



# Astra<sup>+</sup> TOUCH

## Comprehensive Touchscreen Spirometry

The AstraTouch Desktop Spirometer provides easy navigation when performing comprehensive spirometry testing. Its multifunctional capabilities provide a means of making a diagnostic decision from the screen data, from its resident printer or off-line report writers. PC links via USB or optional Bluetooth make easy work of storing data archivally, transferring tests to EMR or performing real-time direct testing.



- Multifunction Capabilities
- Easy Fingertip Navigation
- Digital Turbine Accuracy and Precision
- USB, Bluetooth or Ethernet Connectivity



The Spirometry Source



## AstraTOUCH Couples Sophisticated Simplicity With Comprehensive Spirometry.

The AstraTouch Spirometer was designed to be easy to use while providing accurate and precise testing data. The simplicity of operation and wealth of configurability options expand the scope of spirometry testing like never before. Review and enter data, make a diagnosis, print a report or download to EMR quickly and with minimal effort.

### AccuFlo Digital Turbine

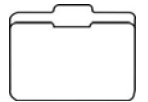


The AccuFlo™ bidirectional digital turbine assures uncompromised accuracy and reliability in your spirometry testing. The assistance of flow triggers allows for patient tidal breathing through the transducer prior to the test initiation, maximizing patient comfort while providing meaningful data.

### Optional Blue Tooth



AstraTouch with AstraPro software interfaces with your PC via the standard USB cable or through the optional Bluetooth wireless connectivity to seamlessly download data for archiving, transfer of data to EMR or to initiate on-screen PC testing.



### Optional MIP/MEP, Sniff

The optional MIP/MEP module interfaces directly with the AstraTouch spirometer, allowing for rapid testing of your patient's inspiratory and expiratory pressures.

### Customizable Firmware

Customizable firmware allows for a number of choices in the function of your AstraTouch spirometer. Choose from a number of Predicted authors, interpretations, quality prompts, parameters, graphics and much more. The AstraTouch can be configured to deliver exactly the kind of spirometry that's right for your office or clinic.

### Pulse Oximetry



The evaluation of O<sub>2</sub> saturation and heart rate parameter measurements can be very important, especially in patients with COPD. The optional Pulse Oximetry module allows for quick, easy testing and complete reporting.

### AstraGuard Bacterial/Viral Filter



The AstraGuard bacterial/viral filter provides virtually perfect infection protection for expiratory and inspiratory spirometry testing. Its single-patient use greatly reduces costly and time-consuming disinfection procedures.

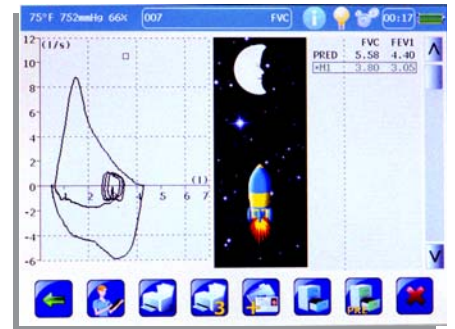


## Easy Navigation

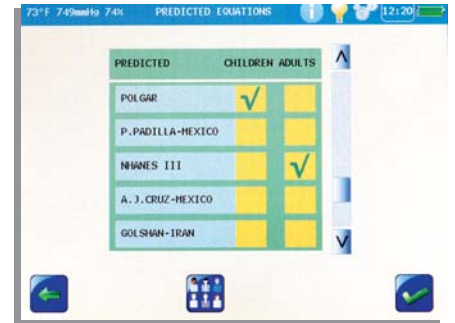
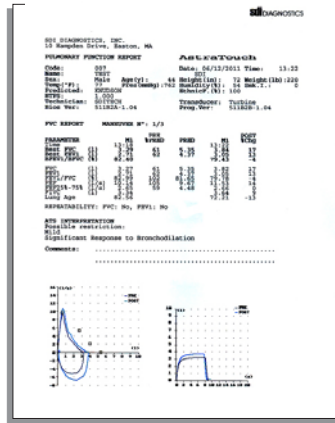
The bright, sharp RealColor display offers easy visualization of graphics and tabular data as the test is being performed. Fingertip touches of the descriptive icons make navigation from screen-to-screen and function-to-function quick and easy, saving time and simplifying the test visit.



- 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 or print hard copies of selected data

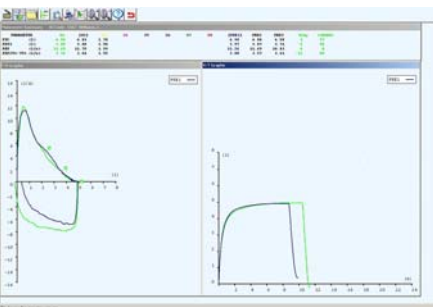


Choose from four different incentive displays to maximize your patients' testing effort.



Choose from 16 different authors for Predicted selection. Select one set for adults and a different set for children or one author for both.

## AstraPro™ software expands AstraTOUCH versatility



Sophisticated communication links allow patient test data transfer from the spirometer to the PC archive or output to EHR/EMR. Choose either Pre- and Post-bronchodilator and bronchial challenge testing or use the incentive program with your pediatric patients or adults.

AstraTOUCH communicates with your PC directly via USB or wirelessly via Bluetooth.



The bronchoprovocation mode provides protocol creation, medicant listing and dosages, and PD levels.



## Technical Specifications

### Forced Parameters Measured

Forced Vital Capacity: FVC, FEV1, FEV1/FVC, PEF, FEF50%FEV6, FEV1/FEC, PEF, FEF50%, FEF25-75%, FEV6, FEV1/FEV0.5, PEFT, Vext, FIVC, FIF50%, FEF50/FIF50, QC Grades, FEV .5, FEV3, FEV.5/FVC, FEV3/FVC, FEV1/VC, FEV1/FEV6, FEV1/PEF, FEV1/FIV1, PEF/PIF, FEF25%, FEF75%, FEF75-85%, FET25-75%, FET100, FIV1, FIV1/FIVC, PIF, MTT, MVVInd, Lung age

MVV: MVV, Br./min

Bronchoconstriction: FVC, FEV1, PEF, FEF25-75%, PDx

### Relaxed Parameters Measured

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

Maneuvers per patient: 8 total; best test and last test highlighted

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

Predicted sets: Selectable – 16 Total

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

Language: Selectable – English, Spanish or French

### Measurement Scale (BTPS)

Flow range: 0-16 L/sec

Volume: 0-10 L

Measurement method: Infrared Interruption via Digital Turbine

Dynamic flow resistance: < 1.5 cm H<sub>2</sub>O/L/sec @14 L/sec

### Measurement Precision (BTPS)

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: 3000+ study database

Display: 5.7" High resolution color VGA touchscreen

Communication: USB to printer and PC

Dimensions: 7.7" x 10.6"x 3.9"

Weight: 3.7 lbs.

Power supply: 110 to 240V, 50 to 60 Hz or NiMH battery pack

Storage Temperature: -4°F to 158°F

Printer: 110 mm thermal graphic printer

### Optional

Ethernet I/O

Bluetooth to PC

Flex Pulse Oximetry module and program (*ask for indices*)

NiMH battery/charger pack

Calibration syringe

MIP/MEP

Weather Station (Barometric Pressure, Temperature, Humidity)

Sniff – Rhinomanometry

Carrying Case

\*To be announced

Your dealer is: