HypAir PFS

Complete Pulmonary Function Testing

medisoft®
CARDIO-RESPIRATORY INSTRUMENTATION



PFT UNIT

SPIROMETRY, LUNG VOLUMES AND DIFFUSION

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.
- Expair software, with complete operator and patient guidance.
- Start with any available option and upgrade over time
- Low cost of operation, low maintenance.





FEATURING PREVENT® FLOW SENSOR TECHNOLOGY

The small, durable and lightweight preVent® flow sensor is used on all systems.

- Saves time between patients with no warm-up or recalibration needed between changes and provides maximum infection control
- No moving parts or electronics

COMPLETE PULMONARY FUNCTION TESTING **WITH ONE DEVICE.**

All measurement programs in the HypAir PFS 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 FRC methods:

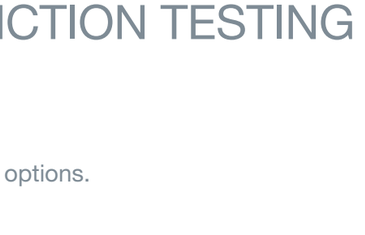
UNIQUE: the only manufacturer featuring a choice of 2 lung volumes methods:
- FRC method by N2 washout, LCI (Lung Clearance Index) and CV (Closing Volume)
- FRC method by Helium dilution

Choice of 6 DLCO Options:

UNIQUE: the only manufacturer featuring a choice of 6 diffusion methods to complete the system:

- Single Breath with Helium trace gas He
- Rapid gas analysis Diffusion test, Single Breath using Helium trace gas (He)
- Rapid gas analysis Diffusion test, Single Breath using Methane trace gas (CH4)
- Intra Breath diffusion with Cardiac Output (Qc)
- DLCO-NO dual diffusion method (Trace gas He) **Exclusivity** with membrane diffusion (DM) and Capillary blood volume (Vc).
- Steady State diffusion TlCo ss **Exclusivity**





The preVent® flow sensor (PFS) is based on an **exclusive** design which is small, durable and lightweight. **The preVent® flow sensor** has been validated to meet or exceed the ATS/ERS specifications. It is used worldwide in thousands of labs and provides accurate testing results with safety and infection control in mind.

- No warm-up or recalibration needed between patients.
- Can be verified with 3L cal syringe at any time to comply to standards.
- Practical Snap-in setup.
- No moving parts or electronics.

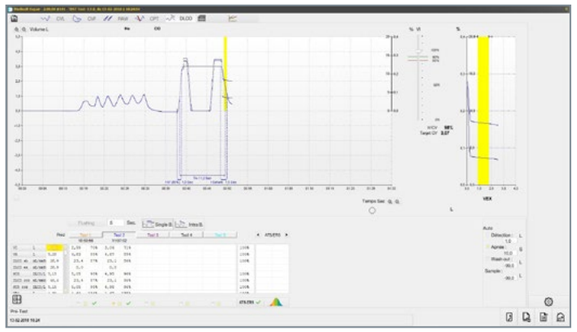
We give you three options for infection control, you make the choice that is right for you!

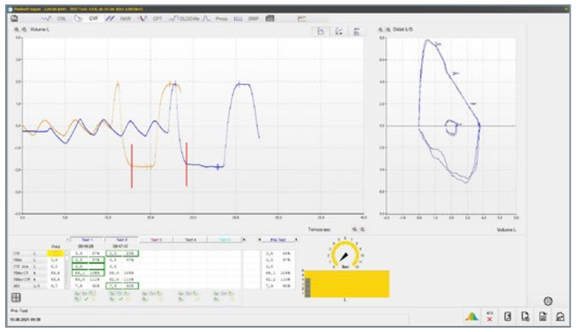
1. **Change:** simply change the filter and keep the same preVent® flow sensor.
2. **Re-Use:** change the flow sensor between patients and replace with disinfected components.
3. **Dispose:** dispose of the flow sensor after each patient.

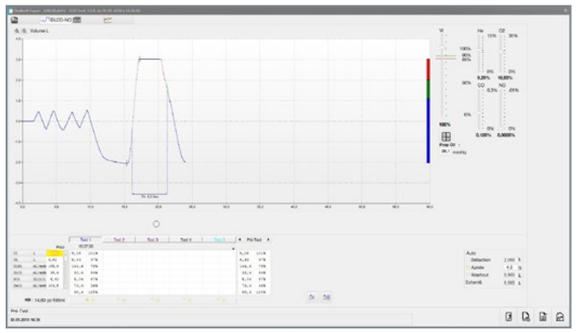
OPTIONS TO COMPLETE YOUR ARRAY OF TESTING CHOICES, FOR ALL YOUR PATIENTS NEEDS.

By adding modules you can perform many more pulmonary diagnostic measurements and integrate them into Expair Database for combining reports, with more tests such as:

- Automated PROVO4, software controlled dosimeter module for accurate, reproducible bronchial challenge testing
- Exhaled Nitric Oxide (FeNO) as a stationary system (FeNO+) for your asthma management and diagnostics
- Cardiopulmonary Exercise Testing module (CPET)
- Respiratory Mechanics modules such as MIP/MEP, SNIP, P.01 (respiratory drive), Negative Expiratory Pressure (NEP)
- Resistance measurement using interrupter technique (Rint)
- Static and dynamic compliance: measured by intra-oesophageal balloon catheters, with transpulmonary pressure option







EXPAIR SOFTWARE

The driving force of the system is **ExpAir** a powerfully intuitive, user-friendly and complete software package. Available for all devices.

- Advanced, powerful database function and electronic storage, full networking, HL7 and MySQL options
- Trend Reporting of any parameter
- New interpretation algorithm based on LLN, ULN, Z-Score and percentile
- Comments and Offline data input such as arterial blood gases
- Online data transfer
- Report designer
- Predicted value editor
- Choice of languages and units of measurement
- Bronchial challenge testing software
- Measurement sequencing configuration
- Full calculation function: display of calculation points with manual correction capability
- Quality control automated software, diagnostic functions and full program control

TECHNICAL SPECIFICATIONS:

Physical Dimensions Module	
(H x W x D)	cm 13,7 x 40 x 34
	inches 5,4 x 15,7 x 13,3
Weight:	12 Kg
	26,5 lbs
Physical Dimensions Trolley	
(H x W x D)	cm 140 x 73 x 55 (standing)
	inches 55 x 28,7 x 21,7
Weight:	35 Kg
	77 lbs
Power supply:	230 VAC 50 Hz or 115 VAC 60 Hz
Power consumption:	100 VA (module)
Warmup time:	20 min.
Meets all electrical safety requirements:	EN60601-1
Classification:	IIa
CE MARK:	CE 1434
MDD:	93/42/EC
	and harmonized standards
Computer interfacing:	Windows 11
	Serial interface RS232 USB 2.0 / 3.0
Ambient conditions for use	
Temperature:	10 - 35°C
Relative humidity:	25 to 85 % (non condensed)
Barometric pressure:	No restriction



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.

Part# 0526HYEN

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