


Orbit™ Spirometer Specifications

Weight	226.8 grams (.5 lb)	
Dimensions	109.2 x 94.0 x 43.2 mm (4.3" x 3.7" x 1.7")	
Communication Port	USB	
Software Compatibility	Office Medic Version 5.5 (or later)	
Environmental (Storage) Conditions	Ambient Temperature: -15 - 50° C Relative Humidity: 90% Maximum (non-condensing) Atmospheric Pressure: 700 to 1060 hPa	
Power Supply	Internal: 5Vdc, ±5% 100 mA or less from the host PC USB Port	
Operating Conditions	Ambient Temperature: 15 - 40°C Relative Humidity: 10 – 90% (non-condensing) Atmospheric Pressure: 700 to 1060 hPa	
Measurement Method	FLOW: Mouthpiece (US Patent #4,905,709)	
Range (BTPS)	FLOW: ±14 liters/second VOLUME: 0.5-8 liters	
Accuracy (BTPS)	FLOW: <i>FEF25-75</i> : ±5% of indication or ±200 ml/sec, whichever is greater; <i>PEF</i> : ±10% of indication or ±300 ml/sec, whichever is greater VOLUME: <i>FVC</i> and <i>FEV1</i> : ±3% of indication or ±50 ml, whichever is greater; <i>MVV</i> : ±10% of indication or ±15 L/min, whichever is greater	
Precision (BTPS)	FLOW: <i>PEF</i> : ±5% of indication or 150 ml/sec, whichever is greater VOLUME: <i>FVC</i> and <i>FEV1</i> : ±3% of indication or 50 ml, whichever is greater	
Calibration	ATS 3-speed and standard calibration check	
Predicted Normals	<i>Adult FVC/SVC</i> : GLI 2012, Crapo '81, Cherniack '72, Morris, Knudson '83, Roberts '91, NHANES III '99, ECC/ERS/Quanjer '93 <i>Pediatric FVC/SVC</i> : GLI 2012, Hsu '79, Knudson '83, Polgar '71, Warwick '77, NHANES III '99, Zapletal '87, Wang '93, Quanjer '95 <i>Adult MVV</i> : Cherniack '72 <i>Pediatric MVV</i> : Polgar '71, Zapletal '87	
Measuring Time	<i>FVC</i> : 60 seconds <i>SVC</i> : 60 seconds <i>MVV</i> : 15 seconds	
Sampling Rate	125 Hz	
Safety	IEC/EN 60601-1 IEC/EN 60601-1-2	
Printed Scale	Flow Volume: (vertical) 5 mm/L/S, (horizontal) 10 mm/L Volume Time: (vertical) 10 mm/L, (horizontal) 10 mm/S	
Parameters Measured	<i>FVC</i> , <i>FEV0.5</i> , <i>FEV1</i> , <i>FEV6</i> , <i>FEV1/FEV6</i> , <i>FEV3</i> , <i>FEV1/FVC</i> , <i>FEV3/FVC</i> , <i>PEFR</i> , <i>PEFT</i> , <i>FEF25%</i> , <i>FEF50%</i> , <i>FEF75%</i> , <i>FEF25-75%</i> , <i>FVC</i> , <i>FIV0.5</i> , <i>FIV1</i> , <i>FIV3</i> , <i>FIV1/FIVC</i> , <i>FIV3/FIVC</i> , <i>PIFR</i> , <i>FIF50%</i> , <i>FIF25-75%</i> , <i>FIF.2-1.2</i> , <i>FVC/FIVC</i> , <i>Extrapolated Volume (Ext. Vol.)</i> , <i>EOTV</i> , <i>FET</i> , <i>MVV</i> , <i>RR</i> , <i>MTV</i> , <i>SVC</i>	
Languages Available	English, Spanish, French, German, Italian, Portuguese	