

Temperature Controlled Spray Chambers

Part No. **N8145314**Part No. **N8142003**Part No. **N8145099**

PC³ Peltier Coolers

The PC³ is a small and robust Peltier cooler for ICP-MS cyclonic spray chambers. The cyclonic spray chamber offers the advantages of low memory effects, fast rinseout and high sample transport efficiency. The PC³ cools the outer walls of the cyclonic spray chamber to a constant temperature, enhancing long-term signal stability, reducing polyatomic interferences such as oxides, and reducing solvent loading when volatile organic solvents are analyzed. The PC³ has 2 preset temperatures +2 °C / -5 °C and is ideal for analysis of aqueous or aqueous/organic mixtures. The PC³-LT operates at -20 °C to reduce the solvent load on the plasma for analysis of 100% volatile organic solvents.

Description	Injector Size	Temperature	Additional Gas Port	Part No.
NexION 300/350				
PC ³ Sample Introduction Kit*	1.5 mm	+2 °C / -5 °C	Yes	N8142003
PC ³ Sample Introduction Kit with Quartz SSI Cyclonic/ Scott Dual Spray Chamber	1.5 mm	+2 °C / -5 °C	No	N8145314
HF PC ³ Sample Introduction Kit*	1.5 mm	+2 °C / -5 °C	Yes	N8145309
PC ³ -LT Organic Sample Introduction Kit*	1.0 mm	+2 °C / -20 °C	Yes	N8145099
HF PC ³ -LT Organic Sample Introduction Kit*	1.5 mm	+2 °C / -20 °C	Yes	N8145310

* All PC³ kits include a PFA-ST nebulizer (**N8122192**)

Part No. **N8145340**Part No. **N8152382**

PC³x Peltier Controlled Heated or Cooled Thermally Stabilized Inlet Systems

The PC^{3x} is a compact Peltier heated or cooled inlet system that controls the spray chamber temperature and improves long-term stability. In cooling mode, water or solvent is removed from the aerosol, reducing water or solvent loading on the plasma. In heating mode, sensitivity is increased and volatility-related sample transport effects can be reduced or eliminated.

- Variable temperature control from -10 °C to +80 °C
- Thermal stabilization of spray chamber improves long-term stability
- Last set temperature saved for stand alone operation
- USB or Bluetooth connectivity
- Remote monitoring and control

ICP-MS Model	Spray Chamber	Part No.
NexION 1000/2000	Not included	N8152382
NexION 300/350	Quartz	N8145340
NexION 300/350	Quartz	N8145446

PC³x Thermally Stabilized Inlet System

The PC^{3x} for the High Performance PFA spray chamber is a compact, Peltier-heated or cooled inlet system that offers the advantages of low memory effects, constant temperature, rapid wash-out, and high sample transport efficiency. In cooling mode the PC^{3x} cools the outer walls of the chamber, reducing the water or solvent vapor loading on the plasma, achieving enhanced stability and performance. In heating mode, sensitivity can be improved for low-flow applications.



ICP-MS Model	Spray Chamber	Part No.
NexION 1000/2000	PFA	N8150445

**See next page for more
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