



# HT2100H

## Headspace autosampler

Just the right features, at just the right price.



### KEY FEATURES:

- Fits all GCs and GC/MSs
- Easy To Use
- Fully Automated
- Cutting-edge technology
- Shaker included

Analysing a small number of samples? Get headspace precision and performance with a system that is the perfect size for your needs.

The **HT2100H** is an inexpensive, simple-to-use, as well as reliable headspace unit. With all the quality and reliability you expect, the **HT2100H** headspace sampler offers exactly the features you need — at a price to fit your budget.

The **HT2100H** offers **automation for processing up to 14 unattended samples.**

The vials are individually lifted up into the heating zone to ensure constant heating time and are immediately returned to their position after injection. Furthermore, a vial can be heated during the GC run of the previous vial specified in the sequence, resulting in a decrease in time between two consecutive GC runs.

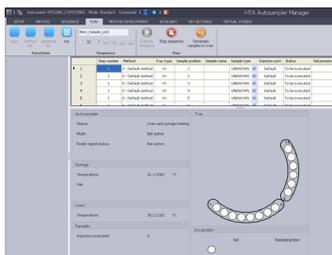
The **HT2100H** is a **quality, cost-effective alternative to manual headspace.** While manual sampling techniques are simple and inexpensive, they are also tedious, subject to human error and they are not able to provide robust and consistent

data. Automation, on the other hand, **ensures consistent and reliable results**, while also freeing up laboratory personnel for more productive tasks.

In addition, the uniformed heat distribution along the barrel prevents cold spots from forming. Sample and syringe heating means no sample condensation. The proprietary, heated, gas-tight syringe offers superior performance; as well as the ability to switch across methods that have different heating temperatures. Furthermore **a cleaning system is integrated in the unit for automated and consistent purging procedures** between different samples.

**HTA - Sampling for science**

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**Easy-to-use controls for minimal operator training.** A simple, easy to use keypad lets you start your analysis by just pushing the START button. All the samples in your rack will be automatically processed. Quick sets of autosampler parameters can be done by the free PC control, **HTA Autosampler Manager**, provided together with the **HT2100H**, while all the routine operations such as analysis start, sample loading and extra purging, can be managed by using the dedicated keypad.

**HT2100H** is the most compact autosampler on the market, with a **near-to-zero requirement for bench space**. It can serve as both the front and rear injector in most supported GCs, with no requirements for GC injector modification. The injector selection is made directly by the sequence list, avoiding difficult set-up operations or re-installation to pass from one injector to another.

Furthermore the rotating head design ensures that the injection port is always free, for manual injections or inlet maintenance. **The system is fully self contained and can be interfaced with almost any gas chromatograph, regardless of the GC brand or model you have in your laboratory.**

Advanced features such as the **system integrity check<sup>1</sup>** are also included: it is automatically performed at every startup by an heuristic procedure. The **HT2100H** allows sequential injections even of samples featuring highly dissimilar characteristics; it offers **adjustable sample volumes** and **vial leakage check<sup>1</sup>**.

## Headspace: the technique

Can be adapted to meet a variety of analytical challenges. **Volatile compounds in almost any sample matrix** can be determined, simply and quickly, by headspace gas chromatography.

Headspace sampling provides the **solvent-free extraction** of volatile compounds from liquid and solid samples, while eliminating the time-consuming and error-producing steps required in other GC sample-preparation techniques, such as purge-and-trap, or solvent extraction.

The **productivity advantages** include fewer problems related to carryover, cross-contamination, and foam formation, which are typical of purge-and-trap techniques. Therefore, you can extract more data from your samples in less time and at the lowest possible cost per sample.

Samples can be sealed in headspace vials at the point of collection, reducing analyte losses that can occur with other techniques during sample handling and storage.

## HT2100H Technical specifications

### General characteristics

Tray capacity: 14 vials (20ml); optional: 10ml  
 Syringe volume: 2.5ml (standard); optional: 1 and 5ml  
 Cleaning system: inert gas flush (inlet: 1/8"; max pressure: 1bar)  
 Maintenance: preventive counters available; system integrity check<sup>1</sup>  
 Electrical control: LAN and TTL  
 Target illumination: yes

### Conditioning

Oven position: 1  
 Oven temperature: off; 40-150°C  
 Incubation time: 0-999min  
 Shaking method: vibration (sussultatory)  
 Shaking cycles: on/off 0-9.9min

### Sampling

Syringe temperature: off; 40-150°C  
 Sample volume: steps of 0.01ml up to 15  
 Sample homogenization: up to 15  
 Sample speed: 0.5-100ml/min

### Injection

Injection speed: 0.5-100ml/min  
 Pre/Post dwell time: 0-99sec  
 Enrichment: up to 15  
 Dwell time between injections: 0-100min

### Physical characteristics

Dimensions (WxHxD): 280x640x320mm  
 Weight: 8kg  
 Power Supply: 100-240±10%Vac; 50-60Hz;150VA

*Free software "HTA Autosampler Manager (Standard Version)" provided for PC control; upgrade to "HTA Autosampler Manager (CFR 21 Part 11 Version)" should be purchased separately. | Required PC for setup, service, method and sequence editing. The following functionalities are only available when using the HTA Autosampler Manager: progressive mode, vial leakage check and CFR 21 Part 11.*

<sup>1</sup> Patented technology

**HTA,**  
the  
company

HTA is one of the leading Italian scientific instrument engineering and manufacturing companies. We are currently focused on applications and solutions for analytical, life sciences and clinical chemistry automation. Our specialisation is in robotic systems for sample management; among our most popular products are the GC and HPLC autosamplers and preparative workstations. In addition, HTA offers engineering and manufacturing consultancy services for its OEM customers. HTA's quality management system is certified UNI EN ISO 9001:2008.



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