



medisoft®
CARDIO-RESPIRATORY INSTRUMENTATION



HypAir

PFT unit for diffusion and lung volumes

www.medisoft.be

HypAir

Complete, modular pulmonary function testing

The highest standard in open-circuit spirometry, lung volumes, diffusion, respiratory mechanics and more... PFT in one station !

The ideal device for accurate spirometry, lung volumes and diffusion measurements, for children and adults.

- **Compact system** on trolley or table-top configuration.
- **High precision**, reliable, stable gold standard Lilly heated pneumotachograph with no moving parts.
- **Expair software**, with complete operator and patient guidance.
- **Low cost** of operation, low maintenance.
- **Any option available** to start with what is needed and upgrade over time.



Ideal for : respiratory care departments, clinical labs, all pulmonary diagnostics, respiratory allergy assessment, pediatrics, physiology, research, occupational

Complete pulmonary function testing with one device.
 All measurement programs in the Medisoft HypAir are controlled by the powerful Expair software featuring the following testing options.



Complete basic Spirometry:

Forced Vital Capacity, Slow Vital Capacity, Maximum Voluntary Ventilation and Minute Tidal Ventilation including bronchochallenge testing software.

Choice of 2 Lung Volumes methods (FRC, VC, IC, ERV, RV, TLC) :

UNIQUE : Medisoft, the only manufacturer featuring a choice of 2 lung volumes methods.

- **Multi Breath N2 washout / LCI** (Lung Clearance Index) including closing volume (N2 Slope).
- **He Dilution**, standard method by closed circuit He dilution technique with O2 compensation and CO2 absorption with re-breathing bag.

Choice of 6 DLCO options :

UNIQUE : Medisoft, the only manufacturer featuring a choice of 6 diffusion methods :

- **Single Breath** with Helium trace gas (He).
- **Rapid gas analysis diffusion** (RTD) test, Single Breath using Helium trace gas (He) or Methane trace gas (CH4).
- **Re-breathing diffusion** with Helium trace gas (He) and using inspiratory bag.
- **Intra Breath diffusion** with Cardiac Output (Qc).
- **DLCO-NO** dual diffusion method (Trace gas He) (**Exclusive**) with membrane diffusion (DM) and Capillary blood volume (Vc).
- **Steady State real time diffusion** TICO ss (**Exclusive**).

Extra options to complete your pulmonary diagnostic testing :

Bronchoprovocation and special resistance testing :

- **PROVO4 Provocation System** for automated, software controlled, accurate and safe bronchial provocation testing.
- **RINT** : resistance measurement using interrupter technique, ideal for children.
- **NEP** : this measurement (negative expiratory pressure) is an alternative method to detect expiratory flow limitation, which does not require performance of forced expiratory efforts on the part of the patient, or a body plethysmography test.

Can be combined with the following devices:

ECG, FeNO+, FOT Resmon Pro, BodyBox, SpiroAir, Micro 5000, Micro 6000, Ergocard Professional, Ergocard Clinical.

Respiratory Mechanics testing :

- **MIP – MEP** : maximum inspiratory and expiratory pressure as an indicator of respiratory muscle strength.
- **SNIP** : measurement of the maximal nasal inspiratory pressure using a nasal cannula. A non-invasive indicator of diaphragmatic muscle fatigue.
- **P01** : inspiratory occlusion pressure at 0.1 seconds, for respiratory muscle drive evaluation, even with CO2 stimulation option.
- **Static and dynamic compliance and resistance** : measured by intra-oesophageal balloon catheters, with transpulmonary pressure option.

ExpAir, the Medisoft software

The most intuitive, user-friendly and complete software package available today, for all Medisoft devices.

- Advanced, data array storage allowing re-evaluation and calculation of test parameters, with export and HL7 messaging capabilities for research and integrating to Hospital systems.
- Trend tabular data reporting of any parameter.
- Interpretation function (GLi 2012 guidelines).
- Comments and offline input.
- Online data transfer.
- Report designer.
- Predicted value editor, new interpretation algorithm based on LLN, ULN, Z-score and percentile.
- Choice of languages and units of measurement.
- Bronchial challenge testing software included.
- Manual entry of blood gases.
- Full calculation function: display of calculation points with manual correction capability.
- Quality control automated software, diagnostic functions and full program control.
- Remote assistance using Teamviewer™.

Intended users : Medical diagnostic device, Class IIa, should only be used by doctors, physiologists, trained respiratory technicians/nurses or under supervision of such. Data obtained must be interpreted and reported by trained medical staff only.



Technical specifications :

Physical Dimensions	Module	Trolley
(H x W x D) cm	13,7 x 40 x 34	Standing - 140 x 73 x 55 Seated - 120 x 73 x 55
Weight	± 12 Kg	± 35 Kg

Power requirements :	230 VAC 50 Hz or 115 VAC 60 Hz
Power consumption :	± 100 VA (module)
Warmup time :	20 min.
Meets all electrical safety requirements :	IEC60601-1
Classification :	IIa
CE MARK :	CE 0029
MDD :	93/42/EC and harmonized standards
Computer interfacing :	Windows 7 Pro / Ultimate/ 8.0 / 8.1™ Serial interface RS232 / USB 2.0

Ambient conditions for use

Temperature :	10 - 35°C
Relative humidity :	25 to 85 % (non condensed)
Barometric pressure :	No restriction



A MGC Diagnostics subsidiary

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