktop (computer required)	Handheld (computer required)	Handheld (standalone or via computer)
Power source	Mains or via USB	via USB	Batteries (rechargeable)
Sensor type	Ultrasonic	Ultrasonic	Ultrasonic
Computer required	Yes (supply optional)	Yes	Yes
Separate external printer required	No	Yes	Yes
BTPS data obtained automatically	Yes	No (weather station available)	No
Weight of unit	1 kg	0.122 kg	0.184 kg
Warranty period	2 year	1 year	1 year

SPIROMETER MODEL	SpiroScout	SpiroSonic Flo	SpiroSonic Smart
Data storage capacity (patients)	Infinite*	Infinite*	>4000 patients on device (unlimited* via computer)
Database type	MSSQL or MYSQL	SQL or MS Access	SQL or MS Access
Automatic clinical interpretation	Yes	Yes	Yes
Results downloadable to clinical software	Yes	Yes	Yes
Feedback provided after each blow	Yes	Yes	Yes
Overall quality of pre-and post-bronchodilator tests graded	Yes	Yes	Yes
GLI-2012 available	Yes	Yes	No
Reference equations can be added	Yes	By manufacturer only	By manufacturer only
Predicted values adjusted for ethnicity	Yes	Yes	Yes
LLN included in report	Yes	Yes	No
Predicted flow-volume curve printed	Yes	Yes	No
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)	Yes (+ others)	Yes (+ others)
Curves displayed in real time	Yes	Yes	Yes
Volume-time & flow-volume curves printable	Yes	Yes	Yes
Final and printed reports customisable	Yes	Yes	Yes
Post-bronchodilator change reported	Yes	Yes	Yes
Report can incorporate results of previous tests	Yes	Yes	Yes
Daily calibration required	No	No	No
Calibration automatically adjusted	Yes	Yes	Yes
Infection control features	Disposable flow sensor Disposable filter	Disposable barrier filter Reusable disinfectable water-resistant flow tube	Disposable barrier filter Reusable disinfectable water-resistant flow tube
User manual provided	Yes	Yes	Yes
Training available after purchase	Yes	Yes	Yes
Spirometer unit cost (ex GST)	\$2,700	\$1,990	\$2,490
Disposables cost per patient (ex GST)	\$2.25	Filter \$3.00	Filter \$3.00

SPIROMETER MODEL	SpiroScout	SpiroSonic Flo	SpiroSonic Smart
Other features	Bronchial provocation Rhinomanometry Capnovolumetry	Paediatric incentives Optional oximetry, EIB test, bronchial challenge tests GDT, HL7 HIR/EMR integration, import and export to multiple databases) User-defined drug step and drug protocol database Calibration check with 3L syringe if required Voice comments	Colour touchscreen No daily external calibration required Optional oximetry Built-in tutorial GDT export Optional SpiroReporter Software Calibration check with 1L or 3L syringe if required

\*Limited by computer data storage capacity

SPIROMETER MODEL	SpiroSonic Mobile
Manufacturer	Uscom
Unit type	Handheld (standalone or via tablet/mobile phone)
Power source	Batteries (rechargeable)
Sensor type	Ultrasonic
Computer required	Yes (via Bluetooth or USB)
Separate external printer required	Yes
BTPS data obtained automatically	No
Weight of unit	0.144 kg
Warranty period	1 year
Data storage capacity (patients)	Infinite*
Database type	SQLite
Automatic clinical interpretation	Yes
Results downloadable to clinical software	Yes
Feedback provided after each blow	Yes
Overall quality of pre-and post-bronchodilator tests graded	No
GLI-2012 available	No
Reference equations can be added	Yes
Predicted values adjusted for ethnicity	Yes
LLN included in report	No
Predicted flow-volume curve printed	No
Measures FEV <sub>1</sub> , FVC, FEV <sub>1</sub> /FVC, PEF	Yes (+ others)
Curves displayed in real time	Yes
Volume-time & flow-volume curves printable	Yes
Final and printed reports customisable	No
Post-bronchodilator change reported	No
Report can incorporate results of previous tests	No
Daily calibration required	No
Calibration automatically adjusted	Yes
Infection control features	Disposable barrier filter Reusable disinfectable water-resistant flow tube
User manual provided	Yes
Training available after purchase	Yes
Spirometer unit cost (ex GST)	\$2,200
Disposables cost per patient (ex GST)	Filter \$3.00
Other features	Bluetooth No daily external calibration required

\*Limited by computer data storage capacity; EIB: exercise-induced bronchoconstriction



# Distributors

MANUFACTURER	PRIMARY DISTRIBUTOR IN AUSTRALIA
COSMED	COSMED Asia-Pacific Pty Ltd 25 Dickson Ave Artarmon NSW 2064 Ph: 02 8069 9673
Ganshorn	Bird Healthcare Pty Ltd 18 Corporate Blvd Bayswater VIC 3153 Ph: 1300 365 561
MedChip Solutions, UK	Ascencia Pty Ltd 114 Assembly Drive Dandenong South VIC 3175 Ph: 1300 887 619
Medikro	Bird Healthcare Pty Ltd 18 Corporate Blvd Bayswater VIC 3153 Ph: 1300 365 561
Medisoft®	Ascencia Pty Ltd 114 Assembly Drive Dandenong South VIC 3175 Ph: 1300 887 619
MIR srl Medical International Research	Zone Medical Pty Ltd Unit 7/22 Mavis Court Yatala QLD 4207 Ph: 1300 009 663
MGC Diagnostics	Ascencia Pty Ltd 114 Assembly Drive Dandenong South VIC 3175 Ph: 1300 887 619
ndd, Zurich, Switzerland	Niche Medical PO Box 1737 North Sydney NSW 2059 Ph: 1300 136 855
SibelMed	Point of Care Diagnostics 14/76 Reserve Rd Artarmon NSW 2064
Uscom	Uscom Limited Level 8, 66 Clarence Street Sydney NSW 2000 Ph: 02 92474144
VITALOGRAPH	Ecomed Trading U4/30 Foundry Road Seven Hills NSW 2147 Ph: 1800 675 432 or 02 9620 6600

## Notes





[nationalasthma.org.au](http://nationalasthma.org.au)