

Astrastar³⁰⁰TM

Intuitive Touchscreen Spirometry

The Astrastar300 puts the sophistication and simplicity of a touchscreen in the palm of your hand. Enter data, review patient results and send or print reports with precision and ease. Customize your Astrastar300's firmware to facilitate and expand your testing and reporting functions. Output test data to your PC with AstrastarPro Spirometry software to further enhance your testing capabilities.



Simply tap on the Astrastar300's sensitive touchscreen to make available a wealth of useful functions.

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DIAGNOSTICS

The Spirometry Source



Astra300 Puts Sophisticated Simplicity in the Palm of Your Hand.

The Touchscreen Makes It Easy. SDI Makes It Accurate.

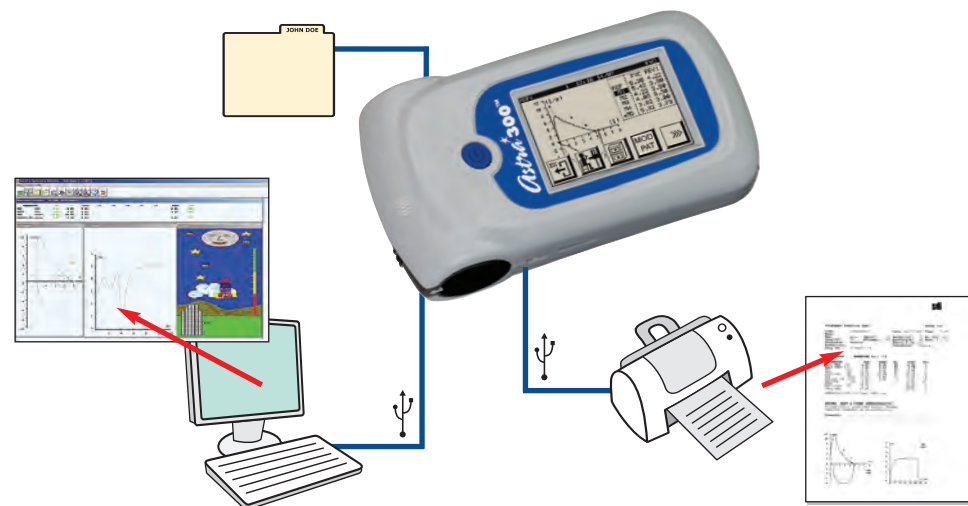
Easily report your choice of up to 40 spirometry test parameters, all measured accurately and precisely with the highly sophisticated Astra300 Spirometer. Using the bright and sensitive touchscreen, you can easily access multifunctional capabilities and view both graphic and tabular data. Entering patient data, patient testing and reporting couldn't be easier. Exporting test data to a printer or PC via USB is quickly accomplished with just a few stylus taps on the touchscreen. A Bluetooth-to-PC module is available as an option for truly wireless communication.

AccuFlo™ Digital Turbine



The AccuFlo bidirectional turbine with optoelectronic rotary sensor is easily detached for cleaning. Sapphire bearings ensure optimal performance for the life of the turbine. AccuFlo has a unique flow trigger algorithm that allows tidal breathing prior to the patient expiratory effort making the spirometry test easier for the patient and insuring quality test results.

Multifunctional Capability Allows You the Flexibility of Choosing the Testing Method.



Choose whatever testing configuration fits your needs best:

- Test patients in your office or lab, with a wide array of testing configurations.
- Observe test results in real time.
- Download test results to the patient's permanent record.
- Perform interactive real-time testing on your PC.
- Save results to permanent records or print hard copies of selected data.

Astra300 Features

Choice of 14 Predicted Sets

Large touchscreen display

Optional Bluetooth-to-PC
Speedy wireless communication



Unique flow triggers
Allows tidal breathing for easier, more accurate testing

Automated maneuver acceptability
Assures accurate results

AstraPro spirometry software included

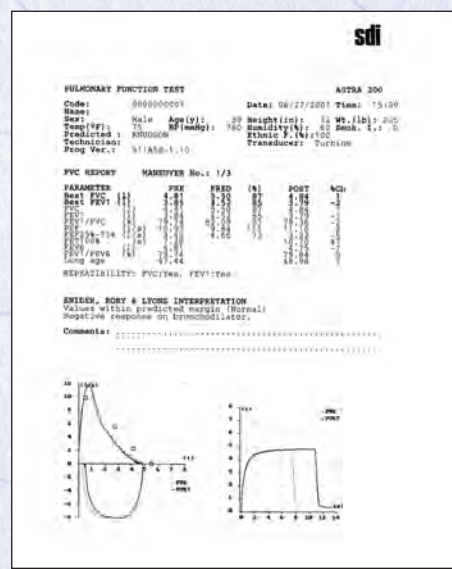
Measures over 40 parameters of FVC, VC and MVV

Highly configurable program
Choice of custom or pre-set programs includes latest NLHEP guidelines

Optional Pulse Oximetry

Standard USB connection to PC and printer
Fast and easy direct communication

AccuFloDigital Turbine Transducer



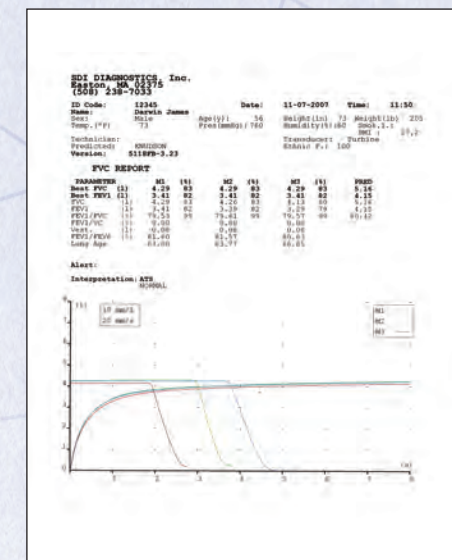
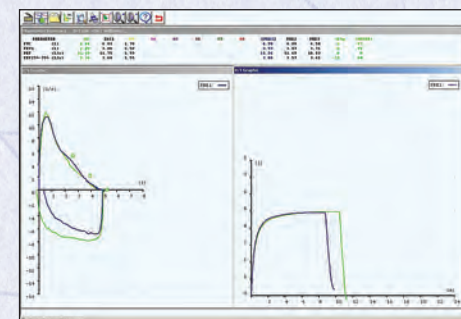
Comprehensive reporting

Configure your final reports to detail only the information you need to assist you in arriving at a diagnosis or an interpretation of the patient status.

AstraPro™ Software Expands Astra300 Versatility

Sophisticated communication links allow patient test data transfer from the spirometer to PC archive or output to EHR. Perform real-time pre- and post-bronchodilator and bronchial challenge testing or utilize the incentive program with your pediatric patients.

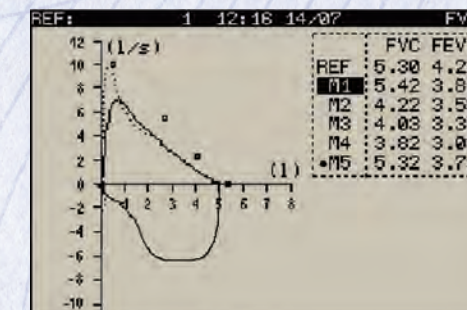
Astra300 communicates with your PC directly via USB or wirelessly via the optional Bluetooth module.



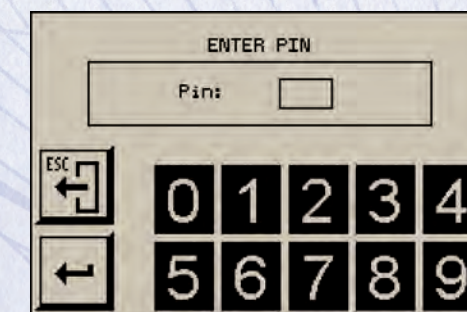
Optional Occupational Health Module
Meets all testing mandates of OSHA and SSA.



Patient information is easily entered as alphabetic or numeric data with just a few taps of the stylus.



View patient data easily on either the graphics screen or scroll through all chosen parameters on the report screen.



To maximize security of patient data and prevent unauthorized use, a custom PIN code access is provided.



The optional SpO₂ module provides additional capability and links directly with your Astra300's RS232 interface.

Astra300™ Spirometer

Technical Specifications

Forced Parameters Measured

Forced Vital Capacity: FVC, FEV_{.5}, FEV₁, FEV₃, FEV₆, FEV₁/FVC, FEV₁/FEV₆, FEV_{.5}/FVC, FEV₃/FVC, PEF, FEF25, FEF50, FEF75, FEF25-75, FEF 75-85, FET, FET25-75, FEV₁/FEV_{.5}, FEV₁/PEF, FIF50, FIVC, FIV₁, FIV₁/FVC, FEV₁/FIV₁, PIF, MTT, PEF/PIF, BEV, Lung Age

MVV: Br/min

Relaxed Parameters Measured

VC: VC, TV, ERV, IRV, IC, Ti, Te, Tt, Ti/Tt

Maneuvers per patient: 5 total; best test and last test highlighted

Interpretation: Selectable – Kory, Miller, ATS, NLHEP (Ferguson)

Predicted sets: Selectable – 14 Total

Ethnic correction: Selectable – % Actual, Caucasian, Hispanic, AfroAmerican

Language: Selectable – English or Spanish

Measurement Scale (BTSP)

Flow range: 0–16 L/sec

Volume: 0–10 L

Measurement method: Infrared Interruption via Digital Turbine

Dynamic flow resistance: <1.5 cm H₂O/L/sec @ 14 L/sec

Precision of Measurements (BTSP)

At highest volume: +/- 3% or 50 mL

At highest flow: +/- 5% or 150 mL

Time related precision: .5%

Volume resolution: <6 mL

Sampling frequency: 50 Hz

Hardware Specifications

Storage capacity: 1000+ study database

Keyboard: Alphanumeric LCD touchscreen

Communication: USB to printer and PC, RS232

Optional: Bluetooth to PC

Dimensions: 5.75" x 3.25" x 4.0"

Power supply: 2 x 1.5 DC Alkaline or NiMH batteries

Weight: 9 oz (250 g)

Optional

OSHA module

Flex Pulse Oximetry module and program

NiMH battery/charger pack

Calibration syringe

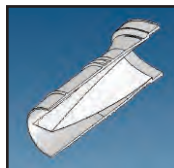


Astra300 is compatible with printers using USB connection and PCL6 drivers.



AstraGuard PFT Filters

Designed exclusively for Astra Spirometers. Free starter pack of 10 filters included with every Astra300.



Cross-section of filter media shows placement of interior media. Edge of media is bonded to exterior housing to form a tight seal.



The filter media is tailored to fit inside every mouthpiece, providing an effective guard against cross-contamination.

Astra spirometers comply with 2005 ATS/ERS guidelines for spirometry.

Your dealer is:

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DIAGNOSTICS

The Spirometry Source

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