



Helios 401

SPIROMETRY SYSTEM (PFT)



PC BASED SPIROMETER

USB POWERED SYSTEM WITH ADVANCED SOFTWARE

Features-

- USB Powered ergonomic handset
- Detachable and easy to disinfect digital turbine transducer
- Best maneuver selection (Auto / Manual)
- FVC, SVC and MVV tests
- Indian Predicted equations
- Ethnic corrections
- Pediatric Incentives
- Lungs age calculation
- Flow - Volume / Volume - Time graphs
- Pre-Post bronchodilation test
- Trends
- Doctor's Notes
- Auto-Interpretation
- Customized printing options (single and all curves)



Pediatric incentives in the Software motivates the children to perform better maneuver



Helios 401 - Technical Specifications

Spirometer

Flow Range	-10 to +16 litres / sec.
Max Volume	8 litres
Accuracy	±1% (using a standard 3L calibration syringe)
Transducer	Bi-directional Turbine Cartridge
Turbine sensor	Infrared interruption
Flow detection	Volume differential

Measured Parameters

Forced Vital Capacity:

FVC	FEV3	FEV.5/FVC%	FIF50%	FIV.5
FEV1	PIFR	FEV3/FVC%	FIF75%	FIV1
FEV1/FVC%	FEF75-85	FET	FEV.75	FIV3
FEF25-75	FEF.2-1.2	Exp Time	FEV1/FEV6	FIV.5/FIVC
PEFR	FEF25%	Lung Age	FEV.75/FVC	FIV1/FIVC
FVC	FEF50%	FEV6	FEV6/FVC	FIV3/FIVC
FEV.5	FEF75%	FIF25%	FEV.75/FEV6	

Slow Vital Capacity:

SVC,	VE,	Te,	Ti/Ttot,
ERV,	Rf,	VT,	IC
IRV,	Ti,	VT/Ti,	

Maximum Voluntary Ventilation:

MVV,	MVT,	ET/IT
MRI,	ET,	IT,

Predicted Equations

ERS 93, ITS Black, ITS White, Knudson 83, BARCELONA, LAM and Indian Predicted Equations

General

Power Supply	USB powered
Communication Interface	USB
Dimensions	150mm X 35mm X 25mm
Weight	120 gms. approx. (handset only)

Safety & Regulatory

Standards

IEC 60601-1:1990/A1 :1993, IEC 60601-1-2:2001, EN ISO 13485:2003, ISO 14971:2000, EN980:2003

Directives

MDD - 93/42/EEC

EMC - 89/336/EEC

Minimum PC/Laptop Configuration

OS: Windows XP Pro/Windows7 Professional 32bit, Processor: Core2Duo or higher, RAM: 2GB or higher, 40 GB harddisk or higher, CD/DVD Optical Drive, Screen Resolution 1024x768 or higher

Hardware & Accessories

Component	Quantity
Hand Set	01
Turbine Transducer	01
Software CD	01
USB Cable	01
Reusable Mouth Pieces	01
Adult Nose Clip	01
Pediatric Nose Clip	01
Carry Bag	01
User Manual	01

Optional

- Disposable Mouth Pieces
- PC / Laptop
- DeskJet / LaserJet Printer

