

# Apex HF

## Hydrofluoric Acid resistant sample inlet system

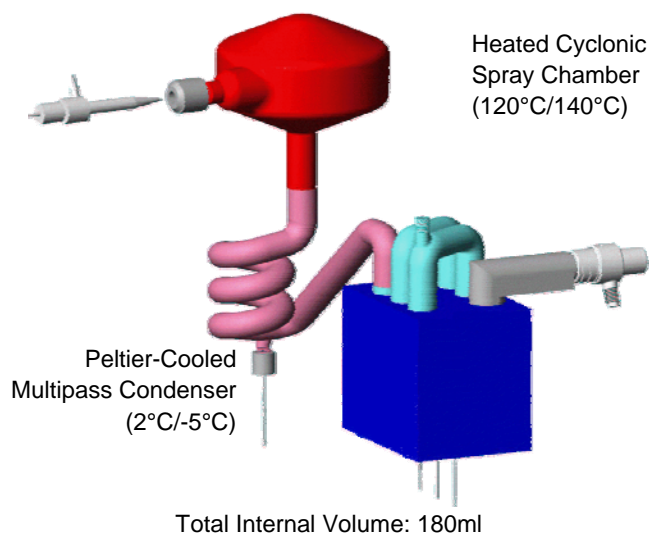
The Apex HF uses a high-purity PFA Teflon® flow path to provide resistance to hydrofluoric acid. The Apex HF is recommended for many geochemistry and semiconductor applications where samples containing HF are analyzed.

Sample transport efficiency is enhanced by nebulizing liquid samples into a heated cyclonic spray chamber using a special version of the PFA MicroFlow nebulizer. A low-volume three-stage Peltier-cooled desolvation system is incorporated for on-line removal of solvent vapor.

- ▲ **Increases sensitivity** by 3x to 10x, depending upon sample flow rate
- ▲ **ppq BECs**
  - self-aspirating PFA nebulizer
  - inert, o-ring-free flow path
- ▲ **Fast rinse out** enables high sample throughput
- ▲ **Couples with nebulizers having a wide range of liquid flow rates** (10-400 µL/min).
- ▲ **High Signal Stability**
- ▲ **Low memory effects**
- ▲ **Small size, easy installation**
- ▲ **Optional Membrane Desolvation**



Apex HF high efficiency inlet system



Preset dual temperature settings for heater and cooler. Patented flow path design ensures rapid wash-in / wash-out.

US Patent # 6864974

The Apex HF is over 90% efficient at introducing analyte to the plasma, resulting in dramatic improvements in sensitivity.

### Sensitivity comparison (1 $\mu$ g/L) Apex HF vs. Crossflow Nebulizer Elan DRC II

	Mg (24)	In (115)	Ba (138)	Ce (140)	Pb (208)
<b>CrossFlow</b>	10091	27470	26366	21499	12885
<b>Apex HF</b>	207329	265083	302756	246960	183914

### Optional Membrane Desolvation

The addition of the ACM or Spiro can further dramatically reduce the amount of water vapor in the aerosol, reducing oxide interferences. Two membrane units are available for use with the Apex HF systems:

**Spiro TMD** Heated Macro-Porous Teflon<sup>®</sup> membrane.

**ACM** Cooled Micro-Porous Nafion<sup>®</sup> membrane.



Spiro TMD Module



ACM Module

