

CCS-200 Spirometer

BENSON MEDICAL
INSTRUMENTS

Computer
Controlled
Spirometer

The only spirometer
specifically designed for
occupational health.



Introducing the CCS-200 Computer Controlled Spirometer

The CCS-200 spirometer produces accurate and repeatable spirometers for use in NIOSH-compliant programs. The single-use disposable mouthpiece mounts easily and securely in the handle, and is removed after testing with the press of a button.

Included operating software for Windows® leads the operator through the testing process by determining repeatability, grading the maneuvers, and detecting artifacts and errors. The CCS-200 uses state-of-the-art ultrasonic sensors to ensure accuracy with every maneuver as well as over the lifetime of the instrument. The included database software provides instant recall of past spirometers for reporting and trend analysis.

- Displays flow/volume and volume/time graphs
- Determines FVC and FEV1, FEV1/FVC, and other indices
- Automated calibration check using 3-liter syringe with 1/2-, 3-, and 6-second flows
- Includes interpretation, and numerous predicted sets
- Uses same database as Benson Medical audiometers
- Used mouthpiece is removed without contact
- One-year warranty

- ✓ Meets or exceeds ATS/ERS 2005 and NIOSH standards
- ✓ Suitable for use for OSHA spirometers and SSA disability
- ✓ BTPS adjustment



310 Fourth Avenue South
Suite 5000
Minneapolis, MN 55415
U.S.A.

(612) 827-2222

www.BensonMedical.com

Spirometer Operation

The state-of-the-art CCS-200 Spirometer uses advanced ultrasonic flow-sensing technology to perform accurate spirometry. Intelligent sensing eliminates the need to hold the spirometer still before maneuvers. The CCS-200 automatically compares the subject's spirometry results to the selected predicted normal set, and provides immediate interpretation.

- ✓ Calculates FVC, FEV1, FEV1/FVC, FEV6, FEV1/FEV6, PEF, FEF25-75%, FEF75-85%, FEF200-1200
- ✓ NHANES III and Knudson 1976 predicted sets (more in optional Plus Package)
- ✓ ATS 1991 Interpretation
- ✓ Verifies readiness with pre-test interview questionnaire
- ✓ Advanced, on-screen Flow-Volume and Volume-Time graphs with zoom, pan, and offset
- ✓ Daily Calibration routines lead you through three flow rates and print results automatically
- ✓ Determines repeatability, usability, acceptability, and spirometry completion
- ✓ Pre- and post-bronchodilator testing
- ✓ BTPS correction
- ✓ Switchable, pre-configured configurations for tests compatible with the following standards: ATS/ERS 2005, ATS 1994, OSHA Cotton Dust, SSA disability, NIOSH, or NLHEP
- ✓ Custom spirometry configurations with programmable artifact detection, end of test, repeatability, and usability parameters

Subject Data Collection

- ✓ No limit to number of subjects and spirometry
- ✓ Race, age, sex, height, and weight fields
- ✓ Use of computer keyboard eliminates frustration of using small push buttons to enter data
- ✓ Extensive user-defined data fields and generous comment fields for each record

Standards Compliance

The CCS-200 spirometer meets the requirements of the latest ATS/ERS and NIOSH requirements and is suitable for use in OSHA-compliant programs for spirometry surveillance, respirator clearance, and SSA disability determination.

- ✓ Available 3-L calibration syringe and adapter for required calibration checks

CCS-200 Reports

The CCS-200 quickly produces full-page reports that are easily read and made into PDF files for use with EMR software. See the optional Plus Package section, below, for additional reports.

- Subject Spirometry – Concise
- Subject Spirometry – Summary
- Subject Spirometry – Trend
- Daily Calibration Certificate

Plus Database Management

Choose the Plus Package for additional analysis and reporting, support for unlimited companies, and data management.

- ✓ Network database access (connects to Microsoft® SQL Server® 2005 and 2008 R2)
- ✓ Unlimited number of companies
- ✓ Adds Knudsen 1983, Crapo, and Morris predicted sets, and NLHEP and Morris 1976 interpretation
- ✓ Customizable pulmonary function history questionnaire in 18 languages
- ✓ Report Builder feature lets you define your own report by selecting from dozens of pre-defined sections
- ✓ Expanded report query ability and Query Wizard
- ✓ Customizable subject ID length and characters
- ✓ Programmable import/export routines
- ✓ Powerful Extract/Merge tools synchronize data between locations
- ✓ May use Microsoft® SQL Server® 2005/2008 and Windows® authentication to help fulfill HIPAA security requirements
- ✓ Customizable data column selection and ordering for on-screen display

Additional Reports (samples available)

Subject Spirometry *
 Subject Spirometry SSA *
 Subject Spirometry Pre-Bronchodilator *
 Subject Spirometry Post-Bronchodilator *
 Subject Spirometry SSA Pre-Bronchodilator
 Subject Spirometry SSA Post-Bronchodilator
 Subject Spirometry PFT Summary
 Subject Spirometry PFT Summary Bronchodilator
 Subject Spirometry Interviews
 Subject Spirometry Trend FVC
 Subject Spirometry Trend FEV1
 Subject Spirometry Trend Percent Predicted
 Subject Spirometry FEV1/FCV Ratio
 Subject Spirometry Percent Predicted and FEV1/FCV Ratio
 Subject Spirometry History
 Subject Spirometry History Questionnaire
 Company Spirometry List
 Company Spirometry Test Schedule List
 Company Spirometry Exception List
 Company Spirometry PFT Category List
 Company Spirometry Test Result List
 Company Spirometry Summary
 Company Spirometry Summary – Subject Details
 Company Spirometry Summary – Respirator Use
 All Company List

System Requirements:

Windows 8 (32- or 64-bit), 7 (32- or 64-bit), Vista SP2 (32- and 64-bit), or XP SP3, 1.4 GHz or higher processor, 512 MB (XP) or 1 GB (Vista/7/8) RAM minimum, 1 GB free HDD. One free USB port (two for Plus Package)

* indicates available in concise or detailed format



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