

# VITALOGRAPH COMPACT

Medical Workstation



**Vitalograph**<sup>®</sup>  
Your cardio-respiratory partner

Data you can rely on. People you can trust.

# VITALOGRAPH COMPACT

Diagnostic Medical Workstation

Vitalograph COMPACT™ is a powerful and flexible medical workstation that offers a wide range of testing capabilities in an easy to use, portable desktop solution. COMPACT features secure data management using data encryption in SQL databases and the ability to exchange patient data with Electronic Medical Record (EMR) systems, using GDT and HL7 protocols.\*



High level cyber security that comes from a 'locked down' operating system and secure encrypted data transmission

## Vitalograph COMPACT Features

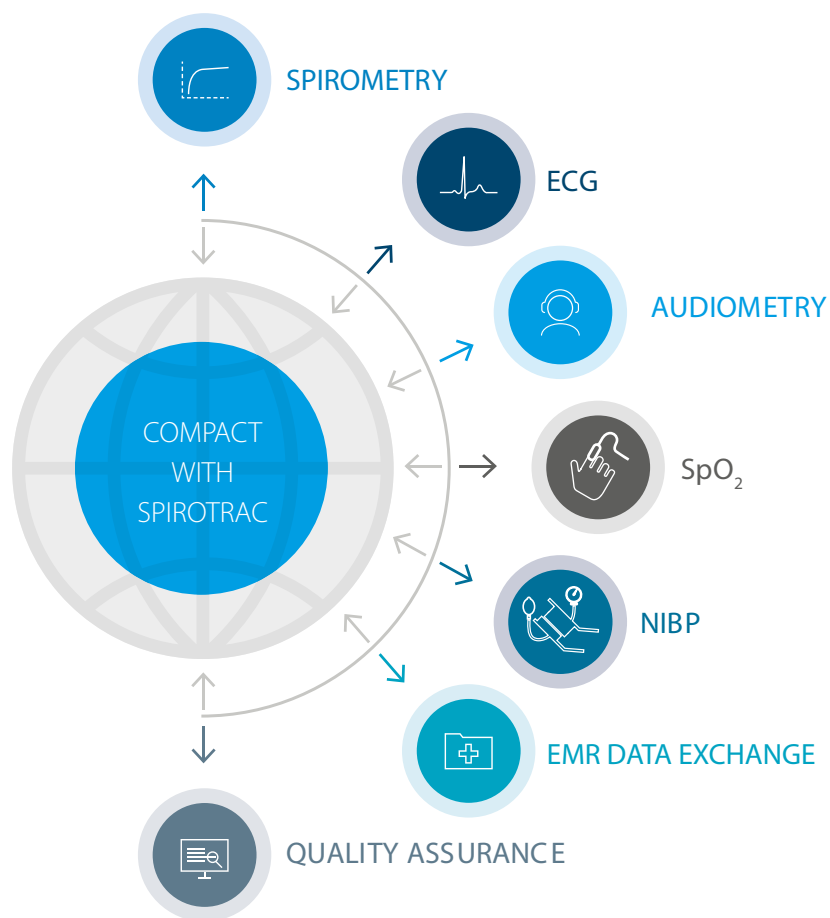
- Full stand-alone operation
- Large colour touch screen
- Simple icon driven menu
- Automatic storage and traceability of all test data
- Network multiple devices
- Secure encrypted data transmission
- HL7, GDT and CSV data exchange with EMR systems in hospital, primary care and occupational health arenas\*
- Automated, secure data management compliant with FDA 21 CFR 11
- Additional compatible/connectable devices:



In2itive™  
Handheld Spirometer



asma-1 BT™  
Home monitoring

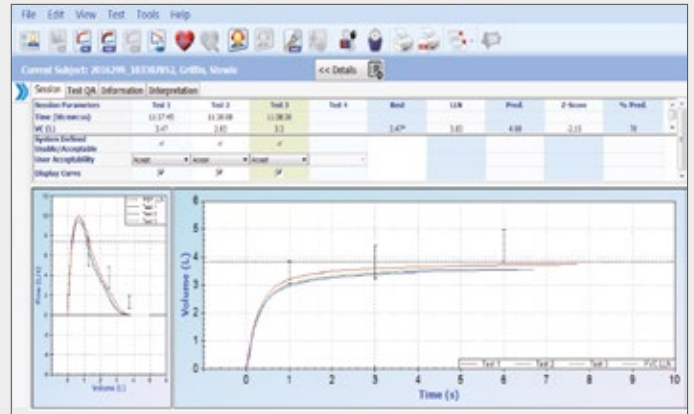


\* Data exchange of certain test parameters with specific electronic medical record systems may be at different stages of development. Please contact Vitalograph for further details.

## Spirotrac Spirometry Module

COMPACT comes with integrated market leading Vitalograph Spirometry and Spirotrac® Software as standard.

COMPACT also can act as a data integration hub for clinic spirometry, mobile spirometry using handheld devices, home monitoring and then onto your electronic medical record (EMR) system.\*



## Accurate, Reliable Technology

COMPACT features a Fleisch pneumotachograph for outstanding performance in the delivery of accurate and reliable flow/volume measurements.

The extremely low flow impedance is well below the requirements of the current spirometer standard

- Accurate
- Easy to use
- Robust
- Reliable
- Low back pressure
- Linear flows ensure accuracy at very low flow rates
- Easy to clean
- Simple accuracy checks
- Meets ISO 23747:2009, ISO 26782:2009 and ATS/ERS:2005 spirometry standards



## Methacholine and Mannitol Bronchial Challenge (ATS and Mannitol) Testing

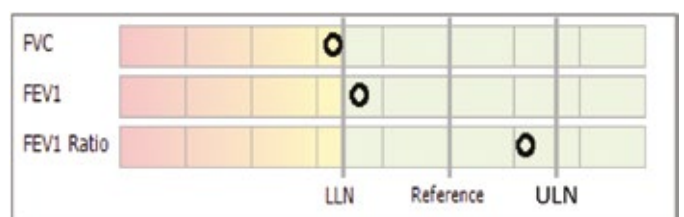
The causes of asthma and allergy can be difficult to diagnose but bronchial provocation with specific sensitizers help to identify the extent and cause of bronchial hyper-responsiveness.

## Spirotrac User Configuration Options

- Scalable volume/time and flow/volume curves using single-breath or multi-breath spirometry
- Optional choice of child incentives with sound effects and transparency so that real-time curves are simultaneously viewable
- Pre-post spirometry comparison for bronchodilator or longer acting treatments
- Choice of over 50 user selectable parameters
- Automatic and scalable FEV<sub>1</sub> trend chart shows the trend of FEV<sub>1</sub> over the lifetime of the subject
- User preference for comparison with reference values: % predicted lower level of normal (LLN) or Z-score (SDS)

## Global Lung Initiative (GLI)

Spirotrac includes the most recent normal reference values from the Global Lung Initiative (GLI). This normative reference data represents the first all age (3-95yrs), global multi-ethnic reference equations for spirometry.



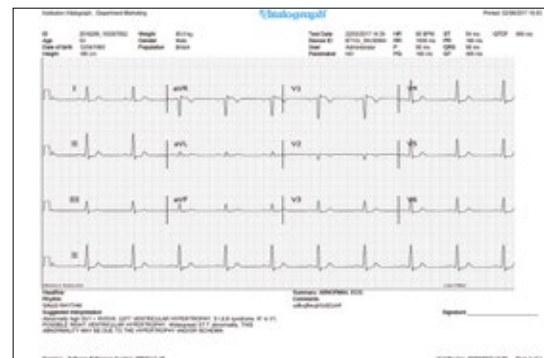
## BT12 Resting 12-lead ECG

Fast, safe, Bluetooth® transmission allows ECG data to be captured, displayed, stored, analyzed and interpreted with minimal lead artefact from movement or electrical sources. ECG tracings are captured and displayed in real-time and data can be saved for recall, reporting and printing. The built-in display also provides information on electrode contact problems, heart rate, battery status, communication status and digital pacemaker detection.



## ECG Key Features

- University of Glasgow Interpretation Algorithm
- Detailed results including measured results (e.g. P duration, PQ interval, QRS period).
- Visual electrode contact indication to assist operator
- Wireless data transmission via Bluetooth
- View traces as 1 x 12, 2 x 6 or 3 x 4 plus rhythm strip
- Automatic pacemaker detection



## Audiometry

The Vitalograph range of screening and diagnostic audiometers offers comprehensive and easy to use audiometry testing options for occupational health, primary care and audiology professionals.

The range offers:

- On-screen audiometry via Spirotrac Software
- Customized settings according to user preferences
- Extensive database and storage capacity
- PDF report generation

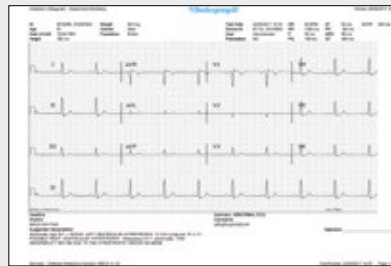
| Audiometer Range               | Screening |       | Diagnostic |
|--------------------------------|-----------|-------|------------|
|                                | 70409     | 70410 | 70411      |
| <b>Part No.</b>                |           |       |            |
| <b>Tests</b>                   |           |       |            |
| Manual Test                    | •         | •     | •          |
| 20dB Auto Test                 | •         | •     | •          |
| 20dB Random Auto Test          |           | •     | •          |
| xxdB Auto Test                 |           | •     | •          |
| xxdB Random Auto Test          |           | •     | •          |
| Hughson Westlake Test          |           | •     | •          |
| Ear Protector Test             |           | •     | •          |
| MCL & UCL Threshold Tests      |           |       | •          |
| Bone Conduction Tests          |           |       | •          |
| SISI Test                      |           |       | •          |
| Weber Test                     |           |       | •          |
| Masking NB                     |           |       | •          |
| Decrease 10dB Random Auto Test |           |       | •          |
| Decrease 5dB Random Auto Test  |           |       | •          |





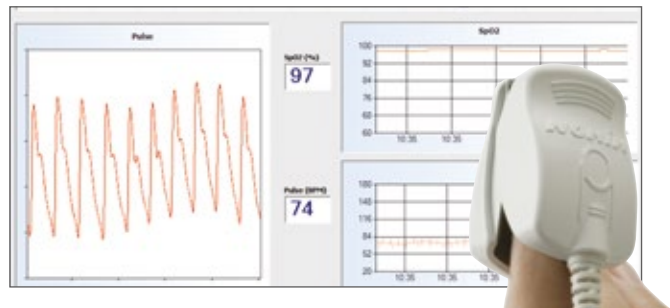
## Spirotrac Reports

- Comprehensive test reports available for all test types
- Trend reports available for spirometry and NIBP
- Custom report service available



## Pulse Oximetry

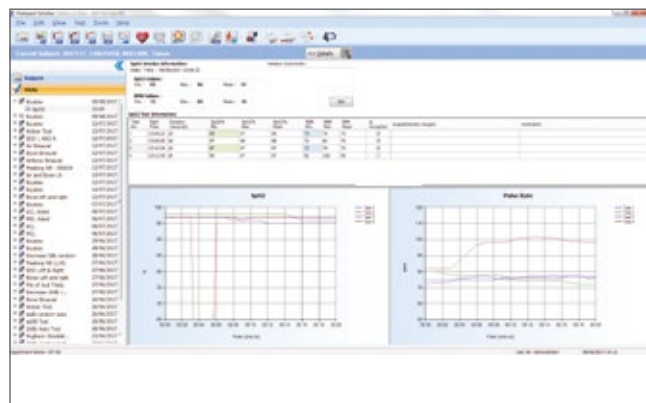
Simply connect the SpO<sub>2</sub> sensor into your PC to deliver accurate and high quality oximetry. This calculates, trends and reports all primary parameters including minimum, maximum and median SpO<sub>2</sub>/pulse rate. Spot check or longer duration recordings are available.



## 6 Minute Walk Test

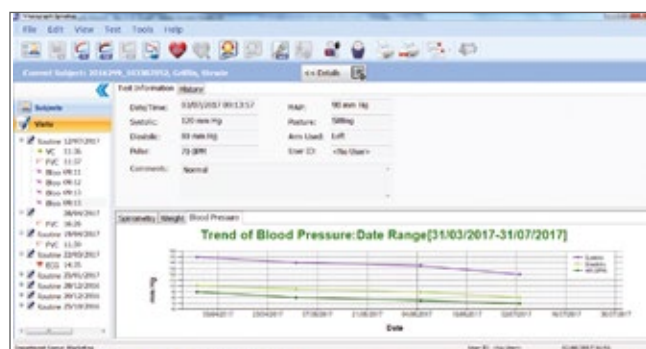
Spirometry and pulse oximetry data is automatically or manually integrated using the ATS/ERS 6 Minute Walk Test (6MWT) protocol.

- 6MWT Wizard guides you through the test
- The BODE\* Index (\*Body Mass Index, Obstructive Index, Dyspnoea Score, Exercise Tolerance) predicts COPD mortality based on FEV<sub>1</sub>, 6MWT, BMI, MMRC and BORG Scale



## Non-Invasive Blood Pressure (NIBP)

- Dedicated manual entry data screen in Spirotrac
- Trend data automatically processed and displayed



## Technical Specifications

**Product:** COMPACT

**Model No:** 6600

**Net Size:** 375mm x 235mm x 110mm

**Gross Size:** 461mm x 297mm x 226mm

**Weight:** Net: 2.5kg; Gross: 4.3kg

**Recommended Operating Temperature Range:**

17– 37°C (ISO 26782 limits), Design limits 10– 40°C

**Data Storage:** Stores up to 10,000 subjects

**Input Voltage/Frequency:** 110-250V AC 50/60Hz

**PowerSAFE Output Voltage:** 19V DC

**Storage Humidity:** 10% - 95%

**Storage Temperature:** 0 - 50°C

**Class:** IIa MDD

**Communications:** USB 2.0 x 6, Serial RS232 x 2, Ethernet x2

**DVI Video Display Interface**

**Electrical Safety Standards:** EN 60601 (IEC 60601) (applicable to electrical devices)

**Medical Safety Standard:** Medical Devices Directive 2007/47/EC

**Designed and Manufactured Under:**

ISO 13485:2012, FDA 21 CFR 820, CDR SOR 98/282 and JPAL

**Performance Standards (meets or exceeds):**

ISO 23747:2009, ISO 26782:2009, ATS/ERS 2005

Vitalograph is a world leading provider of outstanding quality cardio-respiratory diagnostic devices, clinical trial services, audiometers and medical equipment servicing. With a pioneering heritage of excellence spanning half a century Vitalograph continues to make valuable contributions to effective medical care and enhanced quality of life.

## Ordering Info

|              |  |
|--------------|--|
| <b>67800</b> | 6600 Compact Spirometer  |
| <b>70201</b> | 7000 Spirotrac Networking Licence  |
| <b>70454</b> | Spirotrac Software Developers' Kit   |
| <b>89001</b> | Vitalink Middleware Licence (required for data exchange with EMIS™, Vision™ and SystmOne™ EMR systems) |

**NOTE:** Compact Diagnostic Medical Workstation includes software modules for Spirometry, Resting 12-lead ECG, Pulse Oximetry, 6MWT, Audiometry, NIBP (manual data entry) and Bronchial Challenge Testing (Mannitol and Methacholine)

### Compatible Devices & Hardware:

|              |                                 |
|--------------|---------------------------------|
| <b>41300</b> | BT12 Resting 12-lead ECG        |
| <b>70400</b> | Pulse Oximetry Finger Probe USB |
| <b>70409</b> | Screening Audiometer – Standard |
| <b>70410</b> | Screening Audiometer – Advanced |
| <b>70411</b> | Diagnostic Audiometer           |

### Vitalograph devices that communicate with Compact:

|              |                                      |
|--------------|--------------------------------------|
| <b>79400</b> | 2120 Handheld In2itive               |
| <b>40400</b> | 4000 Respiratory Monitor asma-1™ USB |
| <b>40300</b> | 4000 Respiratory Monitor asma-1™ BT  |

### Consumables and Accessories:

|              |  |
|--------------|--|
| <b>41301</b> | ECG Electrodes disposable (30)         |
| <b>28350</b> | 2820 BVF™ Bacterial/Viral Filters (50) |
| <b>20929</b> | 2024 Eco SafeTway® mouthpieces (200)   |
| <b>20242</b> | 2024 SafeTway mouthpieces (200)        |
| <b>20980</b> | 2024 Mini SafeTway mouthpieces (50)    |
| <b>20303</b> | 2030 Noseclip disposable (200)         |
| <b>36020</b> | 2040 Precision Syringe 3-L             |



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