



# GIMA

## SPIRODOC SPIROMETER + OXIMETER + WINSPIRO PRO SOFTWARE

**Code:** 33534  
**Category:** Spirometers  
**Unit of sale:** 1 pc.  
**Minimum order:** 1  
**Type:** Medical device  
**Class:** II A  
**NSIS:** 2494319  
**CND:** Z12150102  
**EAN13:** 8023279335347



**Description:** One touch laboratory for respiratory analysis suitable for professional and personal use.

### Complete spirometer ATS/ERS compliant

Specialist-level analysis, screening and Home-care monitoring. It has been developed with various operation modes: “advanced” parameters for the specialist, “reduced” set of parameters for screening as well as a “simplified” version for Home-care operation. FVC, VC, IVC, MVV, PRE-POST. Precise spirometry interpretation including post bronchodilator. All tests are automatically memorized. Automatic BTPS conversion. Memory capacity: 10.000 tests. Wide selection of predicted values.

### Intelligent pulse oximeter with on-screen results

Simple, clear SpO<sub>2</sub> and Pulse Rate measurements with plethysmographic curve. During the single six-minute walk test (6 MWT), Spirodoc® estimates the level of oxygen therapy required by the patient. Spirodoc® carries out sleep desaturation studies and memorizes events as well as body position.

### 3D Accelerometer with motion analysis

Spirodoc® is the first 3D Oximeter® incorporating a triaxial motion sensor to correlate the saturation level (%SpO<sub>2</sub>) with physical activity (walk counter, movement analysis and VMU).

### Home-care symptoms diary

Fast on-screen symptoms entry. Touch screen with settable questions and automatic answer recording for homecare patient use (eDiary).

### High performance PC software for spirometry and oximetry

All tests memorized in Spirodoc® are automatically downloaded into WinspiroPRO and a patient data card is created with a preview of the spirometry curve. WinspiroPRO can easily be connected to a database, EPR, hospital or occupational health system. This software also gives trend graphs of any parameter. All stored tests and curves of every patient can be reviewed on a single page and the results, including oximetry tests, can be compared.

### Supplied with reusable turbine.

Multilanguage software: GB, FR, IT, ES, DE, PT, PL, NL SE, CZ, LV, TR, RU, CN, JP.

**Technical Specifications:** Central unit  
• Display: LCD backlit touch screen display 128x64 pixels



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- Power supply: Lithium ion 3.7 V, 1100 mA rechargeable battery with 50 hours measurement back up
- Accelerometer: Triaxial  $\pm 2$  g, 400 Hz sampling
- Dimension and weight: central unit 101x48x16 mm, 99 g removable turbine head: 46x47x24 mm, 17 g

#### Spirometry

- Flow sensor: Bi-directional digital turbine
- Flow range:  $\pm 16$  L/s
- Volume accuracy:  $\pm 3\%$  or 50 mL, whichever is greater
- Flow accuracy:  $\pm 5\%$  or 200 mL, whichever is greater
- Dynamic resistance at 12 L/s:  $< 0.5$  cm H<sub>2</sub>O/L/s
- Temperature sensor: semiconductor (0-45°C)

#### Spirometer measured parameters

- FVC, FEV1, FEV1/FVC%, FEV3, FEV3/FVC%, FEV6, FEV1/FEV6%, PEF, FEF25%, FEF50%, FEF75%, FEF25%-75%, FET, Estimated Lung Age, Extr. Vol., FIVC, FIV1, FIV1/FIVC%, PIF, VC, IVC, IC, ERV, FEV1/VC%, VT, VE, Rf, ti, te, ti/t-tot, VT/ti, MW measured, MW calculated

#### Oximetry

- SpO<sub>2</sub> range: 0 -100%,  $\pm 2\%$  (50-100% SpO<sub>2</sub>)
- Pulse rate range: 20-254 BPM,  $\pm 2$  BPM or 2%

#### Pulseoximeter measured parameters

- SpO<sub>2</sub> [Baseline, Min, Max, Mean], Pulse rate [Baseline, Min, Max, Mean], T90% [SpO<sub>2</sub><90%], T89% [SpO<sub>2</sub><89%], T88% [SpO<sub>2</sub><88%], T5% [SpO<sub>2</sub>>5%], ?index [12s], SpO<sub>2</sub> events, Pulse rate events [Bradycardia, Tachycardia], Step counter, Movement [VMU], Recording time, Analysis time

#### Sleep analysis

- Body position, SpO<sub>2</sub> events, Desaturation index (ODI), Desaturation [Mean Value, Mean duration, Longest duration, Nadir Peak], ?SpO<sub>2</sub> [Min Drop, Max Drop], Total Pulse Variations, Pulse Rate Index, NOD89% [SpO<sub>2</sub><89%; >5min], NOD4% [SpO<sub>2</sub> Basale-4%; >5min], NOD90% [SpO<sub>2</sub><90%; Nadir<86%; >5min]