

## SC-E4 Integrated Autosampler for the ELEMENT 2 ICPMS

The SC-E4 autosampler cleanly integrates with the ELEMENT 2 ICPMS, minimizing the distance between the sample vial and the nebulizer to reduce carry-over.

The SC-E4 tray includes space for alternate sample introduction systems, such as the Apex system and FAST systems. It provides space for sample staging.

Combining the SC-E4 with the FAST system can triple sample throughput in comparison to standard sample introduction systems, making the ELEMENT 2 highly productive.

### Benefits

#### • Compact

- Directly replaces the standard ELEMENT 2 tray while allowing a capacity of up to 576 samples plus 10 standards
- Attaches directly to the instrument, minimizing sample path to save time

#### • Clean

- No metal or mechanical parts move over the sample vials
- All fluoropolymer sample flow path ensures both acid and solvent resistant
- Dual Flowing rinse station and guide-free sample probe reduce blank contamination and sample carry over

#### • Durable

- Teflon coated X & Z axis and sealed electronics protect against harsh chemical environments
- Simple mechanical design

#### • Flexible

- Flexible rack combinations of up to 4 large racks, 6 micro racks or 6 microtiter plates
- User defined speed controls allowing the autosampler to be tuned for each application
- A wide variety of probe designs and custom racks available



SC-E4 FAST Autosampler with Dual Flowing Rinse



SC-E4 Moves with ELEMENT 2 door to easily replace cones without removing the autosampler.

#### • Communication Interface

- RS-232 with USB and IEEE-488 options
- 3 External Switches In/Out
- 3 Drive Switches In/Out

#### • Power Requirements

- 100-240 VAC  $\pm$  10%, 50-60 Hz

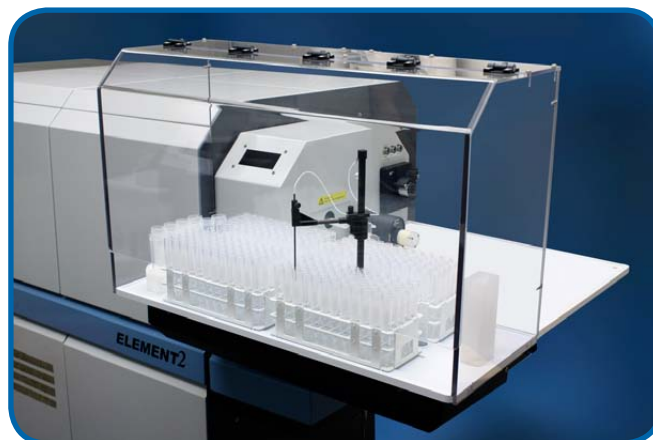
#### • 2 Rinse Positions

#### • ~ 3 s Speed (Sample to Rinse)

# Elemental Scientific

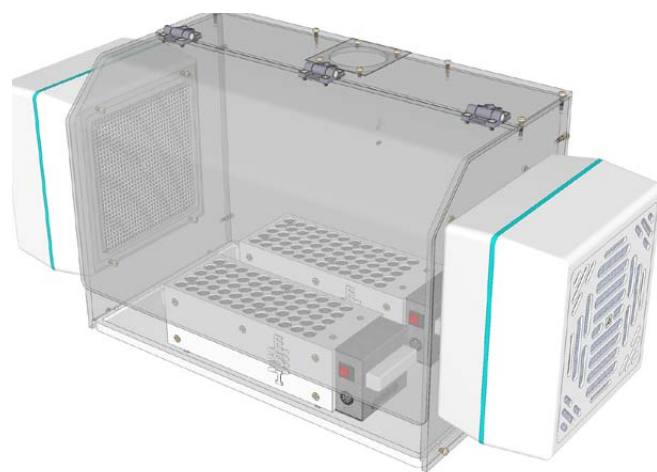
## Options

- **FAST- Sample injection system**
  - Increase sample throughput up to 5 times
- **Rinse pump**
  - Teflon Diaphragm pump
  - Pressurized/Gravity with polypropylene bottles or all PFA rinse path for ultra clean applications (includes PFA bottles)
  - MP<sup>2</sup> – Integrated precision micro peristaltic pump
- **Clean Enclosure**
  - Protects samples, equipment and personnel. Available with or without ULPA filtration.



SC-E4 Enclosure on Thermo ELEMENT 2

**ULPA filter side plate available upon request for either the right or left side of the SC-E4 enclosure**



Part Number	With ULPA Filter	Description
SC-1317	SC-1317-1000	Enclosure for SC-E4 Autosampler

## SC-E4 Autosampler

- Includes:** 2 Sample Probes  
 50 mL Standards Vials (10 ea)  
 15 mL Sample Vials (60 ea)  
 Standards Rack (10 positions)  
 4 Large Racks (21, 40, 60, 90 positions)

Part Number	Description
SC-8113-1000	SC-E4 with dual flowing rinse

## SC-E4 FAST Autosampler

- Includes:** FAST Valve  
 PFA-ST MicroFlow Nebulizer  
 2 Sample Probes  
 Standards Rack (10 positions)  
 4 Large Racks (21, 40, 60, 90 positions)  
 50 mL Standards Vials (10 ea)  
 15 mL Sample Vials (60 ea)

PC<sup>3</sup> Peltier cooled cyclonic chamber, demountable quartz torch and sapphire injector (*Complete System Only*)

Part Number	Description
E4F-52C	SC-E4 FAST PC <sup>3</sup> Complete for ELEMENT 2
E4F-A	SC-E4 FAST Basic system for ELEMENT 2 (without PC <sup>3</sup> ) Uses ELEMENT 2 spray chamber and injector

## Available Sample Racks



Large Racks



Super Racks



Micro Racks



Microtiter Plates

**Dimensions of the SC-E4 Autosampler on the Element 2 (Optional ULPA Filter)**

