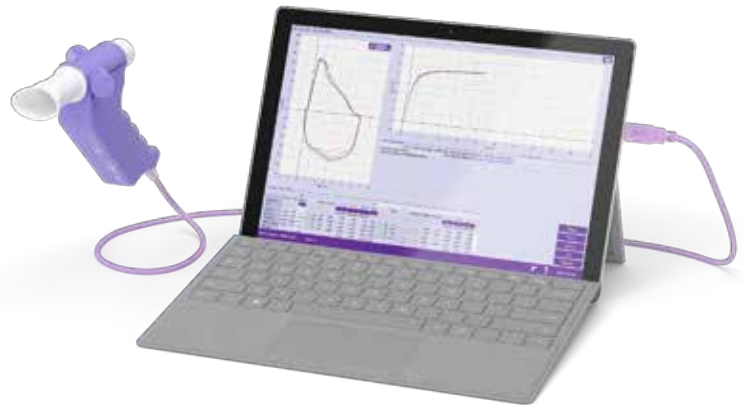


# Easy on-PC

Modern PC-based spirometer offering maximum functionality and value



\* PC/cables not included

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

The proven ultrasound technology  
**NDD TrueFlow**

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

Real time curves and pediatric incentives

Intuitive PC-based solution

Automated user guidance throughout maneuvers based on ATS/ERS standards 2019 and 2005

Reproducible results ensure comparability in multicenter studies

Immediate test quality feedback in accordance with ATS/ERS criteria

Z-score, LLN and %predicted for fast interpretation of results

Export of pdf files and raw data

Flexible HL7 and XML interface for easy EMR integration

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

Customizable reports

Powerful data-management



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

<b>Quality, Medical Devices &amp; Electrical</b>	ISO 13485, ISO 14971, IEC 62366, IEC 62304, ISO 26782, ISO 23747, IEC 60601-1, IEC 60601-2, ISO 10993-1
<b>FDA</b>	510(k) market clearance
<b>MDD 93/42/EEC</b>	CE marked
<b>Associations &amp; Institutes</b>	ATS/ERS 2019 and 2005, NIOSH/OSHA, SSA Disability

### Languages

English, Brazilian Portuguese, Chinese, Croatian, Danish, Dutch, Finnish, French, German, Italian, Japanese, Norwegian, Portuguese, Russian, Spanish, Swedish, Turkish, Vietnamese

### Technical

<b>Printing options</b>	direct to printer or over network
<b>Data management</b>	EasyOne Connect (SQLite, MS SQL Server)
<b>Interface</b>	HL7, XML, GDT
<b>No. of tests</b>	> 10'000 tests
<b>Age range</b>	Spirometry > 4 years
<b>Device classification</b>	Type BF applied part
<b>Operating conditions</b>	Temp 0 - 40 °C/32 - 104 °F Rel. Humidity 5 - 95 % Atmosph. Pressure 620 - 1060 hPA

### Requirements PC/ Laptop

<b>Hard disk capacity</b>	Installation/ system 1 GB Data up to 4 GB
<b>RAM</b>	2 GB
<b>Operating system</b>	Windows 7, Windows 8 and 8.1 (32 and 64 Bit), Windows 10 (32 and 64 Bit)

## Parameters

<b>FVC</b>	ATI, BEV, EOTV, FEF10, FEF25, FEF2575, FEF2575_6, FEF40, FEF50, FEF50/FVC, FEF50/VCmax, FEF60, FEF75, FEF75-85, FEF80, FET, FET25-75, FEV.25, FEV.5, FEV.5/FVC, FEV.75, FEV.75/FEV6, FEV.75/FVC, FEV.75/VCmax, FEV1, FEV1/FEV6, FEV1/FVC, FEV1/FVC6, FEV1/VC, FEV1/VCmax, FEV3/FVC, FEV3/VCmax, FEV3, FEV6, FVC, MEF20, MEF25, MEF40, MEF50, MEF60, MEF75, MEF90, MMEF, MTC1, MTC2, MTC3, MTCR, PEF, PEFT, t0, VC, VCmax
<b>FVL</b>	ATI, BEV, CVI, E50/150, EOTV, FEF10, FEF25, FEF2575, FEF2575_6, FEF40, FEF50, FEF50/FVC, FEF50/VCmax, FEF60, FEF75, FEF75-85, FEF80, FET, FET25-75, FEV.25, FEV.5, FEV.5/FVC, FEV.75, FEV.75/FEV6, FEV.75/FVC, FEV.75/VCmax, FEV1, FEV1/FEV6, FEV1/FIV1, FEV1/FIVC, FEV1/FVC, FEV1/VC, FEV1/VCmax, FEV3/FVC, FEV3/VCmax, FEV3, FEV6, FIF25, FIF2575, FIF50, FIF50/FEF50, FIF75, FIV.25, FIV.5, FIV1, FIVC, FVC, MEF20, MEF25, MEF40, MEF50, MEF60, MEF75, MEF90, MIF25, MIF50, MIF75, MMEF, MMIF, MTC1, MTC2, MTC3, MTCR, PEF, PEFT, PIF, t0, VC, VCmax
<b>SVC</b>	ERV, IC, IRV, Rf, VC, VCex, VCin, VCmax, VT
<b>MVV</b>	MVV, MVV6, MVVtime, Rf, VCext, VT

## Predicted normal values Spirometry

<b>GLI</b>	Quanjer 2012, Stanojevic 2009
<b>North America</b>	Crapo 1981, Dockery (Harvard) 1993, Eigen 2001, Gutierrez (Canada) 2004, Hsu 1979, Knudson 1983, Knudson 1976, Morris 1971 & 1976, NHANES III (Hankinson) 1999, Polgar 1971
<b>Latin America</b>	Chile 2010, Chile (Pediatrics) 1997, Pereira 1992, Pereira 2006/2008, Pérez-Padilla (PLATINO) 2006, Pérez-Padilla (Mexico) 2001, Pérez-Padilla (Mexico, Pediatrics) 2003
<b>Europe</b>	ERS (ECCS, EGKS, Quanjer) 1993, Garcia-Rio (SEPAR) 2013, Falaschetti 2004, Forche (Austria) 1988 & 1994, Klement (Russia) 1986, Roca (Spain, SEPAR) 1982, Rosenthal 1993, Sapaldia (Switzerland) 1996, Vilozni 2005, Zapletal 1977, Zapletal 2003
<b>Europe Scandinavia</b>	Berglund Birath (Sweden) 1963, Finnish 1982 (1998), Gulsvik (Norway) 1985, Hedenström 1985 & 1986, Langhammer (Norway) 2001, Kainu (Finland), 2016, Nystad 2002
<b>Australia</b>	Gore Crockett 1995, Hibbert 1989
<b>Asia</b>	Chhabra (India) 2014, Dejsomritrutai (Thailand) 2000, Indonesia 1992, IP (China, HongKong) 2000 & 2006, JRS 2001 & 2014
<b>Africa</b>	Mengesha (Ethiopia), 1985

### Flow/Volume Sensor

<b>Type</b>	Ultrasonic transit time
<b>Flow Range</b>	± 16 l/s
<b>Flow Resolution</b>	4 ml/s
<b>Flow Accuracy (except PEF)</b>	± 2% or 0.020 l/s
<b>Volume Resolution</b>	1 ml
<b>Volume Accuracy</b>	± 2% or 0.050 l
<b>PEF Accuracy</b>	± 5% or 0.200 l/s
<b>MVV Accuracy</b>	± 5% or 5 l/min
<b>Resistance</b>	~ 0.3 cm H <sub>2</sub> O/l/s at 16 l/s
<b>Sample Rate</b>	400 Hz

### Order Information

Part Number	Product
2700-3	Easy on-PC System Includes: Spirometry sensor and EasyOne Connect software

### Accessories

Part Number	Product
2050-1	Case of 50 Spirette mouthpieces
2050-5	Case of 200 Spirette mouthpieces
2050-10	Case of 500 Spirette mouthpieces
2030-2	NDD Calibration syringe 3L with Spirette Cal Check Adapter