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## SpiroTech+ CMSP-02

### Features

- 3.5" Color TFT display with Touch Keypad
- All functions accessible through keypad
- Built in thermal printer
- Storage for 200 patients data
- FVC, SVC and MVV Test
- Auto Interpretation
- Indian predicted equations
- USB Pen Drive Interface for test storage
- Facility to download data to PC
- Small Size light weight and easy to carry
- Mains & battery operated
- Automatic power saving mode

### Specifications

#### Spirometry

Air Flow Range(L/sec)	-8 L/sec to +12 L/sec
Measurement Method	Flow: Mouthpiece Volume: Flow integration
Max Volume Range	5 litres
Measuring Accuracy	±1%
Transducer	Bi-directional Turbine Cartridge
Calibration	Using a 3.0L calibration syringe
Test Performed	FVC, Pre/Post Testing, Flow Volume Loop, MVV, SVC
Predicted Normal	Indian Predicted equations, Barcelona, ECCS/ERS 93, ITS-Black, ITC-White, Knudson 83 LAM
Measurement Time	Up to 30 seconds
Parameter Measured (Computer)	31 FVC, 11-SVC and 6 MVV
Parameter Measured	30 FVC, 11-SVC and 6 MVV

#### Display

Screen Type	Color TFT with Touch keypad
Display Area	3.5 inch wide
Resolution	320x240 Pixels

#### PC Communication

USB Communication	USB 2.0 interface for PC Application
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#### Electrical

Battery	7.4V 2.2Ah Li-ion can give more than 100 Patient recordings on a single charge
Recharge Time	3-4 hours for fully discharged battery
Power Supply	9V, 3A DC Adapter

#### General

Size	216 mm (L) x 147 mm (w) x 61 (H)
Weight	800 gram
Paper	106 mm wide thermal paper in 20mm roll
LED Indicators	Mains connected, low battery, No paper, Hand Set

#### Operating Environment

Temperature	0 to 45°C
Humidity	5 to 95% RH, non- condensing
Storage	-25 to 70° C

#### Technical Specifications

Flow Detection	Volume Differential
Transducer	Bi-directional Turbine Cartridge
Turbine Sensor	Infrared Transmitter/Receiver
Communication	Serial
Power Supply	DC Powered

#### Measured Parameters

##### Forced Vital Capacity:

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

##### Slow Vital Capacity:

SVC	VE	TE	VT/TI
ERV	RF	VT	
IRV	TI		

##### Maximum Voluntary Ventilation:

MVV	TI
MRF	MVT



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**SpiroTech**  
CMSP-01

## Features

- Compact and Portable hardware
- Graphical & tabular Pre/Post Test Comparison
- Predicted equation builder is provided to add/edit the equation and to evaluate the equation
- Facility to search the patient by patient Name, ID, Reference No. and Referring Doctor/ referred by
- Facility to take up to 10 test of a particular patient
- Facility to print the data in different formats as per the user's need
- Facility to generate the PDF files or print formats and can be send through email as well
- Facility to see the FVC Trends on the main screen with the result values

## Specifications

### General

Dimensions (mm)	100 (L) x 60 (W) x 21 (H)
Weight Approx (gm)	< 70 gm
Screen Resolution	1024 x 768 and above

### Electrical

Power Supply	Powered Via USB
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### Measuring Range

Air Flow Range (L/sec)	10 L/sec to 16 L/sec
Max Volume Range	8 liter
Measuring Accuracy	±1%

### Measured Parameters

#### Forced Vital Capacity:

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

#### Slow Vital Capacity:

SVC	VE	TE	MVV	TI
ERV	RF	VT	MRF	MVT
IRV	TI	VT/TI		

#### Maximum Voluntary Ventilation:

### Technical Specifications

Flow Detection	Volume Differential
Transducer	Bi-directional Turbine Cartridge
Turbine Sensor	Infrared Transmitter/Receiver
Interface Port	USB
Power Supply	Powered Via USB

### Operating Environment

Temperature	0 to 45°C
Humidity	5 to 95% RH, non-condensing.
Storage	-25 to 70°C

### Operating Systems

Windows XP with latest service pack installed  
windows7/windows8/windows10

\* Specifications are subject to change without prior notice.



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