

# Vitalograph micro

A compact respiratory diagnostics solution that offers simple and fast diagnostic spirometry in a lightweight, handheld device for accurate testing on the move. Eitalograph micro

# A cornerstone of respiratory diagnostics

Commonly known as **spirometry**, evaluating how much breath a person has and how fast they breathe is a key diagnostic test in the evaluation of lung health.

#### Detailed spirometry can:

- · Help with the diagnosis of a respiratory condition
- · Monitor progression of a respiratory condition and overall lung health
- · Measure the response to a particular treatment

#### Conditions that **benefit** from spirometry testing include:

- COPD
- · Upper and Lower Respiratory Tract Infections
- · Lung Cancer
- Asthma
- · Many other respiratory-related conditions

# Fast and simple diagnostic spirometry in a compact package.

The Vitalograph **micro**™ is a versatile handheld respiratory diagnostics solution that delivers detailed spirometry testing, in a range of environments.

Ideal for multiple subject testing scenarios, the **micro** has paperless reporting and includes Device Studio for creating full PDF reports, along with USB and Bluetooth connectivity.

The **micro** offers multiple spirometry testing options, such as FVC, SVC and Bronchodilator Responsiveness.



# Compact size. Multiple Testing Options.

micro Test Options	Description	Clinical Benefits
FVC	Forced Vital Capacity The total volume of air that can be exhaled during a maximal forced expiration effort.	Assesses dynamic lung function by providing forced spirometry parameters (FVC, FEV <sub>1</sub> , PEF, FEV <sub>1</sub> /FVC, etc).
SVC	Slow Vital Capacity The total volume of air that can be exhaled during a normal expiration effort.	SVC may indicate collapse of the small airways and air trapping in COPD patients when compared with FVC <sup>1</sup> .
Bronchodilator Responsiveness Testing	In bronchodilator responsiveness testing, spirometry parameters are measured before and after medication.	Determines the degree of improvement of airflow in response to bronchodilator administration as measured by changes in FEV <sub>1</sub> and FVC <sup>2</sup> .

- 1. Yuan et al. BMC Pulmonary Medicine 2014, 14:16
- 2. Graham et al. ATS/ERS Standardization of Spirometry 2019 Update, Am J Respir Crit Care Med Vol 200, Iss 8, pp e70-e88



# Diagnostic spirometry in a compact lightweight device that is big on features, for stress-free testing on the move.

### **Exceptional Test Accuracy**

- Features advanced flowhead technology which offers high-quality spirometry testing that is accurate, repeatable, easy to use, and safe.
- · ATS/ERS 2019 accuracy compliant.

#### Perfect for mobile testing

- · 325 test subject memory.
- Clear and instant test results with 2.8" capacitive touchscreen and high-end graphics.
- · Small enough to fit in a lab coat pocket.
- Optional detachable flowhead makes it easier to view data during test and is an effective option for improving hygiene through creation of distance between subject and tester.

#### Remote respiratory monitoring ready

- Bluetooth connectivity for effortless communication with other devices and healthcare monitoring apps.
- Design custom telehealth apps with the micro Software Developers' Kit.

#### **Easily Interpreted Results**

- Fast evaluation of results with %Predicted comparison, LLN and Z scores.
- · Latest GLI predicted sets.
- · Customisable PDF reports.

#### **Hygienically Efficient**

- Low running costs and environmentally friendly: no costly disposable sensors, turbines, or flow tubes.
- Single-use Vitalograph Bacterial Viral Filters (BVF™)
  with validated cross-contamination efficiency
  >99.999%, protect device, patient, and operator.

## Small in size. Serious about Spirometry.

Although pocket-sized, the **micro** features the same exceptional flowhead design as larger Vitalograph spirometers.

- Fleisch pneumotachograph
- Multiple pressure points
- · Stainless steel core
- · No live electrical components
- · Ergonomically designed protective casing



# **Technical Specifications**

**Product: Vitalograph micro** 

Model: 6300

Volume accuracy: +/- 2.5%

PEF accuracy: +/- 10% or +/- 10L/min of the reading

(ISO 23747:2015)

Performance standards: ATS/ERS 2019, ISO 23747:2015

& ISO 26782:2009

Safety standards: EN 60601-1:2006 + A1:2013 OA/GMP standards: EN ISO 13485, FDA 21 CFR 820.

CMDR SOR/98-282 & Japan's PMD Act Dimensions: 142mm x 81mm x 24mm

Weight: 260g

Communications: USB 2.0 & Bluetooth 2/4

Power supply: 4 x 1.5V AAA batteries (6V) 5V DC via USB 2.0 Parameters meaured: VC, FVC, FEV, FEV, R, PEF L/s, PEF L/min, FEF<sub>25-75</sub>, FEF<sub>75-85</sub>, EVC, IVC, FIVC, FIVC/FVC, FEV<sub>0.5</sub>, PIF L/s, FMFT, FET, FEV<sub>0.5</sub>/FVC, FEV<sub>0.75</sub>, FEV<sub>0.75</sub>/ FVC, FEV<sub>1</sub>/VC, FEV<sub>1</sub>/IVC, FEV<sub>1</sub>/FIVC, FEV<sub>1</sub>/FEV<sub>6</sub>, FEV<sub>1</sub>/  $\mathsf{PEF}, \mathsf{FEV}_{\mathsf{3}}, \mathsf{FEV}_{\mathsf{3}}/\mathsf{FVC}, \mathsf{FEV}_{\mathsf{6}}, \mathsf{FEF}_{\mathsf{25'}}, \mathsf{FEF}0.2\text{-}1.2, \mathsf{FEF}_{\mathsf{25\cdot75}}/\mathsf{FVC},$ FIV<sub>1</sub>, FIV<sub>1</sub>/FIVC, PIF L/min, FIF<sub>25</sub>, FIF<sub>50</sub>, FIF<sub>75</sub>, FIF<sub>50</sub>-FEF<sub>50</sub>,

MVVind, Rind, Vext, Vext/FVC, FEV<sub>1</sub>/EVC

## **Ordering Information**

Product Model Number	Customer Order Number	Product Description
6300	63310	Vitalograph micro with Device Studio Software

## **Optional Extras / Consumables**

Product Model Number	Customer Order Number	Product Description	Product Box Size
2040	36020	2040 3L Precision syringe	1
2820	28501	Eco BVF for Office Spirometers	100
	28572	Eco BVF for Office Spirometers + Disposable Nose Clip	80
	28554	2820 Eco BVF with Plastic Bite Lip	75
	83200	Remote Flowhead Adaptor Kit	1
	63669	micro Software Developers' Kit	1



Free 5-Year warranty included with product registration.

# Contact us

**USA & Canada** 

### Vitalograph Inc.

Toll Free: 1-800 255 6626 Tel: (913) 730 3200 Fax: (913) 730 3232 contact@vitalograph.com 13310 West 99th Street Lexexa, Kansas, 66215, USA

## Ireland

### Vitalograph (Ireland) Ltd

Tel: +353 65 686 4100 Fax: +353 65 682 9289 sales@vitalograph.ie Gort Road Business Park Ennis, Co Clare, V95 HFT4, Ireland

## support on sales, technical queries or information requests. **United Kingdom**

Our trained customer service team are available for telephone

### Vitalograph Ltd, UK

Tel: +44 1280 827110 Fax: +44 1280 823302 sales@vitalograph.co.uk Maids Moreton, Buckingham, MK18 1SW, England

#### Germany

### Vitalograph GmbH

Tel: +49 40 547391-0 Fax: +49 40 547391-40 info@vitalograph.de Rellinger Straße 64a D-20257 Hamburg, Germany

#### All other countries

#### Vitalograph Ltd, International

Tel: +44 1280 827120 Fax: +44 1280 823302 sales@vitalograph.co.uk Maids Moreton. Buckingham, MK18 1SW, England



Malograph, Vitalograph®, micro™ and BVF™ are trademarks or registered trademarks of Vitalograph Ltd.

