

Portable Recording Spirometer



This Spirometer is supplied complete with the spirometer unit, 10 disposable flow tubes, nose clip, one pack of chart paper, power cord and operating manual.

- The latest technology to simplify complex lung function testing.
- High resolution subject incentive screen displays real-time flow volume loops and detailed measurements matrices
- Measures inspiratory and expiratory flows and volumes, Forced Vital Capacity, Slow Vital Capacity, Minute Ventilation, and Maximum Voluntary Ventilation tests (inspiratory/expiratory) and pre/post medication tests with choice of predicted normals
- High resolution printer provides easy-to-read reports within seconds
- Comparison of predicted and actual values
- Data transmission via built-in RS232 interface to PC-based Spirometry Software (optional) for long-term storage, retrieval and trending

Specifications

Measuring:

Flow	0 to ± 14 L/sec
Volume	0 to ± 11 L/sec
Accuracy	$\pm 3\%$ according to ATS tests

Flow Impedance < 0.2 mbar sec/L at 12 L/sec

Measured Values:

FVC	FV _V , FEV _{0.5} [*] , FEV _{1.0} [*] , FEV _{3.0} [*] , FEV _{0.5} /FVC, FEV _{1.0} /FVC, FEV _{3.0} /FVC, FEF _{0.2-1.2} [*] , FEF _{25-75%} [*] , FEF _{75-85%} ^{**} , PEF, MEF _{75%} [*] , MEF _{50%} [*] , MEF _{25%} [*] , FIVC, FIV 1.0, FIV _{1.0} /FVC, FIV _{1.0} /FVC, PIF, MIF _{50%}
SVC	SVC, ERV, IRV, TV,
MV	MV, RR, TV
MVV	MVV, RR, TV

Predicted Equations:

Adults	ECCS, Crapo, Morris, Knudson, Knudson 76, Austria, Berglund, Finnish, Indian, Composite, Polgar
Children	Quanier & Tammeling, Austria, India, Knudson, Knudson 76, Polgar

Display LCD for graphic and alphanumeric; 192 x 64 dots resolution; contrast manually variable from keypad;

Presentation Flow Volume Loop; Flow Time Plot; Measurement Values Table

Environmental Conditions:

Operating Temp.	10° to 40°C (50° to 104°F)
Storage Temp.	-10° to +50°C (14° to +122°F)
Humidity	15 to 95%, non-condensing
Operating Pressure	700 to 1060 hPa

Printer High resolution thermal print head; 8 dots/mm; 25 mm/sec

Paper Thermoreactive, Z-fold, perforations at each page; 90 mm (3.6 in) wide

Dimensions:

Spirometer 6.9 x 29 x 21 cm (2.7 x 11.4 x 8.3 in); 2.9 kg (6.3 lb)

Pneumotachometers:

Reusable	125 x 35 x 28 mm (4.9 x 1.4 x 1.1 in); 160 g (0.34 lb)
Disposable	118 x 36 x 28 mm (4.6 x 1.4 x 1.1 in); 120 g (0.26 lb)

Power, AC 100 to 115 VAC, nominal 115, or 220 to 240 VAC, nominal 220 V, 50/60 Hz; LED indicator for Line or Battery operation, maximum 28 VA consumption

Battery Built-in rechargeable battery and charger; 6 hrs norm. operation; 15 hrs recharge from complete discharge (< 3 hrs to 60% capacity)

Power Universal power supply

Safety:

Standards	RL 93/42/EEC; EN 60601-1:1990; pr EN 1441: 1994; IEC 513:1994
Class	BF according to IEC 601-1
Protection Class	I according to IEC 601-1, VDE, UL and SEV; IIa according to RL 93/42/EEC (medical guideline)
CE Conformity	93/42/EEC

Catalog No. Product

CGS 8267.68	Portable Recording Spirometer
CGS 8268.68	Disposable Flow Tubes, pkg. of 100
CGS 8269.68	Nose Clip
CGS 8270.68	3 Liter Calibration Syringe
CGS 8271.68	Replacement Paper, pkg. of 400 sheets, 10 pkgs.
CGS 8272.68	SEMA Software Base and Spirometry for archiving of test data; permits display of spirometry curves on screen, validation of findings and reports, validation of patient data, recalling possibility for archived recordings, printout of data and curves on Postscript laser printer and export of data.
CGS 8273.68	PC to Spirometer Interface Cable
CGS 8274.68	Spirometer to Modem Cable