

HERACLES NEO E-Nose

New possibilities



The new generation of HERACLES Neo electronic nose from Alpha MOS features **unsurpassed performance in smell and flavor analysis**.

Combining **dual fast gas chromatography** detection with **powerful data processing based on multivariate statistics** and an **optional module for sensory and chemical characterization** (AroChemBase), the instrument is the perfect tool for industrials involved in **quality assurance and product development**.



AlphaSoft



MMI Pro



AroChemBase

BETTER STABILITY & QUALITY

- An **improved fixation of the columns** within the oven ensures a **better retention times stability over time and thus a more robust quality assurance model**.
- Thanks to **optimized thermal management** of the instrument, a **better thermal stability is achieved**, leading to **improved performance and longer lifespan** of the instrument.
- The AlphaSoft includes a **new method for system cleaning and preparation** before any first analysis of a sequence. This will remove the impurities collected during the standby time by conditioning the trap and flushing the column if the duration of validity period of cleaning is surpassed. This method directly **enhances chromatograms quality and instrument stability over time**.

HIGHER SENSITIVITY & ACCURACY

- The **dynamic range of the detector electronics has been increased by 35 times, without compromise on detection limits**. Since major components of the sample are detected without any risk of signal saturation, the sensitivity of the method can be increased for minor compounds. This allows to detect more molecules that can be computed by statistics.
- The **improved temperature regulation** inside the system allows to obtain better chromatographic stability and lower chromatographic noise and artifacts leading to **better signal/noise ratio**. Therefore, we **achieve double in sensitivity**.

POWERFUL TOOLS

- **Sensory ID**: AlphaSoft (v15 and later) is equipped with an optional new patented method for data processing. It makes **chromatograms processing easier** by removing the need for an integration step and for external standard injection (chromatograms alignment is automated). Thus, the electronic nose achieves a **better tracking of chemical and sensory defects that can occur during production**. Sensory ID is our model designed for industry users who need to make fast and good decisions with a PASS/FAIL display.
- **MMI Pro v1.0**: an **intuitive interface** specifically designed for Production operators. **Find all your tools in one window view** create and launch easier and faster analysis. It is specifically designed to production environment by reducing the number of steps for routine operators and avoid potential errors.
- **AroChemBase v7**: this new version of our unique molecules database have been enriched with more than 15,000 compounds, allowing a **larger range of identification**.

HERACLES NEO Portfolio

CONFIGURATIONS	HERACLES					
	Dual column - Fast GC E-Nose with chromatography functionalities Computer - Start-up kit - Leak detector					
	CHECK NEO 50	OPTIMIZE NEO 100 NEO 150		QUALIFY NEO 200 NEO 250		ASSESS NEO 300
Injection mode	Manual	Headspace compact		Headspace autosampler		Headspace / Liquid
Hardware Sample capacity	/	1 tray x 45 positions		2 trays x 45 positions		1 tray x 60 positions (HS) 3 trays x 54 positions (Liquid)
FID station (H ₂ /Air/Compressor)			•	•	•	•
Software Basic statistics processing	Option	•	•	•	•	•
Advanced statistics processing		Option	Option	Option	Option	•
AroChemBase	•	Option	Option	Option	•	•
Sensory ID	/	/	/	•	•	•
MMI Pro	/	/	/	Option	Option	Option

CHECK HERACLES NEO 50: more than a gas chromatograph, use HERACLES NEO 100 to check rapidly your compounds of interest, and identify them easily due to AroChemBase linked to dual GC technology.

OPTIMIZE HERACLES NEO 100 & 150: fully adapted to product development environment, HERACLES NEO 100 & 150 allow easy sample comparisons and compounds characterization with automated samples handling using a compact gas autosampler.

QUALIFY HERACLES NEO 200 & 250: first step to ensure production quality (batch-to-batch consistency) and prevent any outlier by confirming the presence or absence of specific markers. AroChemBase can even help you identify them!

HERACLES NEO 200 & 250 perfectly match QA/QC environment with Sensory ID for an easy PASS/FAIL quality display that comes with a rapid sample throughput thanks to the large capacity gas autosampler. Additionally, the basic statistical data processing package provides an easy comparison of your sample and MMI Pro an intuitive interface with information you need for your daily use.

EXPERTISE HERACLES NEO 300: a powerful system offering in-depth investigation on chemical composition: origin of off-odors and sensory defects, competition benchmarking etc. The full data exploration package allows creating odor maps, predictive, quantitative and qualificative models to easily compare your products and identify the molecules with AroChemBase.

HERACLES NEO 300 is also equipped with a liquid/gas autosampler, which makes it the perfect solution for all your applications from R&D to QC!