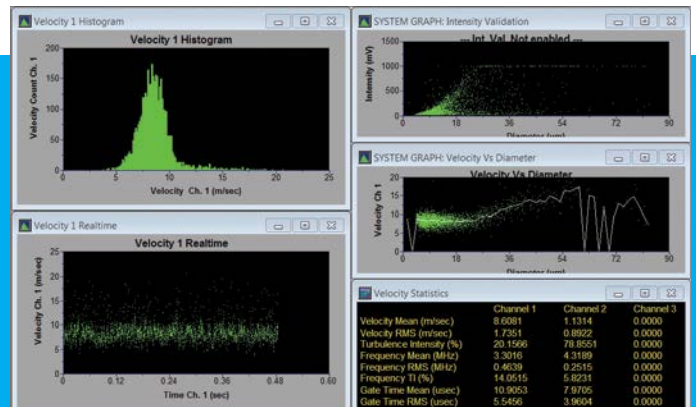


# FLOWSIZER VERSION 4.3 SOFTWARE

## SETTING STANDARDS FOR ACQUISITION AND ANALYSIS

TSI's FlowSizer™ version 4.3 Data Acquisition and Analysis Software Version 4.3 software package sets the standard for acquisition and analysis of Laser Doppler Velocimetry (LDV) and Phase Doppler Particle Analyzer (PDPA) measurements.



The FlowSizer Version 4.3 is the most complete, state-of-the-art package that allows you to easily and flawlessly operate the PowerSight laser modules, DPSS lasers and Ar-ion based LDV or PDPA systems. The software package utilizes the Windows 7 64-bit platform to allow for multi-thread processing and hardware controls. The software automatically detects the FSA and PDM configuration so that it is ready for optimal measurements immediately. The package includes graphics, particle sizing, traverse control, power spectra, full rotating machinery support and custom data export. All of the features are designed to cater to your requirements.

For velocity measurements, the software provides real time display of the Doppler frequency and velocity histogram to allow you to optimize the controls in PMT voltage, downmix filters, burst threshold, SNR and laser power for the most accurate velocity results. In case of droplet size measurements, the fully integrated Probe Volume Correction (PVC) and patented\* Intensity Validation make the FlowSizer Ver 4.3 the most comprehensive package for accurate volume flux, concentration and volume statistics.

### Features

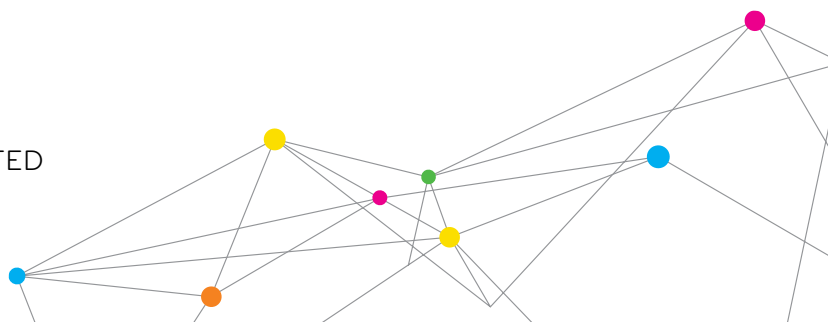
- + File Management Treeview
- + Hardware controls for Data Acquisition
- + Residual Tracking for Convergence
- + Multi-run Analysis
- + Sweep Matrix Capture
- + Traverse Manager Updates
- + User selectable independent variable (time or angle-based)
- + Simple TTL-based reset signal triggers new cycle for pulsed sprays
- + Probe volume correction (PVC) over a maximum of 3,000 diameter bins

### Applications

- + High Speed Flows
- + Flow Measurements in wind and water tunnels
- + Turbulent boundary layer flows
- + Flow around airfoils
- + Wake flows
- + Droplet sizing and velocity measurements of sprays
- + Volume Flux of sprays



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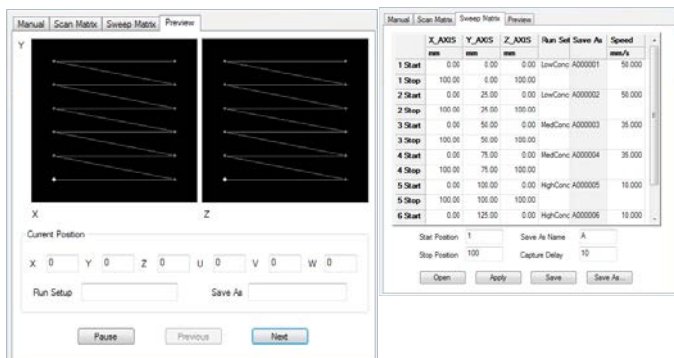


# SPECIFICATIONS

## FLOWSIZER 4.3 SOFTWARE

### Hardware Controls for Data Acquisition

- + Use with models of FSA3500 and FSA4000 for velocity and Phase
- + Use with all models of PDM modules for velocity and Phase
- + Works with system configurations from 1 channel to 3 channels of velocity and Phase
- + Support Powersight laser modules and Ar-ion based optical systems
- + Support DPSS lasers coupled with fiberlight Color separator
- + Complete traverse control from 1 to 6 axis movements
- + Full rotating machinery support with Once-Per-Rev (OPR) or Incremental Shaft Encoder triggering
- + Data acquisition based on external triggering
- + Acquisition of up to 4 channels of analog and/or digital signals



### Flowsize Traverse Control

- + Current traverse position automatically updated after each event
- + Read position function easily switches between local and remote control modes
- + Capture mode performing "sweep captures" through sprays
- + Plot label changes customized for traverse positions

Specifications are subject to change without notice.

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\*Patent number 4986659

### FlowSizer ASCII Export Features

- + User-selectable data exported in TecPlot® or .csv formats
- + New fitted diameter distributions exported
- + Expanded selection of diameter and volume statistics exported for advanced statistical analysis

### FlowSizer Custom Statistics

- + Fitting parameters available from new diameter fits include normal, modified log-normal, Matsumoto-Takahashi, and Nukiyama-Tanasawa routines
- + Fitted diameter statistics (D10, D32, etc.) available for display and export
- + Enhanced text-based statistics copy/paste function
- + Velocity statistics with increased display resolution

### Included Items

- + FlowSizer Software Base Package
- + Support of all TSI LDV and PDPA system components
- + All graphics and display
- + Power Spectrum computation and display
- + ASCII export functionality and data transfer to Microsoft® Excel® or Microsoft® PowerPoint® software
- + Traverse control



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TSI Incorporated - Visit our website [www.tsi.com](http://www.tsi.com) for more information.

**USA** Tel: +1 800 874 2811 **India** Tel: +91 80 67877200  
**UK** Tel: +44 149 4 459200 **China** Tel: +86 10 8219 7688  
**France** Tel: +33 1 41 19 21 99 **Singapore** Tel: +65 6595 6388  
**Germany** Tel: +49 241 523030