

Volume Displacement spirometer

...with **Intelligence**



- ▼ automatic calculation of all selected indices
- ▼ interfaces directly with PC and Spirotrac Software for archiving and trending
- ▼ connect to any PCL A4 printer for printing of test results and curves
- ▼ audio-feedback allows the operator to observe the subject during test
- ▼ a real-time clock automatically records the date and time of every test
- ▼ built-in quality of test criteria and selection of best tests to ATS or ERS criteria
- ▼ temporary storage for up to 160 tests
- ▼ high accuracy, direct volume measurement, linearised litre by litre
- ▼ automatic BTPS correction all results
- ▼ 12-second chart plus 30s continuous accumulation possible for COPD patients



Features ...

- ▼ guaranteed 40 years storage life of chart from inkless stylus plus electronic archive
- ▼ use with SafeTway for expiratory or BVF for inspiratory type tests with assured hygiene
- ▼ the long breathing tubes minimise the risk of cross-contamination between subjects (optional machine washable tubes available)
- ▼ wedge type bellows design measuring system
- ▼ provides a permanent hard copy record of all tests carried out
- ▼ large chart for real-time graphics
- ▼ subject ID and demographics can be uploaded from PC
- ▼ QA messages after every test
- ▼ the highest degree of accuracy in spirometry for FVC, FEV1 and FEV1%
- ▼ compares patients' test results against predicted values
- ▼ direct connection to full size printer
- ▼ available without printer option

Technical Specifications ...

- ▼ Parameters measured: configurable by operator
- ▼ Measuring principle: dry wedge type bellows
- ▼ Measuring accuracy: better than +3%/50mL (ATS 1994)
- ▼ Linearity: litre-by-litre system
- ▼ Size: 460 x 465 x 290mm
- ▼ Weight: 9.1 Kg
- ▼ Back pressure: <2.5cmH₂O/L/s (Complies to ATS 1994)
- ▼ Volume measurement: direct
- ▼ Maximum recorder volume: 8 L BTPS @ 23°C (Using 12-s charts)
- ▼ Display: 4 lines x 20 chs LCD

Model 2160

- ▼ Power supply: 10v DC via PowerSAFE
- ▼ Maximum test duration: 12 s dynamic (30-s VC)
- ▼ Leakage rate: 0.038L/min max. @ 4L, 300g load
- ▼ Recording speed: 20mm/sec over 12 sec
- ▼ Timing accuracy: ±1% of measured time (ATS 1994)
- ▼ Activation volume: 0.04 L
- ▼ Operating temp. (physiological): 15 – 37°C
- ▼ Safety standards: CE mark, EN60601-1/2
- ▼ Spirometry standards: ATS '94, ERS '93

Ordering Information ...

- 81600 Vitalograph Gold Standard Plus
- 70000 Spirotrac PC software
- 20505 Pedestal Stand
- 20408 1-L precision syringe
- 360203-L syringe
- 2120505 Intelligent Printer Cable
- 2150100 12-s Charts (200)
- 2150400 Washable breathing tubes (5)
- 2150300 Long breathing tubes (10)
- 20242 SafeTway mouthpieces (200)
- 20303 Noseclips (10)
- 28350 BVF (50)
- 20991 Long SafeTway mouthpieces (130)
- 17105 Simple Measurement Booklet
- 14353 Spirometry Teaching CD
- 14001 Spirometry Workshop

Single Use Disposables ...



When expiratory testing only, the low cost SafeTway™ mouthpiece can be used. Designed to prevent cross-infection during pulmonary function testing, it has a one-way valve to prevent subjects accidentally breathing in through the spirometer.

Adaptors to fit most types of PFT equipment



When inspiratory and expiratory testing, the Bacterial/Viral Filter should be used. Designed specially for pulmonary function testing, the low back-pressure filter has a bacterial and viral cross-contamination reduction efficiency of 99.99%.

Adaptors to fit most types of PFT equipment



from Vitalograph®

... the spirometry people



Vitalograph Ltd. • Maids Moreton • Buckingham • MK18 1SW • England • Tel: +44 (0) 1280 827110 • Fax: +44 (0) 1280 823302 • E-mail: sales@vitalograph.co.uk
 Vitalograph GmbH • Jacobsenweg 12 • 22525 Hamburg • Germany • Tel: (040) 547391-0 • Fax: (040) 547391-40 • E-mail: info@vitalograph.de
 Vitalograph Inc. • 13310 West 99th Street • Lenexa • Kansas 66215 • USA • Tel.: (913) 888 4221 • Fax: (913) 888 4259 • E-mail: vitcs@vitalograph.com
 Vitalograph (Ireland) Ltd. • Gort Road Business Park • Ennis • Co. Clare • Ireland • Tel.: (065) 6864100 • Fax: (065) 6829289 • E-mail: sales@vitalograph.ie

Internet: www.vitalograph.com

Vitalograph®, Spirotrac®, BVF, and SafeTway are registered trademarks of Vitalograph Ltd.