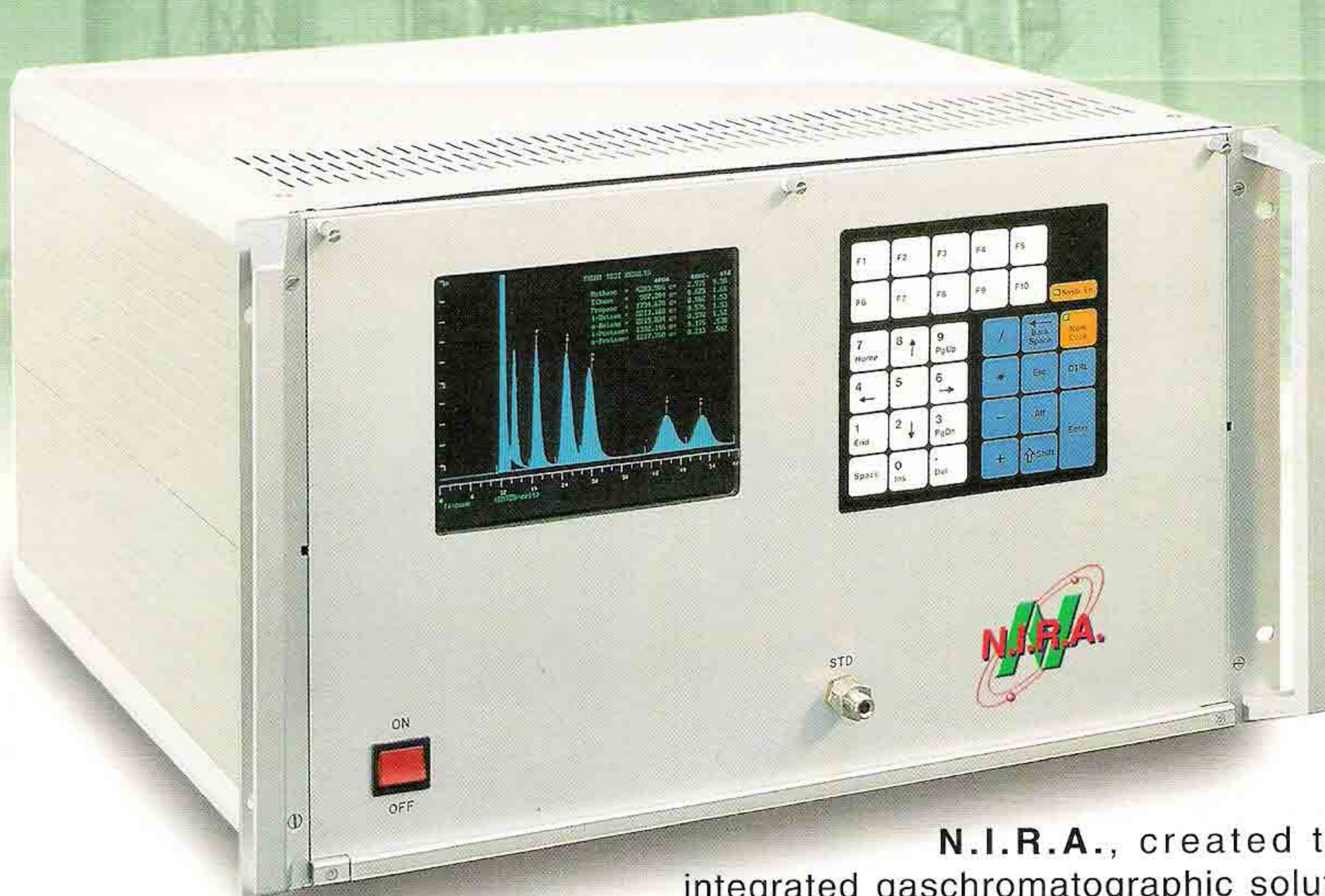


# N.I.R.A.

## SATURN

Automatic  
gaschromatograph  
analyser



N.I.R.A., created the first integrated gaschromatographic solution with "PC-embedded and graphic display".

It supervised to every checking phases of analytic cycle, pressure and gas flow, chromatogram show, screen display, data processing, historic file.

**SATURN** is the ideal solution, full functional keyboard, digital flow rate control, easy-to-use, to immediate identification of analyte and possible irregularities.

The workstation coupled is not necessary.

**The Automatic System Custom-made continuous on-line run, to higher productivity, performance and cost reduction.**

With new **SATURN GASCHROMATOGRAPHY, N.I.R.A.** giving new answers to analytical problems:

- in routine analysis-on-line, process plant monitoring, petrochemical industries, high purity gas checking and pilot plant monitoring systems.

New Chromatography System is the result of synergy between two excellent technologies based on tradition account and recent innovations.

#### **“Analytical process” technology**

- Membrane sampling and switching valves without moving parts, guarantee for long term maintenance free, in high temperature working
- Optimised, continuous and automatic check of pressure and flow gas
- Wide rang of gasproof detectors
- High stability column oven
- Sample path temperature control
- Full functions keyboard control

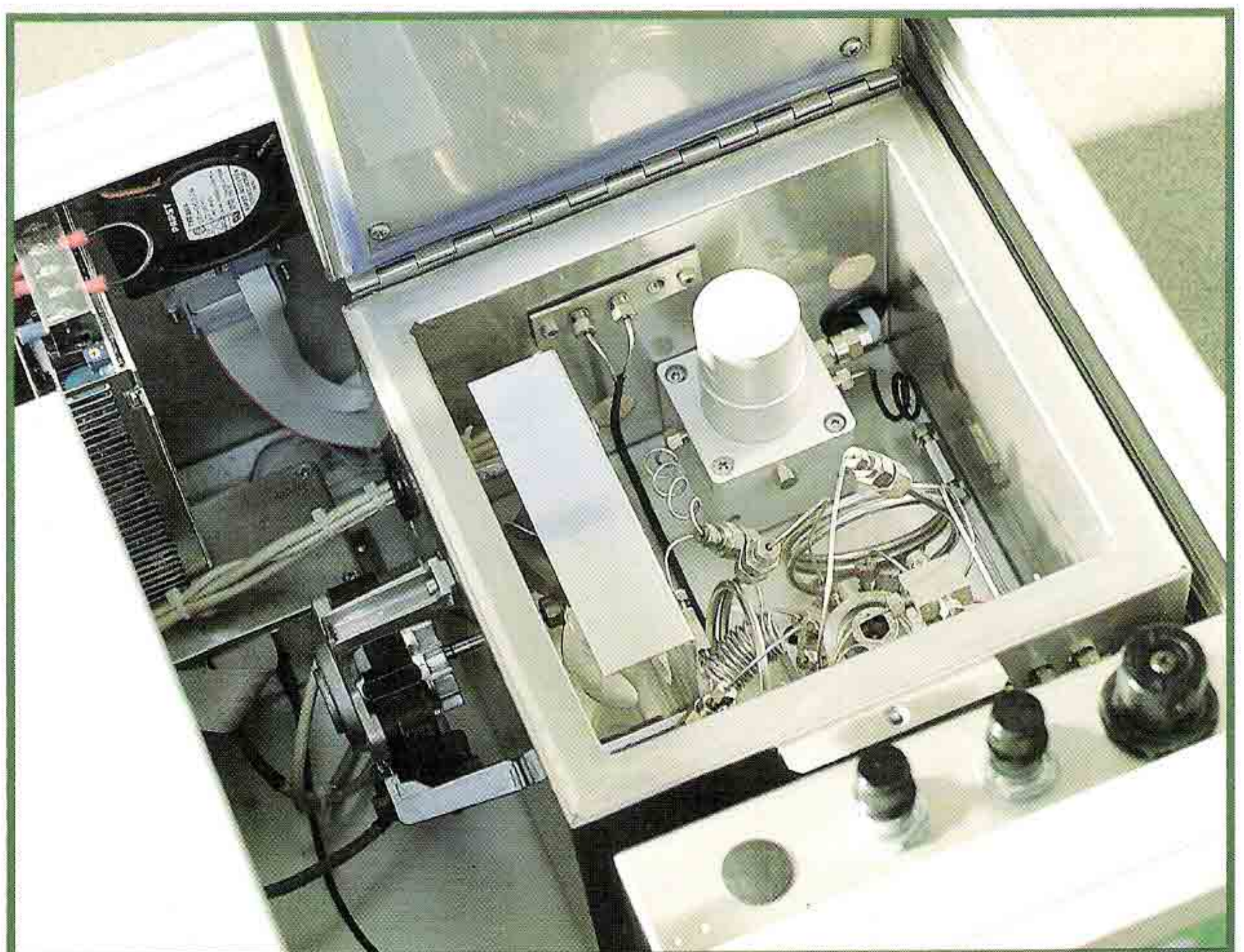
#### **“PC-embedded” technology**

- PC core-module
- Graphic display of analytical process by different animations phases
- Continuous test and displaying of operatives parameters
- Chromatogram elaboration higher then traditional solution to accurate integration (comparable to Laboratory Data acquisition System )
- High resolution chromatogram displayed in real time, with excellent quality
- Internal database
- Graphic and numeric re-elaboration off-line
- Consolidated data recording and record of irregularities, if any
- Autodiagnostic

**The new GC-SATURN, complete analyser package tailored to your needs**

#### **Large column oven**

- high stability
- fast response
- readily-accessible
- multidimensional analysis

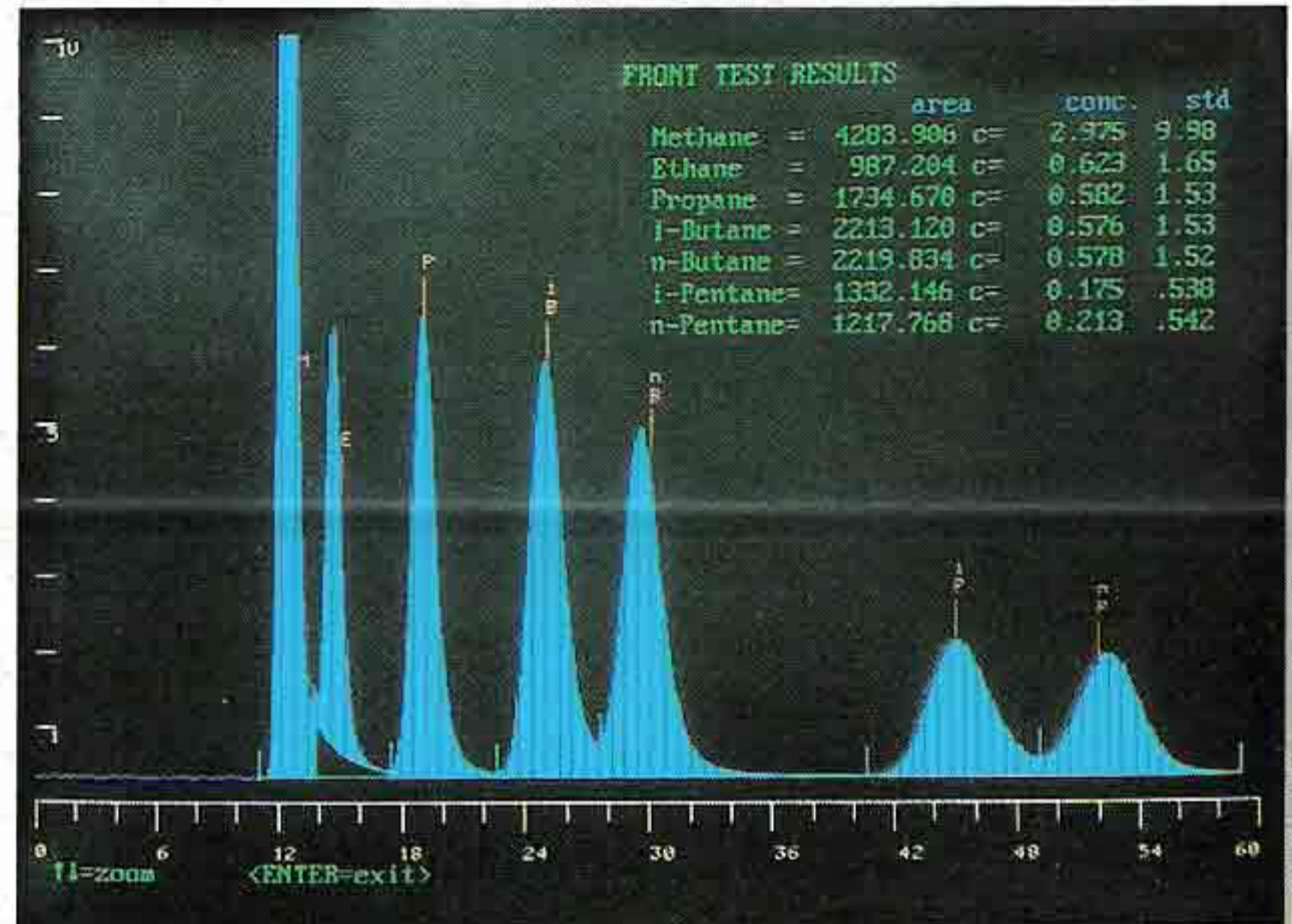




a)

### Electronic processing

- Operative sequence
- Pressure and flow gas digital readouts
- Calibration end standardisation
- Lighting flame and its checking
- Strength alarms
- Full scale values
- System configuration
- Help on-line



b)

### a) Full Functional Controls

Animated display shows the analytical circuit and every internal parameter, pressure, flow, temperature,

### b) Graphic display chromatogram shows

Integration peaks, concentrations and re-processing data



c)

### c) Measurement trend

Graphic showing to measurements trend and historic data

Internal software routines continuously check to optimize the system, and make corrections if is necessary. Should a fault develop, it will be registered in memory to assist with servicing and to aid traceability of operation.

**CUSTOMISED INSTRUMENT STSTEMS - GC-SATURN mod. 202** (analysis of a natural gas)  
 Ours staff supplies fully customised analyser systems, for a wide range of applications.

**Enquiry form:**

Company: ..... Contact: ..... Date: .....

Address: .....

Telephone: ..... Fax: ..... e-mail: .....

**Sample composition:** (please be sure to include all components in the sample, including those which do not need to be measured and also the matrix component. Please indicate which components are to be analysed)

	component	concentration range	measured (yes/no)
1			
2			
3			
4			
5			
6			
7			
8			
	sample conditions	pressure	temperature

remarks/comments:

.....  
 .....  
 .....

**SATURN technical specification**

OVEN	210 x 160 x 210 mm
TEMPERATURE RANGE	from 40°C to 250°C
TEMPERATURE ACCURACY	+/- 1°C
INJECTORS	automatic by loop
DETECTORS	FID (TCD as optional)
GAS	digital flow rate control
DISPLAY	colour 6 inc TFT
KEYBOARD	34 membrane keys
ANALOG OUTPUT	0-10 V; 4/20 mA
SERIAL OUTPUT	RS-232 (other as optional)
DIMENSIONS	rack 19"per 6 u
WEIGHT	20 Kg
POWER REQUIREMENT	220 VCA; 500 VA
REMOTE CONTROL BY MODEM	(optional)



**NEW INSTRUMENTS and RESEARCH for ANALYSIS s.r.l.**  
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Local distributor and service