

SOLATek 72

Multi-Matrix Vial Autosampler

- ✓ Water and soil autosampler for purge and trap concentrator
- ✓ 72 sample positions
- ✓ Vial-to-needle design allows purge-in-vial capabilities
- ✓ Three internal standard positions
- ✓ Auto-dilution up to 1:250 using a two syringe system
- ✓ Soil line, needle and heated valve can be back flushed with helium or nitrogen when used with a Stratum PTC
- ✓ Single elevator / needle for both water and soil handling
- ✓ Optional vial cooling system chills vials to 4° C
- ✓ Complete software solution control allows for multi-method and/or dilution capabilities in a single schedule

Product Description

The SOLATek 72 is a soil and water purge and trap autosampler. Soil analysis is performed by automatically using software selectable parameters, such as mixing, heating and purging. This system will also accurately deliver sample volumes from 1 mL to 25 mL in 1 mL increments using the aqueous mode. Aliquots are then transferred to the concentrator with internal standard for purge and trap analysis.

Methods

- USEPA 5030/5035 in conjunction with 502.1, 502.2, 524.2, 503.1, 601, 602, 603, 624, 8010, 8015, 8020, 8021, 8030, 8240, 8260
- ASTM and Standard Methods
- Massachusetts VPH and GRO Methods



Have questions? Need help?

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 **www.tekmar.com**
 **800.874.2004**

SOLATek 72

Specifications

Sample Specifications

Sample Capacity:	72 positions for 40 mL VOA vials
Vial Trays:	Two removable trays for easy refrigerator storage of 40 mL vials with 36-vial capacity each; Dimensions: 2 1/2" (6.35cm) H x 5 3/4" (14.6cm) W x 18 7/16" (45.7cm) L
Vial Cooling (optional):	Cools samples to 4°C (requires an external recirculating cooling bath)
Vial Heater:	Variable Heat Control from 35°C to 100°C
Sample Liquid Handling:	Sample syringe dispenses variable volumes of water from 1 mL to 25 mL in 1 mL increments; Dilution syringe dispenses volumes of sample up to 250 µL
Sample Precision:	< 1% RSD (n=7 @ 5 mL delivery volume measured by weight)
Sample Types:	Liquid samples, including drinking water and wastewater; Liquid samples containing up to 15 mm of sediment when measured from the bottom of an upright 40 mL vial; Solid samples, including all types of natural soils and sediments
Sample Dilutions:	Programmable automatic aqueous sample dilutions of 1:250, 1:100, 1:50, 1:20, 1:10, 1:5, 1:2 on 5 mL or 25 mL sample volumes
Sample Gas Pathway:	1/16" OD Silcosteel® tubing; Silcosteel treated fittings including sample needle and needle block; Transfer line temperature variable from 35°C to 300°C; Needle and block temperature variable from 35°C to 100°C
Sample Liquid Path:	1/16" OD PEEK™ tubing

Standard Injection Specifications

Injection Systems:	Up to three standard injection systems utilizing a 4-way, 2-position valve
Capacity:	Up to 25 µL in 5 µL increments
Precision:	< 3% RSD measured by GC/FID for Fluorobenzene and Bromofluorobenzene, (n=7)
Accuracy:	5 µL ± 10%
Consumption:	24 µL per injection at 15 psi system pressure
Standard Vessels:	Up to three, 20 mL standard vessels, UV-coated for added standard stability; Standard vessels sealed under pressure for standard concentration integrity

Other Specifications

Instrument Control:	Handheld controller for use with older 3000 Series Purge & Trap concentrators, Teklink™ software in a Windows® XP or greater environment for use with Velocity XPT and Stratum PTC concentrators
Method Storage:	Up to 16 methods including pre-programmed USEPA methods when using hand-held controller
Method Scheduling:	Up to 32 method changes in any sample order. Soil, dilutions or water samples can be run from any position in the sample sequence. Up to three standards can be added to any user-specified position. Multiple runs can be made from the same vial (not recommended)
Vial Transport Device:	Three-axis linear motion robotic arm utilizing linear slides, stepper motors, and optical encoders for accurate positioning
Cleaning:	High Temperature OptiRinse™ with two internal reservoirs to heat blank water up to 90° C to clean the entire liquid pathway including syringe, liquid transfer line, and concentrator glassware. User-defined rinse volume and glassware rinse number
Purge & Trap Concentrator Communication (Input Signals):	GC handshaking through relay contact closures; TTL Logic; RS-232 for advanced communications
Purge & Trap Concentrator Communication (Electronic Control):	Modular four microprocessor system linked via RS-485 communications: Two Motorola 68332 microprocessor embedded controllers, 16 MHz CPU, 4 MB flash, 4 MB RAM; Two Motorola HC 711 microprocessor embedded controllers, 16 MHz CPE, 4 MB flash, 1 MB RAM
Certifications:	CE, CETL, CSA, ETL