

Vyntus[™] SPIRO

PC-based spirometer powered by SentrySuite™ software



Vyntus[™] SPIRO

Obsessed with perfection



Measurement capabilities

- Forced Spirometry
- Slow Spirometry
- MVV
- Pre/Post Bronchodilator
- Bronchial Challenge Software

Complete your Vyntus™ SPIRO

- Optional Ambient sensor
- Optional slim, all-inclusive mobile cart with drawer, syringe holder, and filter basket

Seeking to perfect technology

Thousands of PFT labs expect Vyntus™ SPIRO's pneumotach to meet the 2019 ATS/ERS Spirometry Standards² including the waveform testing requirements of ISO 267822 for proven accuracy. And it does just that! Its wide dynamic range tests broad populations from small children to adults.



Disinfect or replace your pneumotach-it's your choice!

When using our MicroGard™ II bacterial/viral filter with each patient, we have validated that your Vyntus™ Spiro pneumotach needs to be cleaned and disinfected only once every 6 months.³

Want an even easier solution?

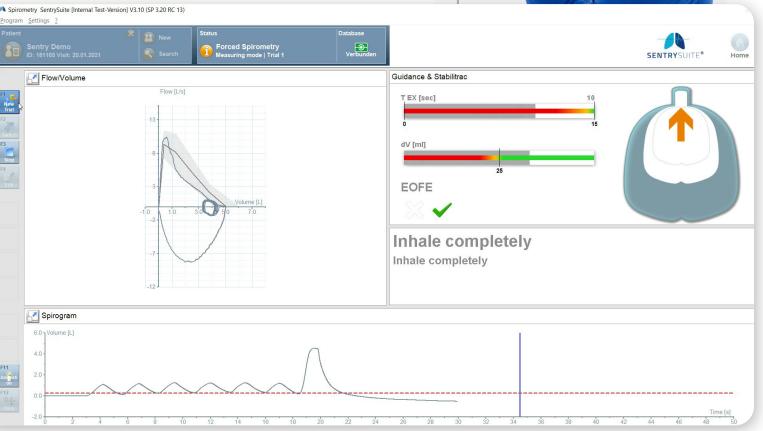
Simply dispose of the old sensor and replace it with a new pneumotach from our cost-effective sensor kit.



Data collection made easy and complete

SentrySuite™ is designed to take the ATS/ERS 2019 standards for data collection and present them in a user friendly format, allowing you to focus more on the patient.





Uncluttered, simplified, and bold **visual** and **audio** cues contribute to optimizing data collection including single beep when plateau is reached and double beep at 15 seconds exhalation.

10 user-definable animations

Experienced technicians can adjust animation difficulty based on patient needs.



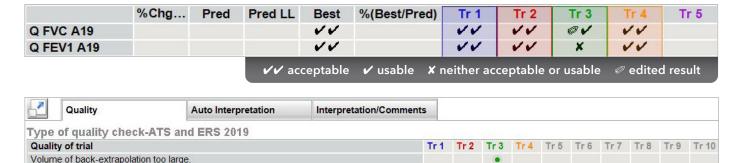




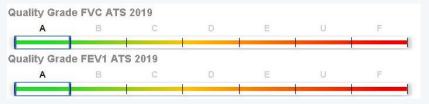
Clear-cut results review

SentrySuite[™] is designed with tools to support the novice user while maintaining flexibility for advanced users.

Clearly view per trial quality feedback







	Best
Quality	
Grade FVC A19	Α
Grade FEV1 A19	Α

Editing data for advanced users

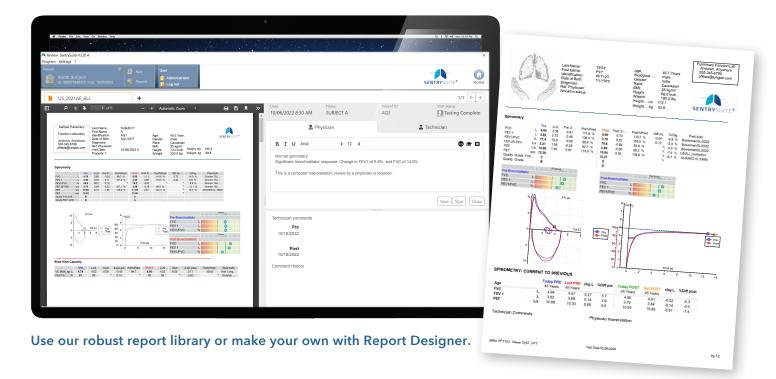
No EOFE criteria found. Difference VC IN-FVC too large

SentrySuite $^{\text{M}}$ will automatically pick the best loop and data according to ATS/ERS standards. Clinicians can easily override and edit the best selection in SentrySuite $^{\text{M}}$.



SentrySuite™ Edit Mode for forced spirometry with the possibilities to hide/unhide trials (in and ex separated), to select best curve (in and ex separated) and to edit the acceptability criteria for FVC and FEV1.

Reporting and data management





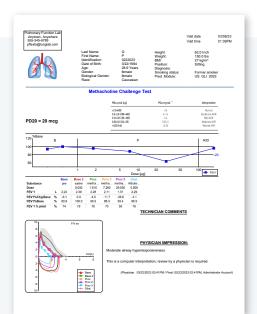
Optional ArtiQ.PFT solution provides assisted interpretation with a single click

- Identify patterns and degree of altered lung physiology in seconds according to 2021 ATS/ERS technical standards⁴
- Improve accuracy while increasing lab efficiency

Complete reference library

including the latest GLI GLOBAL equations.

Z-Score 5 4	Z-Score -3 -2 -1 Pred 1 2 3
0.40	8
-0.49	
-0.92	0
1.21	
-1.40	2



Bronchial Challenge Testing Software is included!

Includes protocols that meet the latest standards, or create you own.



Vyntus™ SPIRO technical specifications

Flow measuremen	t	
Туре	High-quality pneumotach	
Range	0.1 to ± 16 L/s	
Resolution	1 mL/s	
Accuracy	0.1 to 14 L/s: ± 5% of reading or 0.2 L/s, whichever is greater	
Resistance	$<$ 0.05 kPa/L/s (0.51 cmH $_2$ O/L/s) at 10 L/s	
Volume integration	n	
Туре	Software volume integration of flow signal	
Range	30 L (software limited)	
Resolution	1 mL	
Accuracy	0.5 to 8 L: \pm 3% of reading or 0.05 L, whichever is greater	
Ambient condition	s	
Temperature	+10 °C to +34 °C (+50 °F to 93.2 °F)	
Relative humidity	20 to 80 % RH, non-condensing	
Ambient pressure	700 to 1060 hPa (525 to 795 mmHg)	
Altitude	≤ 3000 m	
Power supply		
Mains voltage	5 V DC via USB	
Classification of ap	pplied parts	
Type applied part	В	
Category according	g to MDD 93/42/EEC (2007)	
Complete system	Active class IIa medical product	
Standards, directives and market clearances		
Standards	EN 60601-1, EN 60601-1-2, EN 62304, EN 62366-1, EN ISO 14971, EN ISO 10993-1	
Directives	93/42/EEC amended by 2007/47/EC, RoHS 2011/65/EU compliant	
Market clearances	CE, FDA 510(k) clearance	
Optional Cart		
Dimensions total	22 in W x 24 in D x 49 in H	

32.6 kg (72 lbs)

Weight total



REFERENCES

- Based on Vyntus™ series with pneumotach sensor technology; International Organization for Standardization (ISO) 26782 dynamic waveform test results, 2022.
- Graham B, Steenbruggen I, Miller M, et al. Standardization of spirometry 2019 update. An official american thoracic society and european 2. respiratory society technical statement. Am J Respir Crit Care Med. 2019; 200:e70-e88.
- Based on the Bio Burden DIN EN ISO 11737-1: Report 18AA0193.
- Stanojevic S, Kaminsky DA, Miller M, et al. ERS/ATS technical standard on interpretive strategies for routine lung function tests. Eur Respir J 2021; in press (https://doi.org/10.1183/13993003.01499-2021).