

COMBUSTION ANALYSER

NOVO

4-sensor handheld gas analyzer

7" colour Touch Display

More than 15 preconfigured fuels (including Wood, Pellets, Biogas and Coal) and customisable fuels

Integrated Dilution Pump for CO sensor protection

Rechargeable Li-Ion Batteries

Integrated and easy to empty Water Trap, with LED backlights

Simultaneous Combustion Analysis and Pressure Measurement

Draft Measurement

Tightness Test

Suitable for Combustion Analysis on biomass boilers

Ambient CO measurement



reddot winner 2022

4-YEAR WARRANTY
ON ANALYSER KIT



Highlights



Printer

Available with integrated or external Bluetooth® printer



Touch display

Simple and intuitive interaction on the large colour display



O2 Long Life Sensor

Replaceable by the user



Seitron Smart Analysis

Remote management of analysis, data visualization and reporting via app or PC software



Versatility of application

Configurable up to 4 sensors, also for industrial applications



Graphs supporting the analysis

Real-time numerical and graphical data visualization. PRO mode to support the technician.

INTEGRATED WATER TRAP

The design of the water trap and dust filter is different from other instruments, making routine maintenance by the user effective.

The water trap is integrated in the instrument and easily removable. This allows the user to completely empty the water trap without intervening on the instrument.

A large inspection window with backlit LEDs allows the user to quickly and very easily check the level of water present and the degree of soiling of the particle filter.

UNIQUE PROBE CONNECTOR

The probe is one of Novo's distinguishing features.

The unique connector allows efficient analysis of draft, smoke and temperature. The connector design allows the probe to be safely attached without even looking.

With a single gesture, the user is ready for analysis.

No need for multiple connectors

Water trap



Single probe connection



MAIN FEATURES

- Precalibrated Gas Sensors
- 3 analysis in sequence with automatic calculation of the average value and printing of the result
- Automatic autozero with flue gas sampling probe inside in the chimney
- Autozero pressure sensor, for a more stable and reliable draft measurement
- Self-diagnosis with verification of the

- functioning and status of the sensors
- Language selectable by the user
- Automatic calculation of piping volume
- Integrated magnets for boiler fixing
- Structured analysis archive with large internal memory for storage
- Dimensions (HxWxD):

Analyser	250x125x60 mm; 0.9 Kg
Kit	125x465x335 mm; 5 Kg



MEASURED VALUES

- Flue gas temperature and differential temperature
- Outdoor air temperature and room temperature
- Draft and differential pressure
- CO concentration in ambient air

CALCULATED VALUES

- Boiler efficiency, including condensation
- Stack losses and excess air
- CO₂
- Flow velocity with Pitot tube



THE NOVO KIT INCLUDES:

- Combustion Analyser
- Flue gas probe with interchangeable 300 mm tip and 1,8 m cable
- Water trap integrated in the instrument
- Combustion air temperature probe
- Tube for gas valve pressure measurement
- Charger and European plug
- Hard plastic case
- Quick Guide
- Calibration Certificate



Seitron Smart Analysis



Seitron Smart Analysis



FETURES	Novo 2	Novo 3	Novo 4S	Novo 4N	Novo Bio (*)
O2 Long Life Sensor	✓	✓	✓	✓	✓
CO/H2 sensor (0 .. 8000 ppm)	✓	✓	✓	✓	
NO sensor (0 .. 5000 ppm)		✓	✓	✓	
NOx Calculated		✓	✓		
NO2 sensor (0 .. 1000 ppm)				✓	
NOx Measured (NO+NO2)				✓	
SO2 sensor (0 .. 5000 ppm)			✓		
CO2, CH4, H2S sensors					✓
Kit with integrated printer	Novo 2-P	Novo 3-P	Novo 4S-P	Novo 4N-P	Novo Bio-P
Kit with External Bluetooth® Printer (paper roll included)	Novo 2-ST	Novo 3-ST	Novo 4S-ST	Novo 4N-ST	Novo Bio-ST

Novo X

Gas analyzer with customized configuration with up to 4 sensors (O2 Long Life + up to 3 sensors)

(*) Suggested configuration for exhaust gas analysis in biogas plants



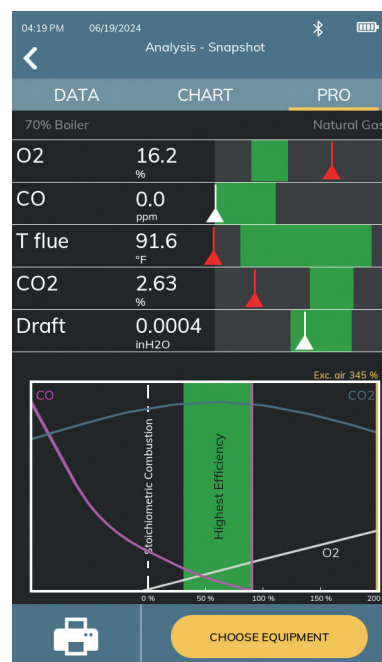
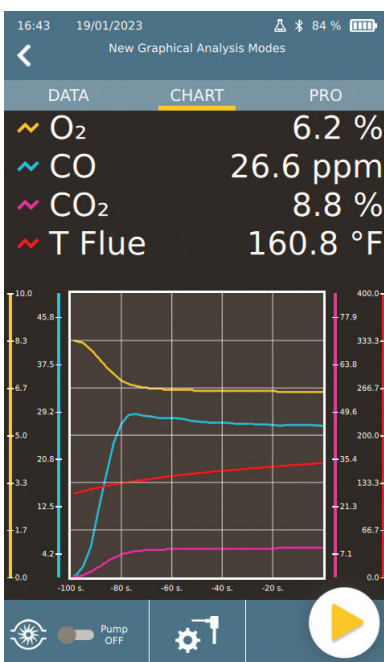
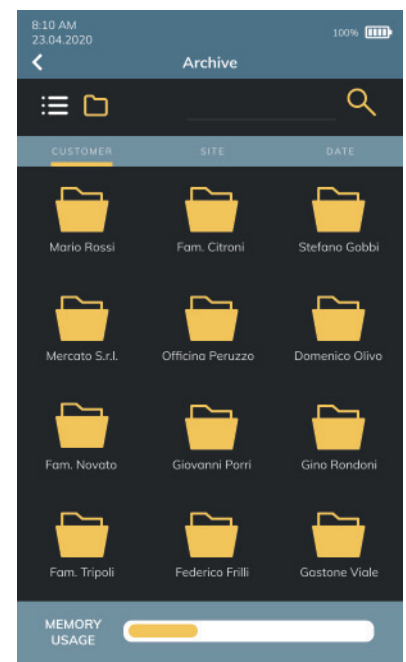
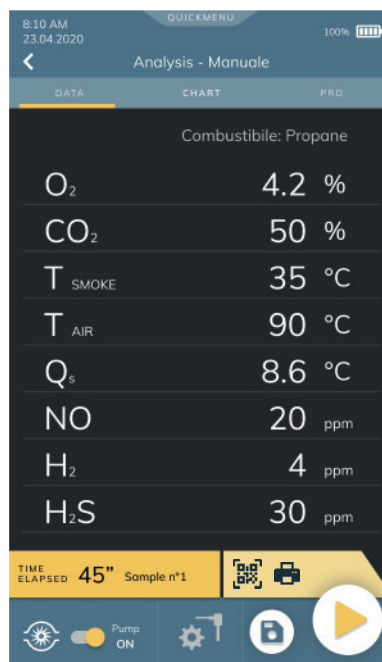
INTUITIVE INTERFACE

In addition to its elegant and ergonomic design, the instrument features a simple, intuitive and efficient touch screen interface.

Developed according to a careful study of UX (User Experience) and UI (User Interface), Novo guarantees the same ease of use as a smartphone, but with the security and stability of an operating system developed by Seitron.

The intuitive interface allows the user to be independent and ready in carrying out a combustion analysis, setting instrument parameters and making complementary measurements, without ever losing control over the data.

It is possible to manage the instrument remotely, by using the Seitron Smart Analysis mobile app.



Graphs and PRO mode

The values measured during combustion analysis can be displayed in real time in 3 different ways:

- Textual data
- Graph
- Professional Graph (Pro)















PRO mode supports the user in boiler regulation by displaying the area where combustion values are optimal for that type of boiler.

Novo - GAS SENSORS

GAS	CODE	MEASURING 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% m.v. 40,1 .. 500.0 ppm
		501 .. 8000 ppm	1 ppm	±10% m.v. 501 .. 8000 ppm
CO Mid	Novo CO Mid	0 .. 20000 ppm	1 ppm	±10 ppm 0 .. 200 ppm ±5% m.v. 201 .. 4000 ppm ±10% m.v. 4001 .. 20000 ppm
CO High	Novo CO High	0.. 100000 ppm	1 ppm	±100 ppm 0 .. 1000 ppm ±10% m.v. 1001 .. 100000 ppm
NO	Novo NO	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40 ppm ±5% m.v. 40,1 .. 500.1 ppm
		501 .. 5000 ppm	1 ppm	±10% m.v. 501 .. 5000 ppm
NO2	Novo NO2	0 .. 100.0 ppm	0.1 ppm	±2 ppm 0 .. 40 ppm ±5% m.v. 40,1 .. 100.1 ppm
		101 .. 1000 ppm	1 ppm	±10% m.v. 101 .. 1000 ppm
SO2	Novo SO2	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40 ppm ±5% m.v. 40,1 .. 500.1 ppm
		501 .. 5000 ppm	1 ppm	±10% m.v. 501 .. 5000 ppm
H2	Novo H2	0 .. 2000 ppm	1 ppm	± 10 ppm 0 ppm .. 100 ppm ± 10% m.v. 101 ppm .. 2000 ppm
H2 High	Novo H2 High	0 .. 40000 ppm	10 ppm	± 100 ppm 0 ppm .. 1000 ppm ± 10% m.v. 1001 ppm .. 40000 ppm
H2S	Novo H2S	0 .. 5000 ppm	1 ppm	± 10 ppm 0 ppm .. 100 ppm ± 10% m.v. 101 ppm .. 5000 ppm
H2S Low	Novo H2S Low	0 .. 500.0 ppm	0.1 ppm	±5 ppm 0 .. 100.0 ppm ±5% m.v. 101 .. 500.0 ppm
NH3 Low	Novo NH3 Low	0 .. 500.0 ppm	0.1 ppm	±10 ppm 0 .. 100.0 ppm ±10% m.v. 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% m.v. 10,01% .. 100.00% vol
CO2 NDIR	Novo CO2 NDIR	0 .. 100% vol	0.01% vol	±1 vol 0 .. 10.00% vol ±2% fs 10,01% .. 100.00% vol

* : Sensor replaceable by the user

Novo - ACCESSORIES AND SPARE PARTS

CODE	PHOTO	DESCRIPTION
AJSJ01		Flue gas sampling probe handle with 1.8 m cable
AJSJ02		Flue gas sampling probe handle with 3 m cable
AJPT01		Interchangeable 180 mm tip for AJSJ-- and AASJ-- handle, maximum temperature 400°C
AJPT02		Interchangeable 300 mm tip for AJSJ-- and AASJ-- handle, maximum temperature 600°C
AJPT03		Interchangeable 750 mm tip for AJSJ-- and AASJ-- handle, maximum temperature 800°C
AJPT04		interchangeable 1000 mm tip for AJSJ-- and AASJ-- handle, maximum temperature 1200°C
AJPT05		Interchangeable 300 mm flexible tip for AJSJ-- and AASJ-- handles, tube diameter 8 mm, maximum temperature 160°C
AJEX01		3 m extension cable for flue gas sampling probes with AJSJ-- and AASJ-- handle
AJCP01		External unit for passive sample treatment, for NO ₂ and SO ₂ measurement, compatible with AJSJ-- and AASJ-- probe handles
AACE01		External cooler for active sample treatment, with adapter for AJSJ-- and AASF-- flue gas probe handles
AJTB01		Gas pressure tube to burner, length 1m
AJKP01		Differential pressure measurement kit
AATT01		L-shaped pitot tube, with 300mm tip length, 6mm outer diameter, 2m silicone tube length and without thermocouple
AATT02		L-shaped pitot tube, with 800mm tip length, 6mm outer diameter, 2m silicone tube length and without thermocouple

CODE	PHOTO	DESCRIPTION
AJSC01		External probe for ambient CO measurement (for Novo) (measuring range: 0 .. 500 ppm)
AJCR01		Hard plastic case
AJTA01		Water trap with dust filter
AACFA01		Dust filter for water trap and filter unit (pack of 5); size 12x32mm
AARC10		Long Life thermal paper roll; size 57x35 mm
AAST04	 batterie include	Bluetooth® -connected thermal printer with rechargeable battery, supplied with charger and EU plug and thermal paper roll
AAKT05		Kit for tightness test with 4-way fitting with taps, manual pump, 100 ml syringe, hoses, 1 conical fitting
AJPB01		Rechargeable Li-Ion battery; 3.7 Vdc - 6 Ah
AJKA02		Power supply with EU plug, USB type C and 1.8 m cable
AATL01		S-shaped probe with clamp for 8 mm tips, for use on exhaust systems
AAPM02		Manual pump for measuring carbon black, including filters and Bacharach table
<p>Accessories for industrial measurements, high temperatures and dusty flue gases</p> <p>AJSJ-- + AJPT-- Flue gas probe</p> <p> +  AASP01 Heat protective shield</p> <p>+  AAFS02 Stainless steel filter with adapter</p>		