

# Powerful Multimode Autosampler

KONIK K2 Q12 LC+GC/MS with ROBOKROM®



The ROBOKROM® is totally independent and can be fitted to any commercial Gas Chromatography and HPLC system. KONIK has developed a complete range of HS, P&T, SPmE and TD systems robust, efficient and versatile, so that any analytical problem implying volatile compounds can be solved in optimal conditions.

## ROBOKROM® Specifications Common Features

- X-Y-Z Displacements.
- Symmetrical Horizontal Arm: Microcontroller can be located at either side.
- Vertical Arm: holds the needles and all syringes.
- 3 interchangeable Vial Trays: for 32 vials of 6, 10 or 20 ml, 105 vials of 2 ml and 171 vials of 1 ml.
- Optional Tray Temperature Control (TTC): all vials can be heated or cooled through a Peltier cell at once from 5° to 70°C depending on room temperature.

## ROBOKROM® Programming

- Easy Menu Driven interactive programming through autosampler microprocessor keyboard (20 characters and 4 lines display). Optional PC programming and control through KONIKROM® PLUS Software.
- Method Linking/ Application Development Mode: Up to 10 separate sample methods can be stored, processed and linked by the stand alone unit. Unlimited methods with KONIKROM® PLUS Software.
- Other: Autodiagnosics. PID temperatures control. RS-232 and RS-485 communication ports.

## Description of the Operational Modes

### Basic GC Unit (HRGC+HRGC-MS)

**Interchangeable Vial Tray:** 171 vials of 1 ml, 105 vials of 2 ml, or 32 vials of 6 ml, 10 ml or 20 ml.

**Syringe Volume:** 0.5, 1, 2, 5, 10, 25, 100, 500 µl.

**Injection Volume:** Programmable from 0.1 µl to 500 µl depending on the syringe type.

**Plunger Speed:** Programmable from 1 µl/s to 5000 µl/s depending on the syringe type. Programmable up & down movement speed on sample, solvents and injector.

**Injection Position:** Left or right. Mobile X and Y axis fits any GC.

**Injection Modes:** External, Internal Double and Dual. Running same sample (dual) or different sample (double) on two columns.

### HPLC Unit (HPLC+HPLC-MS)

**Interchangeable Vial Tray:** 171 vials of 1 ml, 105 vials of 2 ml, or 32 vials of 6 ml, 10 ml or 20 ml. EPA compatible.

**HPLC Injector:** 6-ports valve module box-fixed on the left/right side of the basic unit.

**Sample Volume:** Fixed loop or programmable from 0.1 µl to 500 µl depending on the syringe type.

### Static Head Space Unit (HS)

**Vial Tray:** 32 vials of 6, 10, or 20 ml.

**Vial Volume:** 6, 10 or 20 ml with magnetic crimp caps.

**Temperature control:** In 5 different blocks: tray (up to 70°C), pre-desorption, desorption, valves and transfer line.

**Vial Movement:** Magnetic pick-up robotized arm.

**Injection Volume:** Variable, programmable by injection time.

**HS Injector:** Heated 6-ports valve module box-fixed on the left/right side of the basic unit. Heated transfer line.

**Syringe:** Special double needle.

**EPC:** Electronic Pneumatic Control of carrier and vial pressurization gas.

**Optional:** Sample stirring, fixed loop sampling.

### Purge & Trap Unit (P&T)

**Vial Tray:** 32 vials of 6, 10, or 20 ml.

**Vial Volume:** 6, 10 or 20 ml with crimp caps.

**Temperature control:** all temperatures programmable: transfer line, valve, initial trap, desorption trap, bake trap,...

**P&T Injector:** Heated 10-ports valve module box-fixed on the left/right side of the basic unit. Heated transfer line.

**Syringe:** Special double needle.

**Trap:** Heated from -190°C (cryogenic option) up to 400°C. Optional cryotrap module with LN2. Any trap available: Tenax, Silica Gel, Charcoal, OV10, mixed...

**EPC:** Electronic Pneumatic Control of carrier and vial pressurization gas.

### SPmE Unit

**Interchangeable Vial Tray:** 171 vials of 1 ml, 105 vials of 2 ml, or 32 vials of 6 ml, 10 ml or 20 ml.

**Syringe:** Special needle adapter.

**SPmE Fiber Assemblies:** PDMS, PDMS/DVB, PDMS/Carboxen, CW/TPR, CW/DVB, ... from 7 µm to 100 µm bonded, non-bonded or crosslinked.

**Working Mode:** GC or HPLC µextraction.

**Option:** Sample stirring and sample heating (up to 300°C).

### Thermal Desorption Unit

**Interchangeable Vial Tray:** 32 vials of 6 ml, 10 ml or 20 ml.

**Syringe:** Special needle adapter.

**Purge and Trap** with vial movement, heating and cryogenic option.

### Fraction Collector Unit

**Interchangeable Vial collectors Tray:** 171 vials of 1 ml, 105 vials of 2 ml, or 32 vials of 6 ml, 10 ml or 20 ml.

### Other features:

- Automatic and sequential sample collecting by time.
- Optional baseline monitoring (UV-VIS).
- Automatic waste collection.
- Intelligent volume calculation.

### Optional:

#### Sample Preparation Station Unit

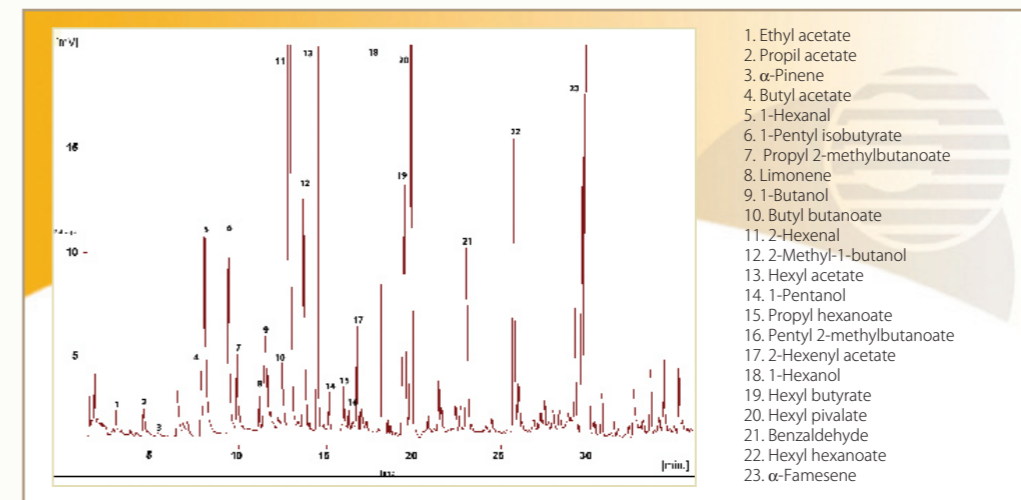
Vial Tray: 171 vials of 1 ml, 105 vials of 2 ml, or 32 vials of 6 ml, 10 or 20 ml.

Options: Evaporation, concentration by volatilization, drying, concentration adjustments (controlled dosing of reagents, standards and/or solvents,...)



ROBOKROM® Accessories

## SPmE : Analysis of Flavors in Apples



ROBOKROM® in STIRRING mode