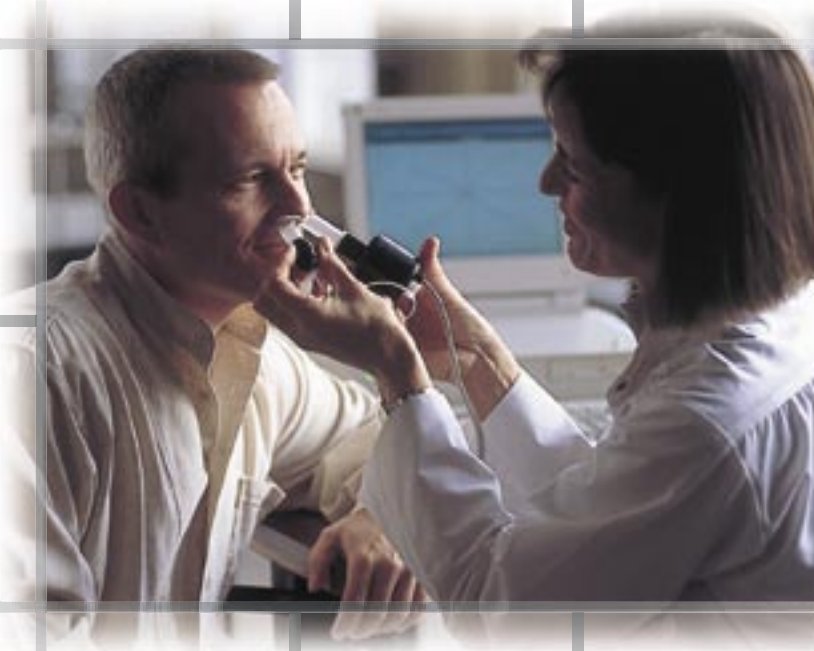


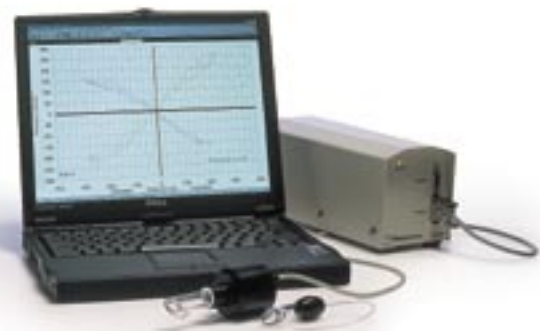
**RhinoStream**

- Efficient Dynamic Rhinomanometry



# Rhinomanometry *precision*

Rhinomanometry is frequently used alone, or as a supplement to acoustic rhinometry. It gives you a dynamic assessment of nasal patency by measuring trans-nasal pressure and flow during respiration. By providing a display of the resistance to airflow through the nostrils, RhinoStream gives you a better understanding of the patient's subjective feeling of nasal patency. Recordings are detected by high quality transducers, all of which are centrally integrated in the manometer probe in order to simplify calibration, ensure stable measurements, and eliminate time displacement errors.



**leading diagnostic solutions**



# The RhinoStream *Module*

- Efficient Rhinomanometry

## Method

Rhinomanometry is frequently used alone, or as a supplement to acoustic rhinometry. It gives you a dynamic assessment of nasal patency by measuring trans-nasal pressure and flow during respiration. By providing a display of the resistance to airflow through the nostrils, RhinoStream gives you a better understanding of the patient's subjective feeling of nasal patency.

The RhinoStream system offers one of the most compact electronic transducer techniques available today. Recordings are detected by high quality transducers, all of which are centrally integrated in the manometer probe in order to simplify calibration, ensure stable measurements, and eliminate time displacement errors.

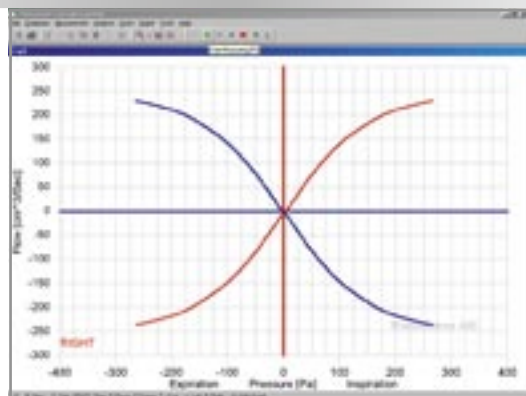
RhinoStream is an excellent, non-invasive tool that offers a high degree of flexibility. You can assess patients according to standard clinical practice by attaching the probe to a mask, or screen patients by attaching the probe to the nose adapters. Rhinomanometry may be superior to acoustics rhinometry in cases of severe nasal obstructions.

*The nose adaptors, tailored to fit right and left nostrils.*



## With RhinoStream you can:

- Conduct standard clinical measurements using the mask
- Objectively assess nasal patency before and after decongestion
- Explore the aerodynamic consequences of neoplasms, polyps, and other space-occupying lesions
- Perform pre- and post-operative assessments
- Make dynamic pressure and flow recordings
- Perform fast, efficient screenings using the special nose adapters
- Document clinical assessments



## Flexible, Accurate Data Analysis

The RhinoStream module is fast and effective. It produces a clear image of nasal resistance to air flow and the nasal passage, and is easily set up for anterior/posterior modes.

As with other Interacoustics products, it is easy to save all data. Additionally, the software gives you the opportunity to select different types of measurements according to the following current industry standards:

- The International Standardization Committee's Recommendation
- The Japanese Standard



## Patient Goup

Patients with respiratory obstructions in the nasal passages.

## Easy-to-use Hardware

### The Hardware - SRE2000

The SRE2000 basic hardware platform is a digital signal-processing unit that can be connected to any personal computer via serial or USB connection.

### Software Installation

Built-in system calibration makes RhinoStream very easy to install.

### The RhinoStream Probe

RhinoStream ensures more reliable measurements due to the superior probe construction. The system is also very easy to clean and maintain. The washable nylon mesh in the manometer probe minimizes the build-up of soil, ensuring valid measurements for extensive periods of time without the need for re-calibration.

### The Standard Nose Adapters

The standard nose adapters are tailored to fit right and left nostrils, with a pleasant, non-slip surface that is anatomically designed to offer maximum patient comfort and a perfect fit. These units can also be used with the RhinoScan module.



*Besides the standard manometer probe two silicone masks are also included with the RhinoStream module.*

# General Technical Specifications

## Approvals:

CE approved 93/42/EEC.  
510(K) K000406.  
UL E179307.

## RhinoStream Description:

Provides manometry measurements according to International Standards.

It provides a dynamic assessment of nasal patency by measuring trans-nasal pressure and flow during respiration. By providing a display of the resistance to airflow through the nostrils, RhinoStream gives you a better understanding of the patient's subjective feeling of nasal patency.

- Real time measurement and live display of flow versus pressure.
  - Supports anterior as well as posterior measurements.
  - Can be used with mask as well as with easy to use nose adapters.
  - Advanced patient database with fast searching, grouping, filtering and sorting facilities.
  - Export/import of measurements for easy exchange of results with colleagues.
  - Flexible built-in-report generator for quick documentation of obtained results.
- Used alone or as supplement to acoustic rhinometry.

## Patient Group:

Patients with respiratory obstructions in the nasal passage.

## Measurement Duration:

Measurement of right and left nostril can be performed in one minute.

## Specific Indications:

- Explore the aerodynamic consequences of neoplasms, polyps and other space-occupying lesions.
- Perform pre- and post operative assessments.
- Make dynamic pressure and flow recordings.
- Objectively assess nasal patency before and after decongestion.

## Method:

True flow and pressure measurements performed by means of high precision pressure transducers.

## Measuring Probe:

Lightweight hand-held Manometer Probe with easy-to-fit mask or easy-to-use anatomical nose adapters.

Length: 8 cm / 3.2"

Weight: 230g / 8.2 ounces.

Patient Age: > 8 years.

## Standard Clinical Measurement:

Clinical measurements can be made with the silicone mask connected to the probe with a strap.

## Fast & Efficient Screening:

Anatomical disposable adult nose adapters, made of polystyrene can be inserted into the probe house. Designed to fit left and right nostril. Available in medium and large.

## Hardware Platform:

SRE2000 - a compact basic digital signal processing unit, which can be connected either serially or via USB to your own external computer.

## Operating System:

SRE2000: Windows® 98/ME/NT4/2000/XP.

## Hardware and Software Upgrades:

The RhinoStream software can be upgraded to support future Windows® operating system versions and hardware platforms.

## Database Facilities:

- Individual patient database function for clinical use.
- Relational database.
- Database system: Paradox.
- Database engine: BDE 5.1.
- Capacity: Depends on hard disk.

## Import / Export Functions:

- All measurements, incl. patient / diagnosis
- Export to ASCII text for import: to SPSS, Excel etc.

## Hard Copy Output:

Results can be printed in colour on all Windows®-based printers. Style and appearance is configurable.

## For US Customers:

### Caution:

*Federal law restricts this device to sale by the order of a physician.*

## Included Parts:

RhinoStream software CD  
Standard Manometer Probe  
2 silicone masks and head strap  
10 sets of disposable nose adapters in two sizes  
RhinoStream user manual  
Certificate with software license code(s)  
Manometer Pressure Tubes, 5 pcs.  
Nose Plaster, 25 pcs.  
Seal Gel

## Optional Parts:

Probe / Extra Probe for RhinoStream  
Nose Adapter Holder  
25 pcs Pressure Tubes

### Silicone Mask/ Head Strap

Mask (small)  
Mask (medium/large)  
Head Strap Holder

### Standard Nose Adapters

100 sets (medium)  
100 sets (large)  
100 sets (medium & large)

Modules available for the SRE2000:

- RhinoScan
- RhinoStream

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