

# HT3000A Liquid GC autosampler

HT3000A autosampler offers reliability and superior performance for all GC-GC/MS applications meeting today's and tomorrow's requirements



Multi-phase sampling

Sandwich injection

Priority sampling

Ambient headspace sampling

Nanoliter injection

HT3000A has been engineered for maximum performance and reliability. The new system takes advantage of today's latest technology to deliver even greater reliability, performance and flexibility.

#### **KEY FEATURES:**

- 50+ GC models supported
- 1 turret serves 2 injectors
- Extraordinary performance
- Requires low maintenance

HT3000A is the most compact autosampler on the market (near-to-zero requirement for bench space) while offering top-class sample capacity. The sample rack can be removed for sample loading or preparation, or to be stored elsewhere.

**HT3000A** is available in the standard version with 121 positions for 2ml vials; in the top version **HT3200A** with 209 positions; in the entry-level version **HT3100A** with a 15 position fixed rack.

It can be easily installed on all the GC and GC/MS systems available on the market through its flexibility and modular configuration. It can be configured serving up to two injectors in the most of the supported GC.

The self-aligning "plug and play" **HT3000A** mounts in seconds without tools. It can be easy moved between GC when workloads change (easy positioning & easy removal/repositioning).

## **HTA - Sampling for science**







Easy to use: Just load your samples and run the analysis with no extra downtime. New run-all-samples mode makes the operation of sample processing even more simple and transparent.

HTA is the first to offer GC liquid autosampler with a large, full-color **touch screen interface**, providing easier system accessibility and usability. Touch screen eliminates drilldown, simplifying instrument control for novices and experienced users.

HT3000A is the fastest liquid autosampler available on the market: injection is performed in less than 100ms. Fast-injection technology ensures the best possible peak shape, while maximizing the accuracy of your results.

The greatest solvent capacity means longer unattended operations. The autosampler supports the use of 6 solvent vials of 10ml each (total capacity: 60ml).

Furthermore you can take advantage from the **double wash step capability**: as preand post-wash solvent in addition to A, B... F solvents you can also choose for a combination of A+B, A+C.... F+E solvents for superior analytical performance (carry-over adverse!).

**HT3000A** handles the **most sophisticated sampling techniques**. Parameters are easily

programmable to optimize both the most convenient sampling method for extremely volatile or viscous samples and the best injection technique. **Variable needle depths** allow you to sample anywhere within the vial, thus performing an extraction directly from the vial.

From small-volume injection, to large-volume injection, to multiphase sampling, **HT3000A** can help you process samples more quickly and get better data too. It can mount **different types of syringes** with volume from 0.5 to 100µl.

HT3000A offers syringe illumination to keep always the sample under control, for easy check against air bubbles in method validation.

The rotating tower leaves the injector port free for manual injection or maintenance.

Besides avoiding any complicated sample vial transfer procedure, this approach keeps the **samples away from any heated source**. In fact sample rack is mounted away from GC oven to prevent exposure to high temperatures that could cause degradation or condensation in the sample vial.

**HT3000A** can be also controlled by a PC using the **HTA Autosampler Manager.** 

### **HT3000A Technical specifications**

#### General features

Syringe volume: Tray capacity: Maintenance: Electrical control: Syringe area illumination: 0.5, 1, 5, 10, 25, 50 and 100µl 121 vials, 2ml; optional tray available preventive counters available LAN and TTL; optional: RS232 yes (programmable)

#### **Filling**

Sample volume: Air volume: Filling speed: Viscosity delay: Bubble elimination: as low as step of  $0.1\mu l$  as low as step of  $0.1\mu l$   $1-100\mu l/sec$ 

0-15s up to 15 pull up strokes

#### **Injection**

 $\begin{tabular}{ll} Injection speed: & 1-100 \mu l/sec \\ Injection depth: & programmable \\ Pre and post inj delay: & 0-99s \\ \end{tabular}$ 

#### Washing

Type: Solvent capacity: Mode: pre-injection, sample, post-injection 6x10ml vials single or double wash

#### Internal standard technique

 $\begin{array}{ll} \text{IS volume:} & \text{as low as step of } 0.1 \mu \text{l} \\ \text{Air gap volume:} & \text{as low as step of } 0.1 \mu \text{l} \\ \text{Mode:} & \text{1 or 2 air gaps} \end{array}$ 

#### **Physical features**

Dimensions (WxHxD)\*
Weight:
Power supply:

280x570x320mm

100-240±10%Vac; 50-60Hz; 60VA

(\*) tray in closed position

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



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