

# EasyOne World

The portable spirometry solution for testing anytime, anywhere.



## Spirometry (FVC, FVL, SVC & MVV)

The proven ultrasound technology  
**ndd TrueFlow**

no calibration, no warm-up time, no moving parts

Immediate test quality feedback in accordance with ATS/ERS criteria

Direct printing without need of a PC

Export of pdf files and raw data (with software)

Automated Quality Control

Selectable predicted values and interpretation

Absolute hygienic solution with Spirette consumable eliminates the risk of cross-contamination

Flexible HL7 and XML interface for easy EMR integration (with software)

Free software upgrades

Powered by 2 standard AA batteries

**TrueFlow**  
makes the difference

The original ultrasonic flow measurement is highly accurate in all flow ranges, independent of gas composition, pressure, temperature and humidity and does not require calibration during its life-time. The sensor is never in direct contact with the patient's flow. ndd TrueFlow is a hygienic and resistance-free solution.

### Standards & Recommendations

#### Quality, Medical Devices & Electrical

EN ISO 9001 , EN ISO 13485 , EN ISO 14971 , EN 62366 , EN 62304 , EN ISO 26782 , EN ISO 23747 , IEC 60601-1, IEC 60601-1-2

#### FDA

510(k) market clearance

#### MDD 93/42/EEC

CE marked

#### Associations & Institutes

ATS / ERS 2005, NIOSH/ OSHA, SSA Disability

### Languages

English, Portuguese, French, German, Italian, Spanish

### Technical

#### Printing options

Direct to printer or with software

#### Data management

EasyWare, EasyWare Pro

#### Export

HL7, XML, GDT, with software

#### Data links

USB

#### Test storage

Up to 1,200 tests

#### Age range

Spirometry > 4 years

#### Dimensions

3.3 x 6.2 x 1.7 " (H x W x D), 9 oz

#### Device classification

Type BF applied part

#### Operating conditions

Temp 0 - 40 °C/32 - 104 °F

Rel. Humidity 0 - 95 %

Atmosph. Pressure 500 - 1060 hPa

## Parameters

<b>FVC</b>	BEV, EOTV, FEF25, FEF2575, FEF50, FEF75, FET, FEV.5, FEV.75, FEV1, FEV1/FEV6, FEV1/FVC, FEV3, FEV6, FVC, FVC6, MEF25, MEF50, MEF75, MMEF, PEF, PEFT, to
<b>FVL</b>	BEV, EOTV, FEF25, FEF2575, FEF50, FEF75, FET, FEV.5, FEV.75, FEV1, FEV1/FEV6, FEV1/FVC, FEV3, FEV6, FIF25, FIF50, FIF75, FIVC, FVC, MEF25, MEF50, MEF75, MIF25, MIF50, MIF75, MMEF, PEF, PEFT, PIF, to
<b>SVC</b>	ERV, IC, IRV, Rf, VC, VCex, VCin, VCmax, VT
<b>MVV</b>	MVV, MVVtime

## Predicted normal values Spirometry

<b>GLI</b>	Stanojevic 2009, Quanjer 2012
<b>North America</b>	NHANES III (Hankinson) 1999, Knudson 1983, Knudson 1976, Crapo 1981, Morris 1971 & 1976, Hsu 1979, Dockery (Harvard) 1993, Polgar 1971, Gutierrez (Canada) 2004, Eigen 2002
<b>Latin America</b>	Pereira 1992, Perreira 2006 & 2008, Pérez-Padilla (PLATINO) 2006, Pérez-Padilla (Mexico) 2001, Pérez-Padilla (Mexico, Pediatrics) 2003, Chile 2010, Chile (Pediatrics) 1997
<b>Europe</b>	ERS (ECCS, EGKS, Quanjer) 1993, Zapletal 1977, Zapletal 2003, Rosenthal 1993, Austria 1988, Austria 1994, Sapaldia 1996, Roca (Spain, SEPAR) 1982, Garcia-Rio (SEPAR) 2013, Vilozni 2005, Falaschetti 2004, Klement (Russia) 1987
<b>Europe Scandinavia</b>	Hedenström 1985 & 1986, Gulsvik (Norway) 1985, Berglund Birath (Sweden) 1963, Langhammer (Norway) 2001, Finnish 1982 (1998), Nystad 2003
<b>Australia</b>	Hibbert 1989, Gore Crockett 1996
<b>Africa, Asia</b>	Ethiopia 1985, JRS 2001

## Flow/Volume Sensor

<b>Type</b>	Ultrasonic transit time
<b>Range</b>	± 16 l/s
<b>Resolution</b>	4 ml/s
<b>Accuracy</b>	± 2% or 0.02 l/s
<b>Volume</b>	± 2% or 0.050 l
<b>Flow</b>	± 2% or 0.020 l/s
<b>PEF</b>	± 5% or 5 l/min
<b>MVV</b>	± 2% or 0.050 l
<b>Resistance</b>	~ 0.3 cm H2O/l/s
<b>Sample rate</b>	400 Hz

## Electrical and Environmental requirements

<b>Power supply</b>	2 AA batteries approx 400 tests
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