

# TELEHEALTH SOLUTIONS

Lung Function Monitoring & Testing  
Anytime, Anywhere



A Global Leader in Respiratory Diagnostics

# Telehealth Solutions

**Fast, Accurate & Simple  
Full Feature Spirometry in the Palm of Your Hand**

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## Remote Patient Monitoring Devices

Fast and accurate telehealth solution devices including respiratory monitors, a full feature Vitalograph micro™ spirometer and a 12-lead resting ECG.

Ideal for home based or in-clinic monitoring of chronic conditions such as asthma, COPD, cystic fibrosis, ILD, post-transplant patients or any other respiratory monitoring.

- **Respiratory monitoring, spirometry and ECG devices.**
- **Ease of integration, immediate results.**
- **Supporting Telemedicine & Telehealth providers' digital healthcare platforms.**

Visit the [Telehealth section of our website](#) for product technical specification, product demo videos and more information.

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## API Developers' Kits

Comprehensive API developers' kits are available enabling third-party applications to interface with Vitalograph devices.

- **Dual mode Bluetooth® and USB models are available.**
- **Compatible with Apple iOS, Android™, Qualcomm 2Net™ Apps and Windows® Applications.**
- **Reduces the regulatory burden on mobile Apps.**
- **Dedicated technical support team.**

Do you want more information on Software Development Kits, interface development partnerships, or licensing and marketing? Speak to one of our team to learn more. Contact details are listed at the end of this brochure or go to [Telehealth section of our website](#).

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## Vitalograph Makes Remote Patient Monitoring Easier Than Ever

For over two decades, Vitalograph has been providing products and services for remote cardio-respiratory monitoring in clinical drug trials. We have extensive experience in supporting remote monitoring programmes for asthma, COPD, cystic fibrosis, ILD, sarcoidosis, post-transplant patients and other respiratory diseases.

Vitalograph is the ideal partner for your remote patient telemonitoring solution.

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# Comparison Table

	micro BT Smart	lung monitor BT Smart	lung monitor USB	lung monitor	asma-1
<b>Tests</b>					
VC	✓	✗	✗	✗	✗
FVC	✓	FEV*	✗	✗	✗
FEV1	✓	✓	✓	✓	✓
FEV6	✓	✓	✓	✓	✗
FEV1/FEV6	✓	✓	✓	✓	✗
FEV1/FVC	✓	FEV1/FEV*	✗	✗	✗
FEV 25-75	✓	✓	✓	✗	✗
FEV 0.5	✓	✗	✗	✗	✗
FEV 0.75	✓	✓	✗	✗	✗
PEF	✓	✓	✗	✗	✓
Post BD	✓	✗	✗	✗	✗
Total Parameters Available	8 (of 48)	8	4	3	2
<b>Quality Measures</b>					
Predicted Values	✓	✗	✗	✗	✗
Personal Best Zones	✗	✓	✓	✓	✓
Quality Prompts	✓	✓	✓	✓	✓
GLI	✓	✗	✗	✗	✗
<b>Data Exchange</b>					
Software Developers Kit (SDK) Connectivity	✓	✓	✓	✗	✗
<b>General Features</b>					
Touch Screen	✓	✗	✗	✗	✗
Colour Display	✓	✗	✗	✗	✗
Internal Battery	✓	✓	✓	✓	✓
Memory	750	600	200	200	600
<b>SDK Data Exchange Compatibility</b>					
Android™	✓	✓	✗	✗	✗
Windows®	✓	✓	✓	✗	✗
iOS	✓	✓	✗	✗	✗

\*FEV – Forced Expiratory Volume (up to 10 seconds). May be used as a surrogate for FVC.

# micro BT Smart™ Handheld Spirometer

**Fast, Accurate & Simple  
Full Feature Spirometry in the Palm of Your Hand**

The micro BT Smart is a portable, handheld spirometer allowing easy integration to your telehealth solution.



## Full Spirometry Solution for Remote Testing

- For chronic conditions such as asthma, COPD, cystic fibrosis, ILD, post-transplant patients or any other respiratory monitoring.
- Robust, accurate flow measuring technology.
- Store & forward data.
- FDA Cleared & CE marked.
- Reduces the regulatory burden on mobile Apps.

## Ease of Integration, Immediate Results

- Captures & transmits respiratory data to healthcare professionals directly from devices operating Apple iOS, Android™, Qualcomm 2Net™ Apps and Windows® Applications via Bluetooth®. The device includes dual mode Bluetooth for wide-ranging compatibility.
- Lightweight and powered by USB or batteries, it features an intuitive menu and colour touch screen with test results and graphs displayed on the device for instant review.

## Supporting Telemedicine & Telehealth Providers' Digital Healthcare Platforms

- API software developers' kit is available to providers of telehealth and e-Diary solutions for ease of integration.
- Integration support via dedicated support team.
- Clinical expertise available to support developers.

## Vitalograph BVF™ Bacterial Viral Filters

### Simple, Validated Hygiene System

Keeping the device clean is easy and inexpensive using Vitalograph Bacterial Viral Filters (BVF). When conducting lung function testing during the COVID-19 pandemic and beyond, the ERS recommends using a high specification disposable in-line bacterial viral filter (with minimum proven efficiency for high expiratory flow of 600 to 700 L/min). Vitalograph's BVFs meet these standards, are independently tested, and proven to have >99.999% effectiveness for cross-infection protection.



# lung monitor BT Smart Bluetooth Lung Function Monitor

## Fast, Accurate & Simple Lung Function Monitoring in the Palm of Your Hand

Ideal for remote or in-clinic monitoring for primary or secondary care, or occupational health.



## Handheld Device for Remote Lung Function Monitoring

- For chronic conditions such as asthma, COPD, cystic fibrosis, ILD, post-transplant patients or any other respiratory monitoring.

## Ease of Integration, Immediate Results

- Captures & transmits respiratory data to healthcare professionals directly from devices operating Apple iOS, Android™, Qualcomm 2Net™ Apps and Windows® Applications via Bluetooth®.
- The device includes dual mode Bluetooth for wide-ranging compatibility.

## Supporting Telemedicine & Telehealth Providers' Digital Healthcare Platforms

- API software developers' kit is available to providers of telehealth and e-Diary solutions for ease of integration.
- Integration support via dedicated support team.
- Clinical expertise available to support developers.

## Low Cost Lung Function Monitoring

- For multi patient use, keeping the device clean is easy and inexpensive using Vitalograph BVFs, a simple validated hygiene system.

## lung monitor USB

### Lung Function Monitor with USB Connectivity

Ideal for remote or in-clinic monitoring for primary, secondary care, or occupational health. Handheld device for remote Lung Function monitoring for chronic respiratory conditions such as COPD, cystic fibrosis, & post-transplant patients.

#### Ease of Integration, Immediate Results

- Capture data & produce PDF reports via Vitalograph Reports Software (included).
- Links easily to Windows® based PC platforms via USB.
- API software developers' Kit Available.

#### Supporting Telemedicine & Telehealth providers' digital healthcare platforms.

API software developers' kit is available to providers of telehealth and e-Diary solutions for ease of integration. Integration support via dedicated technical support team.



## lung monitor

### Lung Function Monitor

Ideal for remote or in-clinic monitoring for primary or secondary care, or occupational health.

#### Fast, Accurate & Immediate Results

Handheld device for remote lung function monitoring for chronic respiratory conditions such as COPD, cystic fibrosis, & post-transplant patients.

#### Cost effective Lung Function Monitoring



## asma-1

### Electronic Asthma Monitor

**Handheld device for remote Asthma patient monitoring.** Ideal for monitoring PEF and FEV1 at home, in-clinic, in primary or secondary care, or occupational health.

#### Fast, Accurate & Immediate Results

The Vitalograph asma-1™ is a simple home use electronic respiratory monitor. It offers greater accuracy than mechanical peak flow meters and eliminates the need for paper record cards.

#### Cost Effective Electronic Monitoring



# BT12 12-lead ECG

## Fast, Accurate 12-Lead ECG Waveform Data Capture for Easy Integration to Your Telehealth Solution.

The Vitalograph BT12 ECG rapidly turns your mobile phone, tablet, or PC into a powerful electrocardiograph.

- Lightweight compact design, ideal for clinic or mobile ECG testing.
- Wireless transmission of the ECG trace with no leads to trip over, providing excellent signal quality, less artefact and ensuring minimal patient discomfort.
- Captures and transmits ECG waveform data directly from devices operating Android™ Apps, and Windows® Applications via Bluetooth®.
- API software developers' kit is available to providers of telehealth solutions for ease of integration.

## Features and Benefits

- **Stream live ECG data via Bluetooth** to your telehealth solution.
- **Instant visual feedback with the built-in display** indicating heart rate, electrode contact problems, battery status and communication status.
- **Automatic pacemaker detection.**
- **Automatic calculation of heart rate** with acoustic and visual signal to aid assessment.
- **Bluetooth®** serial transmission protocol with a 10 metre range.
- Runs on 2 x AA batteries offering **portability** and reduced artefact from electrical power sources.
- **FDA Cleared & CE marked.**
- Can be **comfortably worn** on the subject's body using the integrated fastening clip.

## BT12 ECG comes with

- 12-Lead ECG Measuring Unit
- Electrode Cables
- Batteries
- Bluetooth® Dongle



# Developers' Kit

## Device Application Programming Interface (API) Developers' Kit

A comprehensive API developers' kit for simple and fast integration for Telehealth providers, enabling third-party applications to interface with Vitalograph devices. Designed for providers of e-Diary, home hub and telemedicine solutions, the API Developers' Kit includes license agreement, software code, detailed device API and access to the R&D Technical Support Hotline.

## Micro Software Developers' Kit (SDK)

Get the tools to build your own application on Windows®, iOS and Android™ platforms to integrate with the Vitalograph micro BT Smart, a portable, handheld spirometer.

## 4000 Series Software Developers' Kit (SDK)

Get the tools to build your own application on Windows®, iOS and Android™ platforms to integrate with the Vitalograph lung-monitor BT Smart. This SDK also caters for Windows® based applications that use the lung-monitor USB for a direct cable connection to the device.

## BT12 Software Developers' Kit (SDK)

Get the tools to build your own application on Windows® and Android™ platforms to integrate with the Vitalograph BT12 12-lead ECG.

**Do you want more information on Software Developers' Kits, interface development partnerships, or licensing and marketing? Speak to one of our team to learn more.**

**Contact details are listed below or go to the [Telehealth section of our website](#).**

## our services cover the globe

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