

# Alpha Spirometer

All-in-one V-Core<sup>™</sup> spirometer providing **accurate** and **versatile** testing, with integrated printer and EMR connectivity.



# Point-of-care spirometry – informing your respiratory care decision-making

Spirometry is the term given to the basic lung function tests that measure the air that is expired and inspired. It is performed to detect the presence or absence of lung disease, quantify lung impairment, monitor the effects of occupational/environmental exposures and determine the effects of medications.<sup>1</sup>

Point-of-care testing allows the performance of a test in the immediate vicinity of a patient, providing rapid results. Simple and non-invasive, point-of-care spirometry testing is suitable for multiple healthcare settings, outside the conventional laboratory environment.

# Highly accurate, reliable spirometry in a clinic, or on the go

The Alpha delivers highly accurate, reliable spirometry compliant with ATS/ERS 2019 standards for accuracy and test quality.

Ideal for testing on the go or in a clinic, the Alpha provides multiple testing options, connects to Vitalograph Device Studio and Spirotrac® 6 software to generate PDF reports, and has a quick-loading integrated thermal printer.

Vitalograph Connect enables versatile connectivity to your electronic medical records, ensuring that test data is easily shared.



# Multiple testing options

Test Modules	Description	Parameters*	Onscreen Graphs
Forced Vital Capacity	The total volume of air that can be exhaled during a maximal forced expiration effort.	FVC, FEV <sub>1</sub> , FEF <sub>25-75</sub> , PEF, etc	• Flow / Volume / Time • Volume / Time
Vital Capacity	The total volume of air that can be exhaled during a normal expiration effort.	VC, IC, IVC, TV	Bar Chart     Volume / Time
Post Test	Repeat VC and/or FVC tests to identify changes in FEV <sub>1</sub> and FVC between preand post- tests for a patient.		• Flow / Volume / Time • Volume / Time

## Robust, versatile, connected.

### **Reliable Data Accuracy**

- Powered by V-Core<sup>™</sup> flowhead measuring technology for testing that is accurate, repeatable, easy to use, and safe.
- Accuracy meets the performance standards ATS/ERS 2019, ISO 23747:2015 & ISO 26782:2009.

### **Versatile Connectivity**

- Bi-directional data exchange to EMR achieved through Vitalograph Connect.
- Compatible with HL7, GDT and several regional specific protocols.
- Multiple connectivity options, including wireless and USB.
- · PDF reporting and interpretation software included.

# Hygienically Efficient

- Low running costs: no 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.

## **Enhanced Testing Guidance**

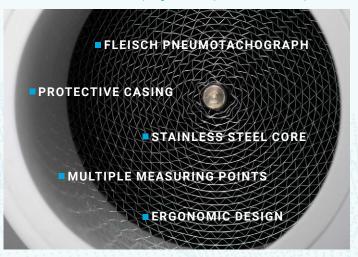
- · Animated incentive to aid blow effort.
- · Real-time flow/volume onscreen graphics.
- · Instant test quality feedback.
- Fast evaluation of results with %Predicted comparison, LLN and Z scores.
- · Latest GLI predicted sets.

### Designed for everyday use

- · Powered by mains or rechargeable battery.
- · Memory capacity for more than 20,0000 tests.
- · Highly portable and lightweight.
- · Robust V-Core flowhead design



# Be free to help your patients perform spirometry



The Alpha has an integrated **V-Core™** flowhead, allowing you to focus on helping your patients achieve their best spirometry test, confident that you are capturing accurate and reproducible results.

# V-Core Flowhead Technology is: Accurate Repeatable Robust Safe Comfortable 2019 ATS/ERS Spirometry Technical Standards Compliance

# **Technical Specifications**

**Product: Vitalograph Model 6000 Alpha** 

Model: 6000

Dimensions: 204mm (length) x 253mm (width)

Weight: 1.5kg

Communications: USB (Device Studio & Spirotrac 6),

Ethernet/WiFi (Connect)
Flow detection principle:
Fleisch type pneumotachograph
Essential performance test limits:

Flow accuracy: ±10% or ±20L/min of the reading (ISO

23747:2015)

Volume detection: Flow integration sampling @100Hz

Maximum test duration: 90 seconds Maximum displayed volume: 10L

**Volume accuracy:** +/- 2.5% ATS/ERS 2019, ISO 26782:2009 **Power supply:** Input 100-240V, 50/60Hz Output 12V, 1.5A,

Battery: 7.2V, 2.2Ahr

Accuracy when operated in operating temperature range

conditions: Flow ±10%, Max. flow rate ±16 L/s,

Min. flow rate ±0.02 L/s

**Safety standards:** EN 60601-1:2006 +A1:2013 +A2:2021 **Performance standards:** ATS/ERS 2019, ISO 23747:2015

& ISO 26782:2009 Printer type: Thermal

QA/GMP standards: EN ISO 13485, FDA 21 CFR 820,

CMDR SOR/98-282 & Japan's PMD Act

Test parameters measured:

VC Test: VC, EVC, IVC, TV, IRV, ERV, IC

**FVC Test:** VC, FVC, FIVC, FIVC/FVC, FEV<sub>0.5</sub>, FEV<sub>0.5</sub>/FVC, FEV<sub>0.75</sub>, FEV<sub>0.75</sub>/FVC, FEV<sub>1</sub>, FEV<sub>1</sub>, FEV<sub>1</sub>/VC, FEV<sub>1</sub>/VC, FEV<sub>1</sub>/IVC, FEV<sub>1</sub>/IVC, FEV<sub>1</sub>/IVC, FEV<sub>1</sub>/IVC, FEV<sub>1</sub>/FIVC, FEV<sub>1</sub>/FEV<sub>6</sub>, FEV<sub>1</sub>/PEF, FEV<sub>3</sub>, FEV<sub>3</sub>/VC, FEV<sub>3</sub>/FVC, FEV<sub>6</sub>, PEF L/s, PEF L/min, FEF<sub>25</sub>, FEF<sub>50</sub>, FEF<sub>75</sub>, FEF<sub>0.2</sub>-1.2, FEF<sub>25</sub>-75, FEF<sub>25</sub>-75/FVC, FEF<sub>75</sub>-85, FIV<sub>1</sub>, FIV<sub>1</sub>/FVC, FIV<sub>1</sub>/FIVC, PIF L/s, PIF L/min, FIF<sub>25</sub>, FIF<sub>50</sub>, FIF<sub>50</sub>, FIF<sub>50</sub>, FEF<sub>50</sub>, FEF<sub>50</sub>, MVVind, FMFT, FET, FRC, TV, RV, TLC, IRV, ERV, IC, Rind, ELA, tPEF, Text, EV, EV/FVC,

### **Ordering information**

Product Model	Customer	Product
Number	Order Number	Description
6000	69002	

## **Optional extras/ Consumables**

Product Model Number	Customer Order Number	Product Description
2040	36020	3-L Precision Syringe
	28554	Eco BVF with Bite Lip (75)
2820	28553	Eco BVF with Bite Lip + Disposable Nose Clip (75)
	28501	Eco BVF (100)
	69140	Alpha Printer Paper (10 rolls)
7000	70902	Spirotrac 6 Software



Free 5-Year warranty included with product registration.

# Contact us

Our customer service team are available for telephone support on sales, technical queries or information requests.

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