

# **Overbrook Autosamplers**

A Common Workstation Concept Assures Efficient Operations for Sample handling and preparation



Overbrook Autosamplers provide the means to automate sample introduction. Automatic insertion provides better reproducibility and time optimization. Each of the autosamplers are based on a common look and feel, and are accurate, precise and fast.

These autosamplers provide increased lab productivity with excellent precision and reliability. Different modes control the autosampler in order to fit your needs, including integrated keypad control or PC software interface. All essential vials, syringes, caps and septa are available for smooth operation and performance.

#### **Universal Key Overbrook Autosampler Features**

- No use of transfer lines helps to minimize carryover, active site problems and line replacement
- Sampler rotating turret keeps the inlet free for maintenance or manual injections
- Quick and simple syringe change outs

#### **HTA Sampler System Overview**

System handling: Syringe sampler for liquid, headspace and SPME sample Programmable front panel; Comsoft software interface

300A Dimensions:  $16.5 \times 20.5 \times 15.7$  inches [W x H x D] – 20lbs with tray

310A Dimensions:  $16.5 \times 20.5 \times 15.7$  inches [W x H x D] – 18lbs (no tray)

200H Dimensions:  $16.5 \times 24.4 \times 15.7$  inches [W x H x D] – 25lbs with tray

280T Dimensions:  $16.5 \times 24.4 \times 15.7$  inches [W x H x D] – 25lbs with tray

Power requirements: 115V/230V - 50/60Hz

GC compatibility: Interfaces available for most GC models including Agilent, Varian and

Shimadzu

Communication: RS-232 and TTL

Method storage: Up to ten different methods can be programmed and stored for

all units

### **Liquid Sampling**



Units: HT300A, HT310A, HT280T, HT300A/LV

Syringe sizes: 1, 10, 25, 50 or 100uL (0.1mL to 10mL available on HT300A/LV)

Tray capacity: Up to 110 standard 2 or 2.5mL vials (the HT310A uses a 10 sample

fixed tray)

Sample volume: Programmable in 0.1uL steps up to syringe capacity

Fill speed: From 1 to 100uL/sec

Pull up strokes: Used to eliminate bubbles in injection; up to 15 strokes

Viscosity delay: Used when injecting viscous samples; from 0 to 15 second delay

Injection speed: Programmable from 0.1uL/sec to 100uL/sec

Injection depth: Needle depth into inlet can be optimized for application

Injection dwell: Programmable with up to 99 second dwell before and after injection

## Liquid Sampling (cont'd.)

Syringe cleaning: Four solvent rinse positions with options to wash prior and after

injections

Syringe washes: Up to 15 washes with variable volume up to capacity of syringe

Internal standard: Option to add an internal standard to each injection in syringe with

air gap

Vial depth: Needle depth into the vial variable; useful for multiphase sampling

Multiplicity: One sampler can inject onto both inlets allowing for dual column

analyses

# **Headspace Sampling**



Units: HT200H, HT280T

Tray capacity: Up to 40 standard 10 or 20mL headspace vials

Syringe size: 2.5mL (200H can be configured with a 5.0mL syringe)

Syringe temperature: 40 to 150C in steps of 1C

Sample volume: Up to syringe capacity in steps of 0.01mL

Fill speed: From 0.1 to 100mL/minute

Equilibrium delay: Used to ensure syringe filled with sample; Up to 60sec in 1 sec

increments

Injection speed: From 0.1 to 100mL/minute

Oven capacity: Six position incubation oven

Oven temperature: 40 to 150C in steps of 1C

Incubation time: Up to 24 hours of incubation per sample in steps of one minute

Agitation: Orbital shaker with options for always on, always off or on/off cycling

Shaking speed: Variable with up to ten speeds

Syringe cleaning: Optional gas flush to purge syringe in between injections

#### **SPME Sampling**

Units: HT280T

Tray capacity: Up to 40 standard 10 or 20mL vials

Extraction: Liquid or headspace; determined by variable vial depths

Oven capacity: Six position incubation oven
Oven temperature: 40 to 150C in steps of 1C

Incubation time: Up to 24 hours of incubation per sample in steps of one minute

Agitation: Orbital shaker with options for always on, always off or on/off cycling

Shaking speed: Variable with up to ten speeds

**Note:** HT280T is a single unit that combines headspace analysis, liquid sample injection and SPME (solid phase micro extraction) in one unit. The HT280T effectively combines the operations of the HT200H headspace autosampler and the HT300A liquid autosampler, with the addition of SPME capability. Changing between liquid, headspace and SPME modes is very simple. It takes about 5 minutes and there's no need to remove the sampler from the GC.



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