



COMBUSTION ANALYZERS


MADE IN ITALY



www.seitron.it

CHEMIST RANGE for Combustion Analysis

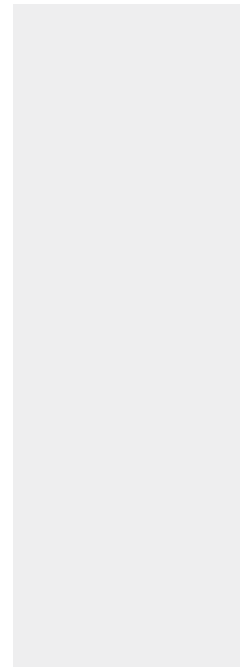
The periodic boiler analysis, also known as boiler combustion analysis/smoke test, is key to ensure the safety of the boiler, improve its efficiency and reduce its emissions. The combustion analyzer meets the needs of any operator who wishes to perform combustion analyses in a simple and immediate way, while being always up to date with current standards such as UNI 10389-1. Seitron combustion analyzers can perform several measures, such as:

- Gas systems tightness test (for new systems UNI 7129 and existing systems UNI 11137)
- Differential temperature measurement
- Gas pressure measurement
- Draft measurement according to UNI 10845 standard
- Calculation of the boiler heat losses and efficiency
- Detection of CO values in closed rooms

The portable Seitron instruments are designed to help maximize combustion efficiency, for easily setting up, install and adequately maintain any residential and / or commercial boiler and burner. The series of the gas combustion analyzers Novo, CHEMIST 100 BE GREEN are dedicated to professionals for HVAC assistance, providing the necessary instruments to perform the job in a quick and correct way. In fact, Seitron combustion analyzers are the ideal solution to monitor boiler and burner processes. All of our analyzers are designed and manufactured in Italy to provide high quality, compact design, strong build and easy to use instruments.



Applications



Combustion analysis of residential Boilers



Combustion analysis of Pellet Boiler



reddot winner 2022

**4 YEARS WARRANTY ON
INSTRUMENT AND GAS
SENSORS**



Seitron Smart Analysis



**Seitron Smart Analysis
Windows 10**



Novo

UP TO 4 SENSORS

PORTABLE COMBUSTION ANALYZER

7" Touch Display

**15 Preprogrammed Fuels
(Including Wood, Pellets, Biogas And Coal)**

CO Protection Dilution Pump

Rechargeable Li-Ion Batteries

**Integrated and easy to clean water trap,
with LED backlight**

4 Pa Ventilation Measurement

**Simultaneous measurement of boiler gas
pressure**

Draught Measurement

Tightness Test

Biomass Combustion Analysis

EVERY KIT INCLUDES:

- Instrument
- Smoke probe with 300 mm interchangeable tip
- Integrated water trap
- Combustion air temperature Probe
- Gas valve pressure measuring tube
- Power Adapter and International Plug
- Hard plastic kit case
- Quick Guide
- Calibration Certificate

MAIN FEATURES

- Precalibrated Gas Sensors
- 3 analysis in sequence with automatic calculation of the average and printing of the result
- Automatic autozero (with smoke sampling probe inserted in the chimney)
- Autozero pressure sensor, for a more stable and reliable draft measurement
- Self-diagnosis with verification of the functions and status of the sensors
- Language selectable by User
- Automatic calculation of pipe volume
- Integrated magnets
- 100 MB for complete analyzes memory
- Dimensions:
Analyzer 270Ax93Lx68Pmm, weight 0,9 Kg
Kit 125Ax465Lx335Pmm, weight 5 Kg

MEASURED VALUES

- Flue gas temperature and Temperature Differential
- Outdoor air temperature and room temperature
- Draft and Pressure Differential
- Ambient CO

CALCULATED VALUES

- Boiler efficiency, including condensing
- Stack losses and excess air
- CO
- Flow velocity with Pitot tube
- Burning power

FEATURES	Novo 2	Novo 3	Novo 4S	Novo 4N
O2 Sensor	✓	✓	✓	✓
CO/H2 Sensor	✓	✓	✓	✓
NO Sensor	-	✓	✓	✓
NOx Calculated	-	✓	✓	✓
NO2 Sensor	-	-	-	✓
NOx Measured (NO+NO2)	-	-	-	✓
SO2 Sensor	-	-	✓	-
Kit with integrated Printer	Novo 2-P	Novo 3-P	Novo 4S-P	Novo 4N-P
Kit with Bluetooth Printer (Thermal Paper Roll included)	Novo 2-ST	Novo 3-ST	Novo 4S-ST	Novo 4N-ST

Novo X

Modular Gas Analyzer Kit up to 4 sensors (O₂ + up to 3 sensors of your choice)

NEW UPDATED FEATURES



7" touch screen (85x155mm)

The new device has been redesigned to give the user an improved and easy-to-use experience.

The analyzer includes a large 7" touchscreen, granting maximum visibility of all information along with quick and smooth browsing experience.

Integrated water trap

The water trap design has been completely innovated to guarantee maximum performance and easy maintenance. A large inspection window with backlit LED allows the user to quickly and very easily check the water level and filter at any time.



New Updated Analyzer Housing

Reliability and ease of use have represented development guidelines for Novo, also inspiring the new cover. With a rubber finish which confers a steady and simple grip, as well as a sturdy and modern design, the new housing offers a pleasant and functional use experience.



Simple ONE Probe Connection

One source of major improvement of our analyzer is the new, innovative flue gas sampling probe connection. Instead of three (3) separate connections for temperature, draft and flue gases, it has been redesigned to just one (1) simple connection. The new connection allows the user to connect the probe without looking with an easy plug-n-play design.



Intuitive interface

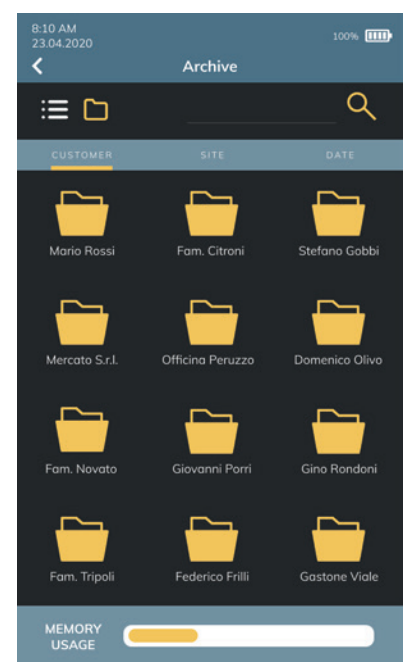
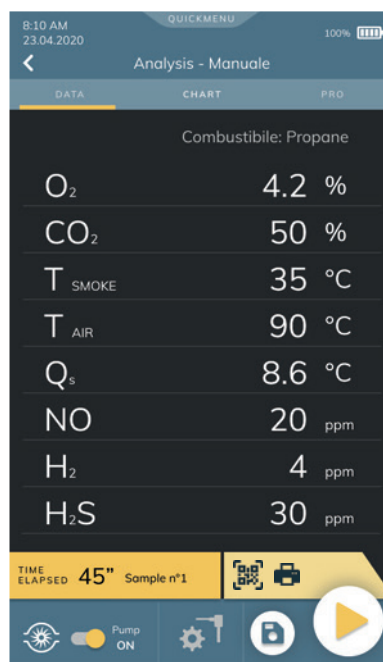
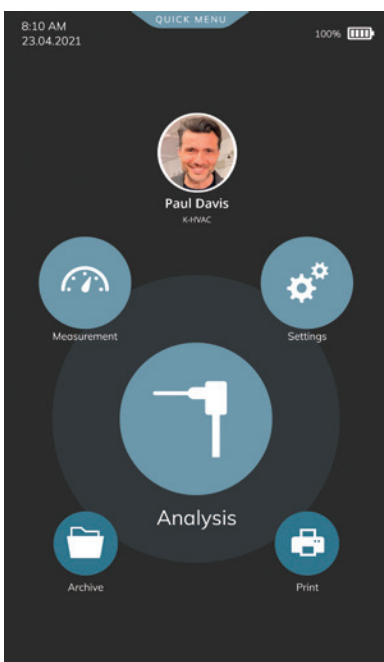
In addition to the elegant and ergonomic design, the Novo features a simple, intuitive and efficient touchscreen interface.

The new and intuitive interface allows the user to quickly create customizable combustion reports, set and/or change the parameters of the device, carry out multiple optional measurements, and so much more.

There is also the possibility to customize the home screen, with user's profile picture and information.

The combustion report can be shared in different formats or it can be printed by using the built-in integrated printer or the option wireless Bluetooth printer.

The new generation of LONG-LIFE gas sensors, installed in the Novo, enhance reliability and accuracy of measurements, in addition to a longer sensor life compared to competition.

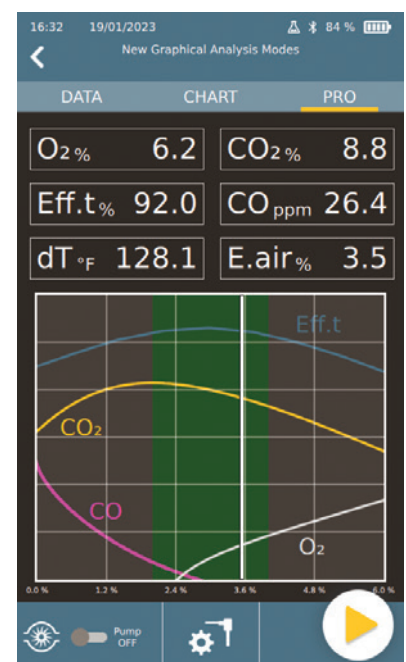
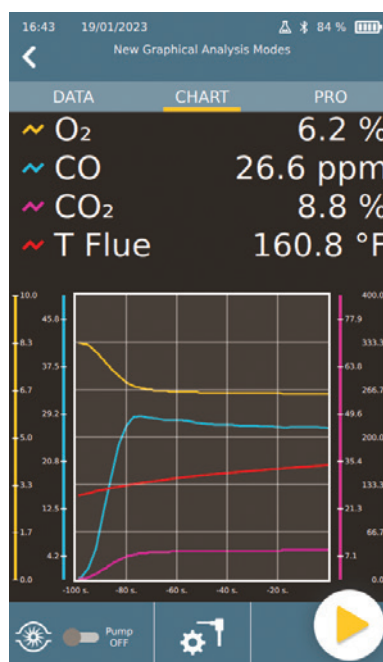


Graphs

Display of graphs of values detected in real time.

Possibility to change the mode Text data, Graphics, Professional.

In Pro mode it is possible to adjust the boiler by graphically displaying the area in which the values are optimal.






Novo - GAS SENSORS

GAS	CODE	RANGE	RESOLUTION	ACCURACY
O2 Long Life *	Novo O2 LL	0...25% v/v	0.1% vol	±0.2% vol
CO / H2	Novo CO/H2	0...500.0 ppm	0.1 ppm	±2 ppm 0 .. 40 ppm ±5% v.m. 40.1 .. 500.0 ppm
		501...8000 ppm	1 ppm	±10% v.m. 501 .. 8000 ppm
CO Mid	Novo CO Mid	0...20000 ppm	1 ppm	±10 ppm 0 .. 200 ppm ±5% v.m. 201 .. 4000 ppm ±10% v.m. 4001 .. 20000 ppm
CO High	Novo CO High	0...100000 ppm	1 ppm	±100 ppm 0 .. 1000 ppm ±10% v.m. 1001 .. 100000 ppm
NO	Novo NO	0...500.0 ppm	0.1 ppm	±2 ppm 0 .. 40 ppm ±5% v.m. 40.1 .. 500.1 ppm
		501...5000 ppm	1 ppm	±10% v.m. 501 .. 5000 ppm
NO2	Novo NO2	0...100.0 ppm	0.1 ppm	±2 ppm 0 .. 40 ppm ±5% v.m. 40.1 .. 100.1 ppm
		101...1000 ppm	1 ppm	±10% v.m. 101 .. 1000 ppm
S02	Novo S02	0...500.0 ppm	0.1 ppm	±2 ppm 0 .. 40 ppm ±5% v.m. 40.1 .. 500.1 ppm
		501...5000 ppm	1 ppm	±10% v.m. 501 .. 5000 ppm
H2	Novo H2	0...2000 ppm	1 ppm	± 10 ppm 0 ppm - 100 ppm ± 10% v.m. 101 ppm - 2000 ppm
H2 High	Novo H2 High	0...40000 ppm	10 ppm	± 100 ppm 0 ppm - 1000 ppm ± 10% v.m. 1001 ppm - 40000 ppm
H2S	Novo H2S	0...5000 ppm	1 ppm	± 10 ppm 0 ppm - 100 ppm ± 10% v.m. 101 ppm - 5000 ppm
H2S Low	Novo H2S Low	0...500.0 ppm	0.1 ppm	±5 ppm 0 .. 100.0 ppm ±5% v.m. 101 .. 500.0 ppm
NH3 Low	Novo NH3 Low	0...500.0 ppm	0.1 ppm	±10 ppm 0 .. 100.0 ppm ±10% v.m. 100.1 .. 500.0 ppm
CxHy	Novo CxHy	0..5% vol CH4	0.01% vol	±0.25% abs
CH4 NDIR	Novo CH4 NDIR	0..100% vol	0.01% vol	±0.3 vol 0 .. 10% vol ±10% v.m. 10.01% .. 100.00% vol
CO2 NDIR	Novo CO2 NDIR	0..50% vol	0.01% vol	±1 vol 0 .. 10.00% vol ±2% fs 10.01% .. 50.00% vol

*: User replaceable sensor

Accessories and Spare Parts

COD.	FOTO	DESCRIZIONE
AJPB01		Li-Ion Rechargeable Battery; 3,7Vdc - 6 A/h
AJKA02		Power supply with US plug, USB type C and 1.8 m cable
AJCR01		Hard plastic Case
AJTA01		Water trap with flue gas filter
AACFA01		Dust filters for AACTA03 (pack of 5 pieces) dimensions 12x32 mm
AARC10		Long Life thermal paper roll 57x35
AAST04	 batterie include	Thermal printer with Bluetooth connection
AAKT05		Kit for tightness test with 4 ways manifold, manual pump, 100 ml syringe, hoses, 1 silicone conical fitting
AATL01		S-probe with clamp for 8 mm tips, for use on exhaust systems
AAPM02		Manual pump for measuring carbon black + filters + BACHARACH table
<p>Accessories for industrial measurements, high temperatures and particularly dirty smokes</p> <div style="display: flex; align-items: center; justify-content: center;"> <div style="text-align: center;">  <p>AJSJxx + AJPTxx Smoke analysis probe</p> </div> <div style="margin: 0 10px;">+</div> <div style="text-align: center;">  <p>AASP01 Heat shield</p> </div> <div style="margin: 0 10px;">+</div> <div style="text-align: center;">  <p>AAFS02 Stainless steel filter with adapter</p> </div> </div>		

COD.	FOTO	DESCRIZIONE
AJTB01		Gas pressure tube; length 1 m
AJKP01		Differential pressure measurement Kit
AJSJ01		Smoke sampling probe handle with 1.8 m cable
AJSJ02		Smoke sampling probe handle with 3 m cable
AJPT01		Interchangeable 180 mm tip for AJSJ01 handle, maximum temperature 400 °C
AJPT02		Interchangeable 300 mm tip for AJSJ01 handle, maximum temperature 600 °C
AJPT03		Interchangeable 750 mm tip for AJSJ01 handle, maximum temperature 800 °C
AJPT04		Interchangeable 1000 mm tip for AJSJ01 handle, maximum temperature 1200 °C
AJPT05		Interchangeable 300 mm flexible tip for AJSJ01 handle, maximum temperature 600 °C
AJEX01		3 m extension cable for smoke sampling probes with handle AJSJ01
AJCP01		External unit for passive sample treatment, for NO2 and SO2 measurement, compatible with AJSJ-- probe (probes with interchangeable tip for NOVO)
AATT01		"L" shaped Pitot Tube. 300 mm length, 6 mm external diameter. Without thermocouple
AATT02		"L" shaped Pitot Tube. 800 mm length, 6 mm external diameter. Without thermocouple



CHEMIST 100 BE GREEN

UP TO 3 SENSORS

PORTABLE COMBUSTION ANALYZER

B/W Backlit LCD (50 X 50 Mm)

**15 Preprogrammed Fuels
(Including Wood, Pellets, Biogas And Coal)**

Rechargeable Lithium Ion Batteries

IR Communication

Qr Code To Acquire Analysis With Smartphone

Draught Measurement (Optional)

Tightness Test (Optional)



**Bluetooth Printer
AAST04**

**CHEMIST 100 BE GREEN
WARRANTY: 2 YEARS ON
INSTRUMENT AND GAS
SENSORS**

EVERY KIT INCLUDES:

- Instrument
- 300 mm Smoke Probe with 2 m cable
- Water trap with dust filter, stainless steel fittings and silicon hose
- Combustion air temperature Probe
- Pressure Measures Kit
- Power Adapter and International Plug
- Hard plastic kit case
- Quick Guide
- Calibration Certificate



Seitron Smart Analysis



MAIN FEATURES

- Precalibrated gas sensors
- Self diagnostic function with sensors status
- QR code generation
- Automatic recognition of condensing boiler
- Internal memory for 5 analyses
- Up to 10 hrs. autonomy of continuous operation
- Dimensions:
Analyzer 70Ax60Lx170Pmm, weight 0,35 Kg
Kit 122Ax406Lx290Pmm, weight 2,35 Kg

MEASURED VALUE

- Flue gas temperature and Temperature Differential
- Outdoor air temperature and room temperature
- Gage and Pressure Differential
- Ambient CO

CALCULATED VALUES

- Boiler efficiency, including condensing
- Stack losses






FEATURES	101	101 S	102	102 S	103	103 S
O2 Sensor	✓	✓	✓	✓	✓	✓
CO/H2 Sensor	✓	✓	✓	✓	✓	✓
NO Sensor	-	-	-	-	✓	✓
NOx Calculated	-	-	-	-	✓	✓
Expandable to 3 sensors	-	-	✓	✓	✓	✓
Draft measurement with internal sensor (optional)	-	-	✓	✓	✓	✓
Gas pipe tightness (optional)	-	-	✓	✓	✓	✓
Gas pipes volume automatic calculation (optional)	-	-	✓	✓	✓	✓
Kit with Bluetooth Printer	-	✓	-	✓	-	✓
Thermal Paper Roll	-	✓	-	✓	-	✓



GAS	CODE	RANGE	RESOLUTION	PRECISION
O2 *	AACSE50	0...25% v/v	0.1% vol	±0.2% vol
CO high immunity H2 with NOx filter	AACSE58	0...4000 ppm	1 ppm	±20 ppm ±5% ±10% 0 .. 400 ppm 401 .. 4000 ppm 4001 .. 8000 ppm
NO **	AACSE60	0...2000 ppm	1 ppm	±5 ppm ±5% v.m. ±10% v.m. 0 .. 100 ppm 101 .. 1000 ppm 1001 .. 2000 ppm

* : User Replaceable Sensor



** : Sensor available only for replacement on CHEMIST 103 BE GREEN

Gas Analysis Probes

CODE	PHOTO	DESCRIPTION
AASF51A		180 mm flue gas sampling probe, cable length 2m, maximum temperature 400 ° C, without anti-condensation unit
AASF62A		300 mm flue gas sampling probe, cable length 3m, maximum temperature 600 ° C, without anti-condensation unit
AASF71A		180 mm flue gas sampling probe, cable length 1.5m, maximum temperature 400 ° C, without anti-condensation unit
AASF72A		300 mm flue gas sampling probe, cable length 1.5m, maximum temperature 600 ° C, without anti-condensation unit
AASL05A		300 mm flue gas sampling probe, cable length 2m, maximum temperature 600 ° C, without anti-condensation unit

CODE	PHOTO	DESCRIPTION
AASJ07		Smoke suction probe handle Without tip - length. Cable: 1.8 meters
AASJ08		Smoke suction probe handle Without tip - length. Cable: 3 meters

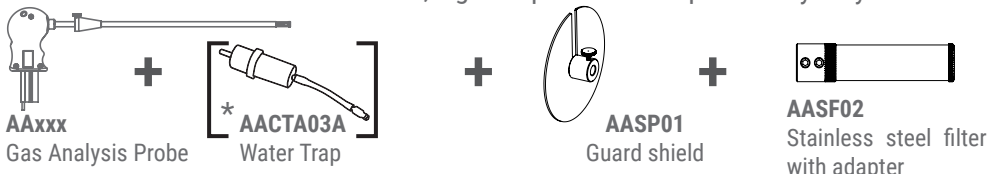


Printers and Consumables

CODE	PHOTO	DESCRIPTION
AARC10		Long life plain thermal paper roll 57x30
AAST04		Thermal printer with Bluetooth connection

Accessories for Residential Applications

CODE	PHOTO	DESCRIPTION
AACT001		Silicone conical fitting 44 - 22 mm (for tightness test)
AACT002		Silicone conical fitting 32 - 18 mm (for tightness test)
AAKT05		Kit for tightness test with 4 ways manifold, manual pump, 100 ml syringe, hoses, 1 silicone conical fitting
AAAR01		Threaded 9 mm diameter fitting, 1/4" gas coupling, 1/4" to 1/8" gas nipple (for tightness test)
AAAR02		Gas valve hose adapter: d.i. 7 mm
AASA08		Outdoor air temperature 200 mm TcK probe, with 2 m cable

Accessories for Industrial Applications



CODE	PHOTO	DESCRIPTION
<p>Accessories for industrial measurements, high temperatures and particularly dirty smokes</p>  <p>AAxxx Gas Analysis Probe + AACTA03A Water Trap + AASP01 Guard shield + AASF02 Stainless steel filter with adapter</p>		
AATL01		S probe with clamp for 8mm tips, for use on waste systems
AACP01		External unit for passive sample treatment, for NO ₂ and SO ₂ measurement, compatible with AASJ probe--

* : If not included in the probe AASFxxx

SPARE REPLACEMENT PARTS

CODE	PHOTO	DESCRIPTION
AAPB13		Rechargeable Li-Ion battery, 3,7 V 2.6 mAh
AAKA02		Power Adapter with international plug, USB A / USB B with 2 m cable
AACFA01		Fine dust filters for AACTA03 (5 pcs. package) Dimensions 12x32 mm
AACTA03A		Water trap with dust filter, stainless steel fittings and silicon hose suitable for all combustion analyzers

CASE, HOLSTER AND ACCESSORIES

CODE	PHOTO	DESCRIPTION
AACR09		Hard plastic kit case
AASM07		Rubber holster

CALIBRATION CERTIFICATE

COD	DESCRIPTION
CER012	ISO 9001 calibration certificate for 2 sensors analyzers
CER013	ISO 9001 calibration certificate for 3 sensors analyzers

To ensure your and your customers' safety, please remind that the current legislation imposes that all measuring instruments must be calibrated by a lab and certified every 12 months.

UNI 10389-1:2009 – Combustion analyzers

UNI 11137:2019 – Manometers and analyzers in use also for gas plants leak tests

UNI 10845:2018 – Manometers and analyzers in use also for open chamber boilers draft