

# TOC and methane-NMHC analyzer for air quality Venus 301

- High quality construction.
- Advanced analytics.
- Extremely long average instrumental lifetime.
- Simple and clear user interface.



# PC embedded Technology

We integrated a PC, working on Windows® operating system able to ensure:

- Software supervision on all parameter.
- Software supervision on every operation step.
- Analysis recording and alarms/faults storage in local memory.
- Downloadable analysis in .csv compatible files.
- Downloads via USB or Ethernet ports.



09-28-2017 10:02:24 STAND-BY

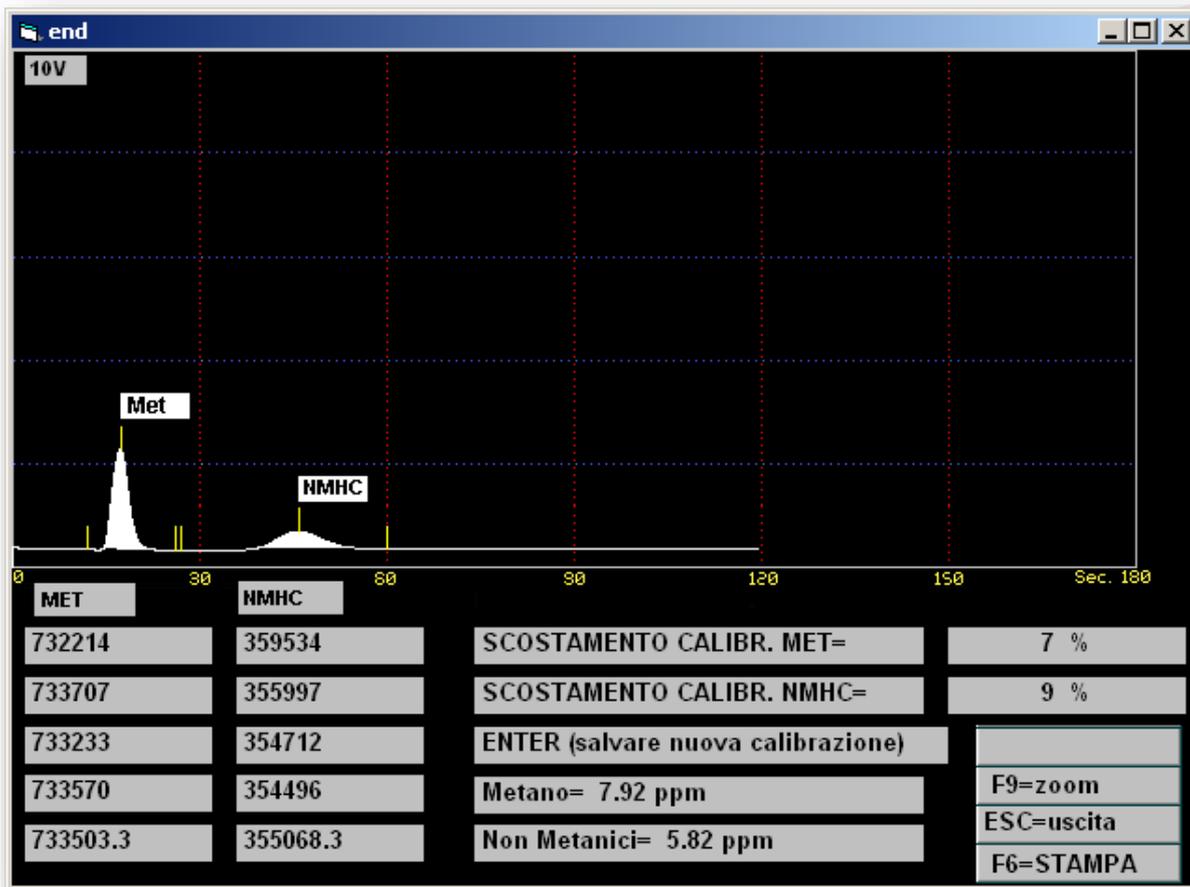
## VENUS 301

sn=xxxxxxxxx-V1.0.0 431 (ACTUAL) (SET)

T.CAMERA (°C)	102	100	OK
ARIA FID(bar)	.9	0.9	OK
H2 FID(bar)	.92	0.9	OK
SERVO PRESS.(bar)	3.77	3.5	OK
CARR. PRESS. (bar)	1.21	1.2	OK
PORTATA CAMPIONE (ml/min)	8	3	OK
SEGNALE FID (Volt)	.346		
TENTATIVI ACC.	1		
STATUS FIAMMA	ON	-	

F1 CONFIGURAZIONE	F4 RUN	F7 TEST DAC	F10 ALT OPERATORE
F2 ALLARMI	F5 ANALISI SINGOLA	F8 TEST HARDWARE	
F3	F6 CALIBRAZIONE	F9	ALT RITORNO A WINDOWS

# Sampling loop analysis technology

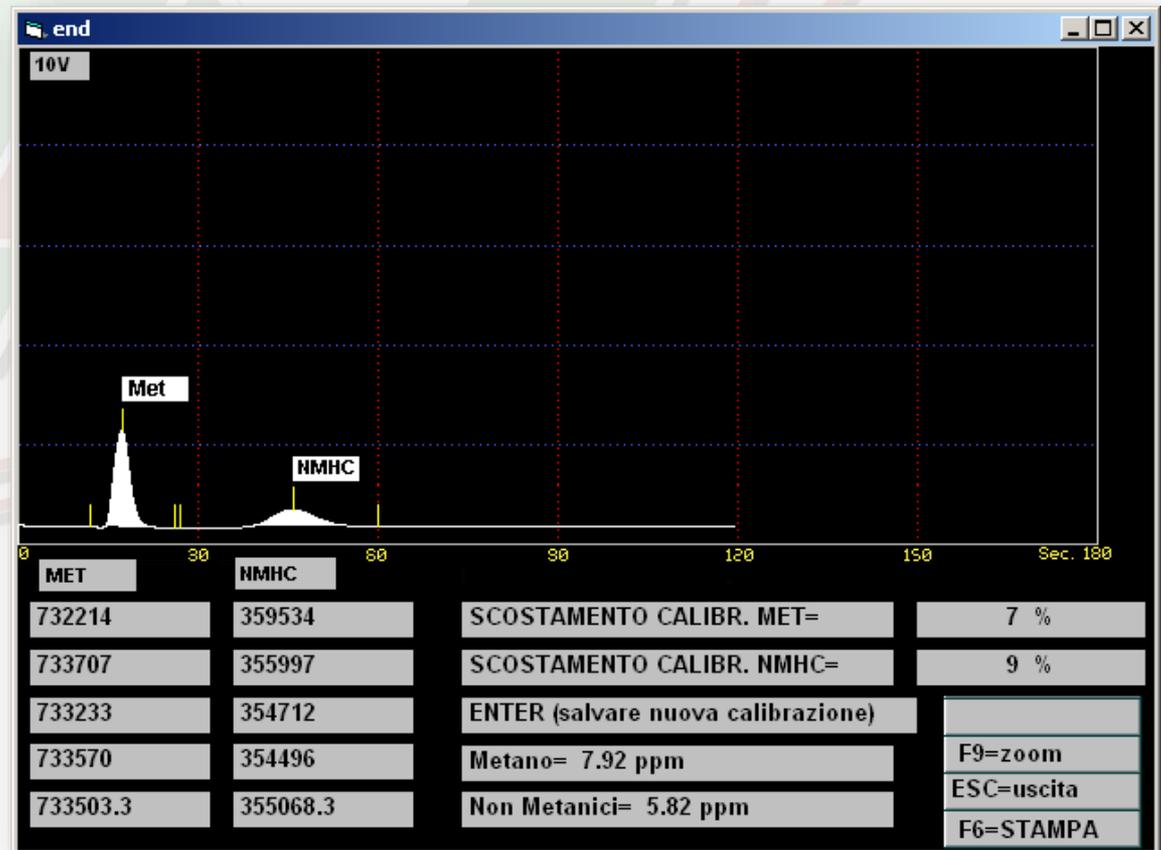


A known volume of the sample stream is repeatedly withdrawn and pushed into the detector using loop sampling. The VOC concentration is proportional to the area under the peak.

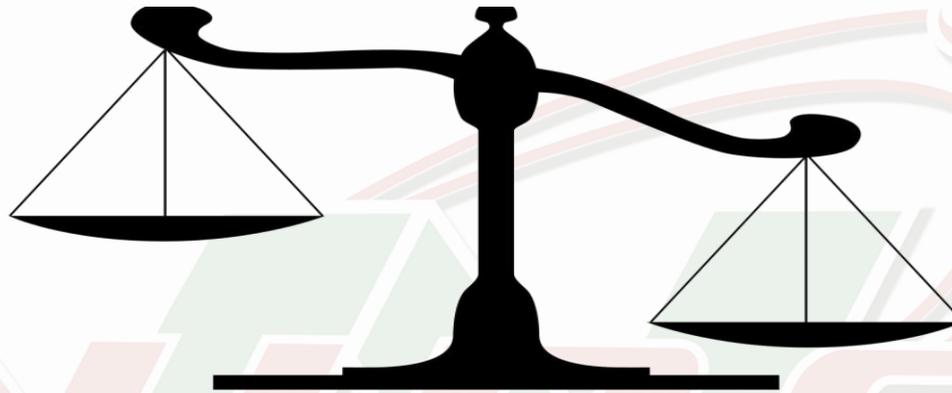
In this way, we obtain much more stable and accurate results with less maintenance, despite standard systems, which use continuous sample flow capillaries that can become clogged.

# Methane - NMHC analysis

Performed via packed columns, directly integrated into the instrument. We don't need bulky and/or expensive accessories. Chromatographic separation with back flush technology ensures extraordinary reliability and stability on stationary analyzers.



# COMPARISON WITH SIMILAR EQUIPMENTS



## TRADITIONAL FID ANALYZER

- Frequent calibration and maintenance costs due to Span & zero drifts (capillary sampling clogging effect).
- Limited diagnostics and interface.

## VENUS 301 FID

- Reduced calibration and maintenance costs thanks to our loop sampling system technology.
- Developed diagnostics and interface, thanks to our PC embedded technology.

# REQUIREMENTS

Our FID systems requires hydrogen and compressed air



Hydrogen 4,5 grade pure (3 bar)  
40 Liters gas cylinder or optional H<sub>2</sub> generator  
CONSUMPTION = 50 ml/min.



Air from your network (3 bar)  
Nira filtering system  
CONSUMPTION = 1 m<sup>3</sup>/hour



Power supply 230V or 115V

# CALIBRATION AND MAINTENANCE

We worked hard to minimize maintenance and calibration frequencies, obtaining record results.

**Every 6 months:** Calibration check, the procedure is guided from the software and takes just few minutes using a pre-installed standard gas cylinder.



Once a year, ask for a service visit from our staff.

# COMPETENCE IN AFTERSALES

Our service department work worldwide every day, on 6 different kind of Nira instruments:

- E-mail, remote and phone service.
- More than 500 interventions performed per year.
- More than 1000 instruments serviced worldwide.
- Less than 5 working days to organize an intervention within Europe, 10 worldwide.

