



New Instruments and
Research for Analysis

VENUS SERIES 300

METHANE & NON-METHANE HYDROCARBON
ANALYZER IN LOW CONCENTRATION.

NIRA Analyzer Mod. **VENUS 301** is a sensitive instrument specifically designed to automatically measure traces of organic volatile composites in air, able to separate methane and non-methane components in one single analysis.

It is designed to simplify typical monitoring problems, carrying out the task in cabins or mobile units maintaining the typical sensitivity and selectivity of the laboratory instruments.

This instrument separate organic volatile compounds trough packed columns and detect them with FID. With the VENUS 301, N.I.R.A. gives coherent and complete results to those who value air quality: urban vehicular traffic pollution monitoring in fixed or on mobile units; industrial or residential area monitoring near industrial plants.



Venus 300

BENEFITS

- > **Flame ionization detector:** enhanced linearity, reproducibility, reliability and can be used in cabins.
- > **Sampling membrane valves:** they can work for years at a high temperature without any maintenance.
- > **Optimized pneumatics:** an automatic electronic pressures and temperatures monitoring system is incorporated in a traditional pneumatic circuit, this allow easier interface and performances optimization.
- > **Sampling pump:** integrated pump.
- > **Chromatographic separation:** through long life packed columns.
- > **Automatic injection system.**
- > **Hermetic detectors with channeled vent:** they can be used in any area, even in controlled atmospheres.
- > **FID auto diagnostic interlocked with hydrogen flow stop.**
- > **High precision thermostatic oven for a high resolution separation.**

■ "PC EMBEDDED" TECHNOLOGY

- Allows the total visibility in every analytical step;
- Increase the quality of chromatograms thanks to an LCD/TFT display and a real time analysis control;
- Increased sampling accuracy and precise chromatogram elaboration;
- Accurate data elaboration: integration, trend recording, and history of all anomalies that may occur;
- Graphic and numeric data re-loading off-line;
- Continuous checking of: operating parameters, analysis and conditioning;
- Trends recordings;
- Auto-diagnostic;

■ TECHNICAL SPECIFICATION

ANALYZED COMPONENTS	<i>VO_C as methane & non methane components</i>
RANGES (SELECTABLE)	<i>0-5; 0-10; 0-100; 0-1000ppm</i>
RESPONSE TIME	<i>120 seconds</i>
NOISE	<i>< 0.01% FS</i>
DETECTION LIMIT	<i>< 0.02% FS</i>
ZERO DRIFT	<i>Compensated</i>
SPAN DRIFT WITHIN 24H (MAX SENSIBILITY)	<i>< 1%</i>
ACCURACY	<i>1%fs</i>
LINEARITY	<i>1%fs</i>
REPEATABILITY	<i>< 1%fs</i>
OPERATING TEMPERATURE	<i>+5; +40°C</i>
H ₂	<i>2 bar, 50ml/min.</i>
AIR CONSUMPTION	<i>4,5 bar, 400ml/min.</i>
DISPLAY INTERFACE	<i>LCD - 10.4"</i>
ANALOGIC OUTPUT	<i>0-10V; 4-20mA</i>
SERIAL OUTPUT (OTHERS IN OPTION)	<i>RS 232</i>
POWER SUPPLY	<i>230V; 110V (in option)</i>
DIMENSIONS	<i>450x270x600mm (L x W x H)</i>
WEIGHT	<i>20 kg</i>



NEW INSTRUMENTS and RESEARCH for ANALYSIS s.r.l.

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