

# ASX-560 Series

Autosamplers



AUTOMATION



# Setting the Standard

See why users call CETAC Autosamplers the best on the market. Put the most reliable, longest-lasting autosampler to work in your lab for the seemingly endless demands of sample analyses. Whether your lab is small, mid-sized, or very large, there's a model to meet your needs.

- Polymer cover, base and sample tray
- Carbon fiber arm and z-drive
- No exposed metal parts
- Flowing rinse station with on-board peristaltic pump
- 10 standards positions for 50 mL vials
- Flexible sample rack configurations
- Fast, quiet operation



# We've Got You Covered!

Protect Samples, Protect Personnel, Protect the Bottom Line

## ENC DC Series

### Autosampler Enclosures

Enclosures loaded with features and options for convenience and reliability:

- Save bench space with an enclosure sized to fit your autosampler (see below)
- Flat pack design to reduce shipping costs
- Shatter-proof polycarbonate construction
- Quickly evacuates harmful fumes to protect samples from contamination and hardware from corrosion
- Easy access to samples and autosampler components through front and rear
- Multiple configuration possibilities for vent and fan
- Multiple ports for tubing and power cords



#### Dimensions

	Height	Width	Depth	Weight
ENC-560DC	65 cm (26 in)	60 cm (24 in)	58 cm (23 in)	11 kg (25 lb)
ENC-280DC	65 cm (26 in)	43 cm (17 in)	58 cm (23 in)	8 kg (17 lb)
ENC-860DC	98 cm (39 in)	111 cm (44 in)	67 cm (27 in)	22 kg (49 lb)

#### Shipping Dimensions

	Box 1	Box 2	Base
ENC-560DC	28" x 28" x 1.5" at 15 lbs	8" x 8" x 24" at 10 lb	28" x 25.5" x 1" at 18 lbs
ENC-280DC	28" x 28" x 1.5" at 15 lbs	8" x 8" x 17" at 7 lbs	28" x 18" x 1" at 12 lbs
ENC-860DC	33" x 33" x 1.75" at 30 lbs	12" x 12" x 48" at 23 lbs	48" x 30" x 1" at 35 lbs

#### Enclosure Materials

- Polycarbonate frame
- Silicone & polyethylene plugs
- Nylon fittings

#### Exhaust

- 4" fume hood exhaust attachment
- Recommended ventilation rate: 12 to 15 cfm (0.34 – 0.42 m<sup>3</sup>/min)

#### Optional Accessories

- HEPA filter
- Positive pressure fan
- Gas flow meter (up to 5 L/min)
- Base for irregular surfaces



# Building On Automation

Accessories to Make Your Lab Faster, Smarter, and More Efficient

## ASXPRESS PLUS

### Rapid Sample Introduction

This simple sample injection accessory dramatically increases the throughput of an ICP-OES or ICP-MS. An inert, high-speed vacuum pump quickly loads the sample, reducing uptake time, while a metal-free, 6-port injection valve allows for simultaneous analysis and washout. A simple user interface controls the ASXpress plus parameters, allowing the user to adapt the sample introduction to fit their analysis needs.

- Increase throughput
- Improve ICP and ICP-MS efficiency
- Reduce sample matrix exposure



## SDXHPLD

### High-Performance Liquid Dilution System

The SDXHPLD system combines the ASX-560 autosampler with a high-precision syringe pump for both aliquot and diluent, but goes an additional step using a novel vortex mixing accessory prior to sample introduction for ICP and ICP-MS.

Vortex mixing promotes homogenization of a sample to ensure accurate and precise analysis following dilution, whatever the sample matrix. The resulting fully homogenized dilution improves data quality over in-line combination. The SDX-HPLD is ideal on-line preparation of calibration curves.



## SimPrep

### Automated Sample Preparation Station

Turn your autosampler into an all-purpose liquid handling station. The SimPrep upgrade pairs your autosampler to a high-precision, dual syringe pump with flexible, simple software. The combination allows you to quickly and accurately automate almost any routine sample preparation task. Whether simple or complex, the SimPrep will get the same result every time.

- Sample dilutions
- Dispensing
- Spikes
- Calibration curves
- Serial dilutions
- Internal standard additions
- 1-to-1 and 1-to-many sample transfers (splitting)



# Straightforward, Easy-to-Use Automation

Every feature of CETAC Autosamplers is designed to simplify analysis and save time. Invaluable features include:

- Chemically resistant materials
- Optional dual rinse station
- Fluid mechanical operation
- Quiet, consistent pumping
- Configurable XYZ movement
- Dust cover enclosure (optional)

## Advanced Mechanical Design

- Injection molded parts
  - Broad chemical compatibility
  - Improved high-resolution applications
- Advanced pump technology
  - Quiet operation
  - Easy tubing replacement options
  - Wide-ranging flow capabilities,
    - 0.1– 80 mL/min
    - Conserve expensive rinse solution and reduce liquid waste
- Easy serviceability and maintenance
- Simple accessory interfaces
- Dual flowing rinse station

## Advanced Electronics

- State-of-the-art movement profile
  - Quiet movement
  - Precise, configurable XYZ movement
  - Expansive movement speed options
- High-resolution positioning
  - Excellent accuracy
  - Active resonance control
- Electronic home position alignment
- User-friendly firmware and configuration software utilities
- Backward-compatible communications
  - Seamless upgrade path
- Performance proven technology



## Technical Specifications

### Dimensions

	ASX-560	ASX-280	XLR-860
<b>Height*</b>	62 cm (24 in)	62 cm (24 in)	66.7 cm (26.3 in)
<b>Width</b>	58 cm (22.8 in)	36 cm (14 in)	112 cm (44 in)
<b>Depth†</b>	56 cm (22 in)	56 cm (22 in)	59.5 cm (23.5 in)
<b>Weight</b>	11.7 kg (26 lbs)	8.1 kg (17.8 lbs)	20.4 kg (45 lbs)

\*with sample probe

† allow additional space for cables

### Sample Area

	ASX-560	ASX-280	XLR-860
<b>X-Axis</b>	42.0 cm (16.54 in)	22.2 cm (8.74 in)	2x42.0 cm (16.54 in)
<b>Y-Axis</b>	30.0 cm (11.81 in)	30.0 cm (11.81 in)	30.0 cm (11.81 in)
<b>Z-Axis</b>	15.5 cm (6.10 in)	15.5 cm (6.10 in)	15.5 cm (6.10 in)
<b>Tray</b>	4-rack capacity	2-rack capacity	8-rack capacity

### Pump

- 0-80 mL/min

### Speed

Axis	Min	Max
<b>X</b>	100 mm/sec	330 mm/sec
<b>Y</b>	73 mm/sec	411 mm/sec
<b>Z</b>	164 mm/sec	476 mm/sec

### Autosampler Control Utilities

- Autosampler configuration tool for control of XYZ and pump
- Firmware updater utility
- IQ/OQ and Log Extractor Utilities

### Communication Interface

- 2 Serial (RS-232) ports
- USB (virtual COM port)

### Power Requirements

- 100-240 VAC, 47-63 Hz, 1.9A

### Options

- Dust cover enclosures, sized to fit
- SDX<sup>HPLD</sup> High-Performance Liquid Dilution System
- ASX<sup>PRESS</sup><sup>®</sup> PLUS Rapid sample Introduction System
- SimPrep Automated Sample Preparation Station

Teledyne LABS enhances the visibility for our brands, products, and services, aiding customers in finding solutions that meet their current and future needs. The existing Teledyne brands will remain, providing ongoing value to customers.

