

MARIN-5

Enhanced Nebulizer System for ICP-AES and ICP-MS

Coupling a concentric pneumatic nebulizer with a heated spray chamber/desolvation system, the CETAC Marin-5 Enhanced Nebulizer System is a cost-effective solution for up to 5+ times or more signal enhancement with ICP-AES and ICP-MS.



The CETAC Marin-5 Enhanced Nebulizer System consists of a conventional concentric pneumatic nebulizer with a specialized (patent-pending) heated spray chamber to increase analyte transport efficiency to the ICP and enable fast sample washout. A dedicated desolvation system with an integrated drain pump prevents liquid overloading of the plasma and ensures stable operation.

KEY FEATURES

- Up to 5+ times signal enhancement for ICP-AES and ICP-MS
- Dedicated temperature controllers for both heating and cooling
- Self-aspiration or pumped modes for sample input
- Small system footprint to save laboratory bench space
- Can accept standard 6mm dimension concentric nebulizers

The dedicated temperature controllers are user programmed from a range of +100 °C to +160 °C for the heater and -20 °C to +10 °C for the electrothermal cooler. This temperature control capability is especially important for fine tuning analyte signal in both aqueous solutions and organic solvents.

Suggested sample input rate is from 0.1 to 0.5 mL/min, conserving sample and minimizing sample waste. The built-in drain pump is easily accessible for replacement of worn pump tubing.

Additional features of the Marin-5 include a secure system cover with viewing window, a dedicated interface kit for simple and fast installation to the host ICP-AES or ICP-MS, and easy access to the system glassware for cleaning.

No software communication interface is needed between the Marin-5 and the host ICP-AES or ICP-MS. Simply connect the host instrument gas supply to the concentric nebulizer, attach the sample out line to the ICP torch, then introduce samples.

Technical Specifications

Nebulizer: Glass concentric, standard 6mm diameter

Liquid Uptake Rate: 0.1 to 0.5 mL/min

Nebulizer Gas: Argon, 0.50 to 1.10 L/min

Spray Chamber: Quartz

Desolvation System: Quartz

Heater Temperature: 100 °C to 160 °C

Chiller Temperature: -20 °C to 10 °C

Voltage: 120 VAC +/- 10%, 50/60 Hz, 5A
220 VAC +/- 10%, 50/60 Hz, 2.5A

Dimensions:

Height: 31.4 cm (12.4")

Width: 29.5 cm (11.6")

Depth: 26.7 cm (10.5")

Weight: 7.3 kg (16.1 lbs)

Warranty: 12 month limited

