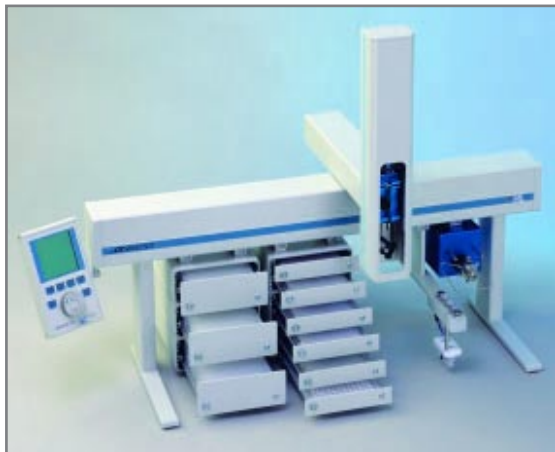


HTS PAL

ULTIMATE FLEXIBILITY IN AUTOMATED LC AND LC/MS SAMPLE INJECTIONS



HTS PAL offers increased laboratory productivity with automated pretreatment operations combined with precise injection of sample sequences.

Productivity

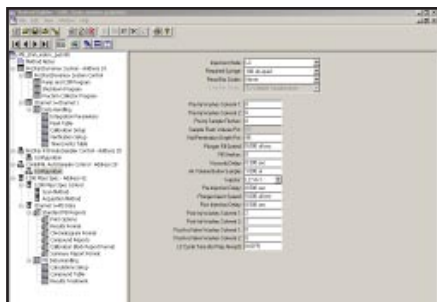
The HTS PAL delivers highly precise and accurate injections and random access to individual samples. The HTS PAL provides task-oriented programming along with options and accessories for additional sample handling routines. The autosampler employs a unique XYZ mechanism for fast sampling and/or rapid vial-to-vial transfers. Fast injection cycles coupled with a large sample capacity make the HTS PAL ideal for high throughput screening, QA/QC applications, or LC/MS Flow Injection Analysis.

Syringe Only Technology

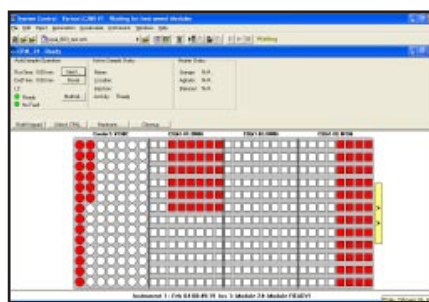
The HTS PAL combines the manual sample injection procedure with the precision and throughput of a robotic liquid handling system. Samples are aspirated with a conventional liquid syringe and are transferred directly into the sample loop. Before and after each injection, the syringe and syringe needle are rinsed in a dedicated Fast Wash Station containing two user-selectable cleaning solvents. This unique design virtually eliminates sample carryover and adsorption problems.

Software Control

The HTS PAL is controlled by Varian MS Workstation software. GLP comes standard with MS Workstation software and includes optional tools to facilitate 21 CFR Part 11 compliance.



Method editor screen allows complete control of the HTS PAL



Interactive access to sample information

NOTICE: This document contains references to Varian. Please note that Varian, Inc. is now part of Agilent Technologies. For more information, go to www.agilent.com/chem.

HTS PAL Specifications

- ▶ XYZ robot with syringe only concept
- ▶ Positioning precision: ± 0.1 mm
- ▶ Injection mode: automatic recognition of syringe type

Syringe Size:

100 μ L standard

(Optional syringe sizes 10, 25, 250, 1000, 2500, 5000 μ L)

Injection Volume Range:

0.1 μ L – 5000 μ L

Injection Speed:

0.01 μ L/sec – 250 μ L/sec.

LC Injector:

1 electrically actuated fast switching 6-port valve

(Optional multi-valve configurations available)

Sample Capacity:

Up to:

- ▶ 600 1 mL micro vials
- ▶ 648 2 mL standard vials
- ▶ 96 10 mL or 20 mL vials
- ▶ 12 deepwell plates (96 or 384)
- ▶ 24 standard microplates (96 or 384 wells)

Dimensions:

25.5 in./64.8 cm (h) x 32.6 in./82.8 cm (w) x 15.2 in./38.5 cm (d)

Weight:

10 kg (without accessories)

Needle, Syringe and Valve Cleaning:

Fast Wash Station for 2 different solvents

Instrument Control:

- ▶ Local User Interface
- ▶ Control panel: four function keys with graphical LCD display
- ▶ Unique scroll knob for 'Teach Functions'

Remote control:

- ▶ Varian MS Workstation Software
- ▶ Cycle Composer Windows 98/NT4/2000/XP®-based PC software

Electrical Control:

- ▶ Two RS 232C ports
- ▶ Three TTL input/three TTL output
- ▶ Two Opto Coupler Input/two relay output

HTS PAL Options:

- ▶ Thermostatted Trayholders (4 °C – 70 °C)
- ▶ Thermostatted Microplate Stacks (4 °C – 40 °C)
- ▶ Barcode Reader

Ordering Information

Cat. No.	Description
PALHTS0VAR	HTS PAL without TraySet or Stack Prep and Load System for High Throughput Screening
PALTray1ml	Sample tray for 200 vials 0.7/1 mL
PALTray2ml	Sample tray for 98 vials 2 mL or 78 vials 0.7/1 mL
PALTray10ml	Sample tray for 32 vials 10/20 mL or 21 vials 2 mL
PALTrayMT2ml	Sample tray for PAL Stack6DW, PAL StkCooler or PAL MT4Holder for 54x2 mL vials (6 Trays may be used in 1 PAL Stack6DW, Stack Cooler or 4 Trays may be used in 1 PAL MT4Holder)
PALTrayMT2ml6	Set of 6 pcs. PAL TrayMT 2 mL sample trays
PALStack12MT	MT PAL System stack for 12 Microtiter plates
PALStack6DW	PAL System stack for 6 Deepwell plates or 6 PAL TrayMT 2mL
PALMTHolder	Trayholder for 2 Microtiter/Deepwell plates or 2 PAL TrayMT 2mL
PALMT4Holder	Trayholder for 4 Microtiter/Deepwell plates or 4 PAL TrayMT 2mL
PALTraySet1ml	Sample tray for 200 vials 0.7/1 mL, including Trayholder 76 mm
PALTraySet2ml	Sample tray for 98 vials 2 mL or 78 vials 0.7/1 mL, including Trayholder

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www.varianinc.com

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Asia Pacific Australia: 613.9560.7133

Latin America Brazil: 55.11.3845.0444

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