

Gas Chromatography/ Mass Spectrometry

Key Features:

- Can operate for up to 26 hours at 100 mL/min. on a single charge
- Equipped with convenient-to-use interfaces that allows connection to either the Custodion-NT Pump Interface or Custodion-CT Pump Interface
- Diaphragm air pump unit features an LCD display for easy programming and viewing



Clairion Hand-held Battery-powered Air Pump for Air Sampling

Introduction

Clairion™ air sampling products enhance the capabilities of PerkinElmer's personal, portable Torion™ T-9 GC/MS. The Clairion product line includes a hand-held battery-powered air pump, along with Custodion™ conventional and needle trapping devices for air sampling. The pump has a flow rate range of 100 mL/min. to 600 mL/min. under flow control used for collecting samples on the Custodion-CT (Conventional Traps) 20 mL/min. (45-50 inches of water) under pressure or speed control, used for collecting samples on the Custodion-NT (Needle Traps). It can operate for up to 26 hours at 100 mL/min. on a single charge; the battery will charge when the unit is plugged into 110V AC or 220V AC service. It comes with convenient-to-use interfaces that allows connection to either the Custodion-NT Pump Interface or Custodion-CT Pump Interface.

High concentration samples (100 ppb to 10 ppm) are collected on a Custodion-NT, where the NT-Pump Interface is used to connect the NT to the Clairion pump. After sample collection, the Custodion-NT interfaces directly to the Torion T-9 GC/MS, where the analytes are thermally desorbed from the NT into the T-9 GC injection port.

Low concentration samples (<100 ppb) are collected using the Custodion-CT. Here, the CT Pump Interface is used to connect the conventional trap to the pump. After sample collection, the target analytes are thermally desorbed from the CT to the NT using the SPS-3 Sample Desorption Module. The Interface Handle connects the CT to the NT for thermal desorption.

Once the analytes have been transferred to the NT, the NT is inserted directly into the T-9 GC injection port. The Custodion-CT holders accommodate conventional traps of 0.25 inch OD, 3.5 inches long with IDs of 3-4 mm.

The Clairion case is a high impact steel fiber filled Lexan that is antistatic and RFI/EMI-shielded. The diaphragm air pump unit features an LCD display with two lines of 16 characters for easy programming and viewing of sample collection parameters. The air sampling manifold is a proprietary design and fabricated with inert materials for preservation of sample integrity.

The Clairion products are completely compatible with the new SPS-3 and Custodion air sampling accessories. The Clairion and SPS-3 products, along with PerkinElmer's Torion T-9 personal, portable GC/MS, provide complete solutions for air sampling and analysis in the field.