

oneFAST

Universal, High-Throughput Sample Introduction System

Introduction

There are more than 500 field-proven *FAST* systems operating around the world today. The oneFAST hardware and software has been optimized to integrate with common non-ESI autosamplers—immediately increasing sample throughput by 2-5 times.

- Compatible with all common ICP/ICPMS autosamplers, including:
 - ◆ CETAC 500/510/520
 - ◆ ESI SC-Series
 - ◆ PerkinElmer AS93 / S10
 - ◆ Varian SPS-3
- Increase throughput by 2-5 times
- Pays for itself in 2-6 months
- Uses field-proven ESI *FAST* technology
- Reduces ICP/ICPMS maintenance costs
- Reduces gas/power consumption
- Small footprint which enables the valve module to be close to the nebulizer
- May be upgraded to SC-Autosampler
- Integrated Peltier-cooled spray chamber available
- *FAST* methods have been developed for most high-throughput samples



Control Module and Vacuum Pump

FAST Valve Module

Industry-leading *FAST* technology is now available for laboratories satisfied with their existing autosamplers, and want to increase sample throughput by up to 300%

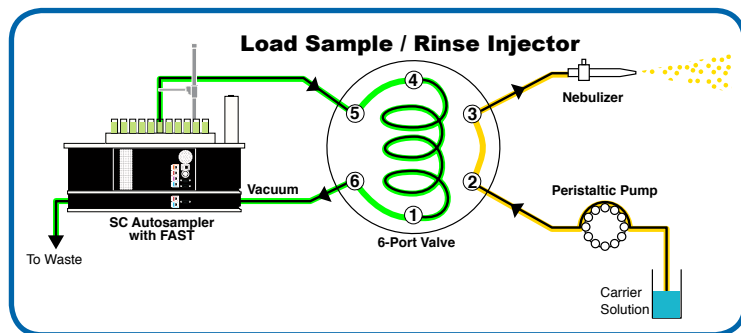


Figure 1. The oneFAST loads the sample loop as the nebulizer and tubing is being flushed.

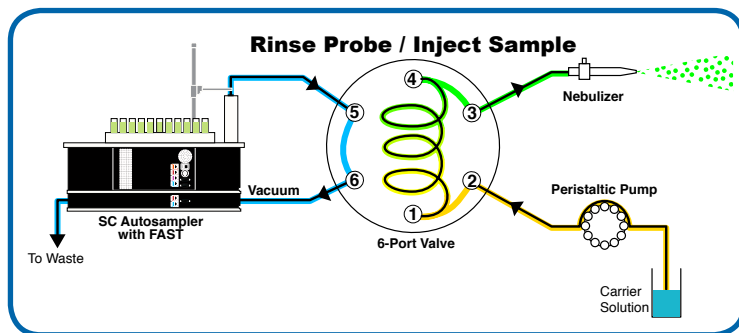


Figure 2. The oneFAST rinses the autosampler probe and tubing while the sample is being analyzed.

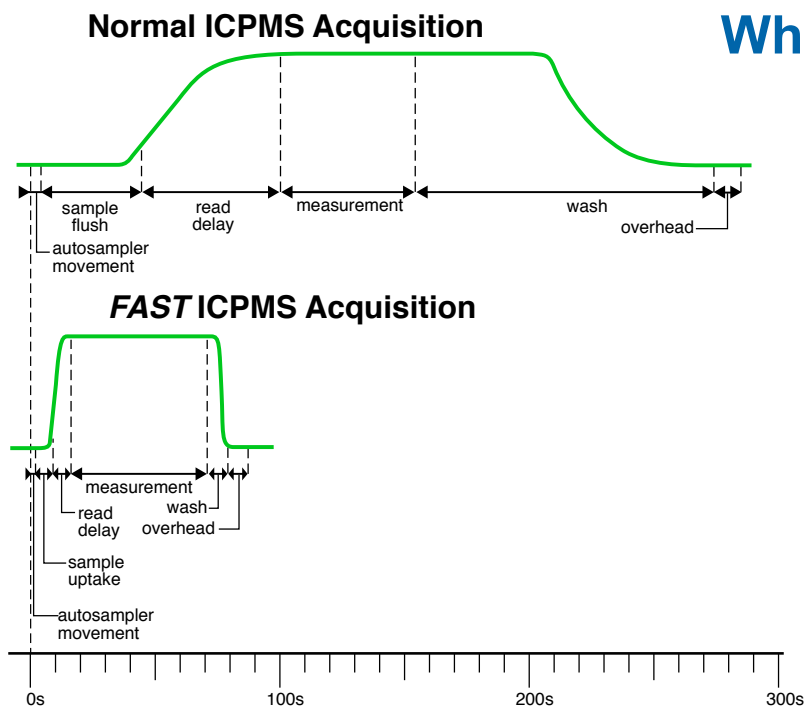
When You Think Productivity, Think **FAST!**

ICPMS Analysis Steps:

1. Probe Movement
2. Sample Flush
3. Read Delay
4. Measurement
5. Wash
6. Overhead

◆ Only the measurement time is productive.

◆ **FAST** reduces or eliminates time spent on non-productive steps.



- High-speed sample loading significantly reduces sample uptake and wash-out times
- Eliminates peristaltic pump memory effects
- Reduces QC failures
- Supports online addition of internal standard
- Adds volatile analytes such as Hg to methods
- Rapid implementation of pre-loaded **FAST** and ICP / ICPMS methods
- Low-flow sample uptake further reduces salt loading, and the amount of reagents used
- **FAST** Method Development Software, and phone support if future needs change



PC³-FAST Peltier-cooled Cyclonic Spray Chamber
ESI offers a complete line of high performance sample introduction components designed for use with the **FAST** system which provides world class performance. For example, optional integrated Peltier-cooled cyclonic spray chambers are available to lower the oxide levels in aqueous samples.

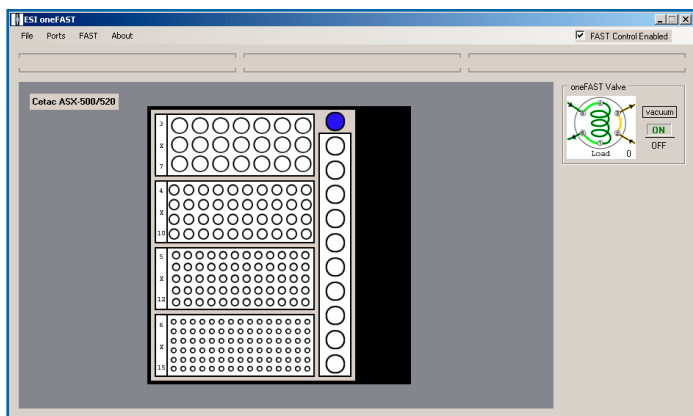


Figure 3. The easy to use ESI oneFAST software is windows-based and compatible with virtually all autosamplers.

oneFAST Specifications

Communication Interface	USB / RS-232
Power Requirements	100-240 VAC ± 10%, 50-60 Hz
Dimensions (h x w x d)	20.32cm (8") x 7.3cm (2 ⁷ / ₈ ") x 10.5cm (4 ¹ / ₈)
Weight	1.13 (2 ¹ / ₂ lbs.)