



A new era in **Cardiac Output** monitoring
From the lab to the clinic

PhysioFlow® Lab1™ Parameters

- Stroke Volume/Index
- Cardiac Output/Index
- Early Diastolic Filling Ratio (Preload Index)
- Systemic Vascular Resistance (Afterload)
- Left Cardiac Work Index (surrogate of MVO₂)
- Contractility Index
- Ventricular Ejection Time
- Ejection Fraction (est.)/End Diastolic Volume (est.)

For Multiple Applications

- Cardiology/Heart failure
- Internal Medicine/Hypertension
- Critical Care/Anaesthesia
- Emergency
- Pulmonology/COPD
- Hemodialysis
- Obstetrics
- Physiology/Sports Medicine
- Research and Clinical Studies

...and enhanced diagnosis based on analysis of signal abnormalities



Routine hemodynamic
evaluations



Intensive care monitoring



Assessment of performance
limiting factors

Cardiac Output monitoring at rest and during exercise

The well established PhysioFlow® **Signal Morphology-based Impedance Cardiography** (SM-ICG™) technology has been fully validated in the last ten years, resulting in more than 40 international peer-reviewed publications and a market presence in over 35 countries.

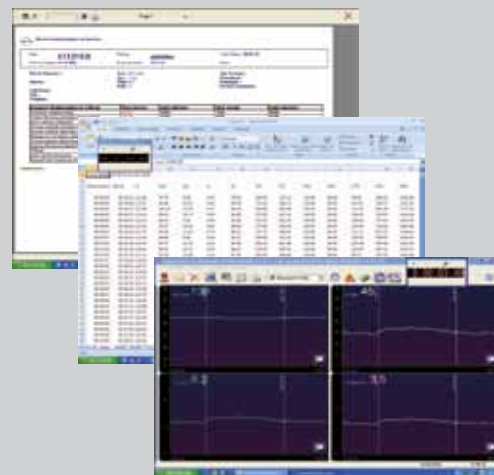
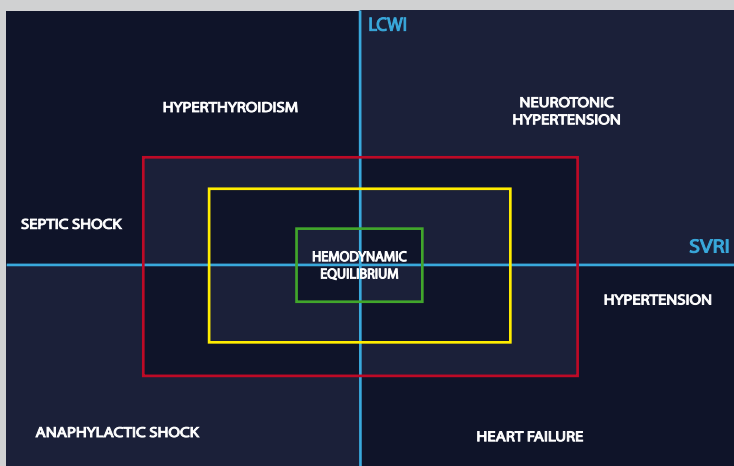
Its accuracy is **comparable to invasive techniques** and its clinical reproducibility and sensitivity are unsurpassed. PhysioFlow® pushes the limits of noninvasive cardiac output monitoring in general and thoracic electrical bioimpedance in particular by broadening applications where continuous noninvasive cardiac output measurements are made possible: **exercise at all levels, obesity, thoracic fluid overload, COPD, low cardiac outputs etc.** The PhysioFlow® core technology has been approved in many countries, including Europe, Japan, Canada, and recently by the US Food and Drug Administration.

- Signal Morphology-Impedance Cardiography (SM-ICG™): Accurate, Reproducible and Sensitive
- Noninvasive, cost effective and easy to use
- Virtually all patients can be effectively measured
- HD-Z™ high performance signal stabilization filter

PhysioFlow® Lab1™ Features:

- Dimensions: 343 x 260 x 82 mm
- Weight: 4.2 kg
- 6 pre-gelled thoracic surface electrodes
- Connections: Patient cable PF092 (length 4 meters), RS232 serial link, Power cable (220V-50Hz, 110V-60Hz), Analogue output
- Options: Optical cable serial link (or USB adaptor), Lengthened patient cable (10 meters)
- OS: Windows™XP SP2 or later, Windows™7 or later,
- RAM: 512 MB, Hard Drive 100 MB free, 14 inch X VGA screen, processor 1.4 GHz X86
- Any MS-Windows™ compatible printer

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A breakthrough concept: the Hemodynamic Cross

A graphic representation of the Vascular Resistance/Cardiac Work equilibrium, for more accurate and faster diagnosis and assessment of the hemodynamic impact of a treatment

Contact:

Manatec Biomedical
44, rue de Laborde
75008 Paris
FRANCE

info@physioflow.com
physioflow@yahoo.com
Tel: + 33 9 65 03 24 01
Fax: + 33 1 30 74 46 48