

## **COMBUSTION ANALYZERS**



# **Range for Combustion Analysis**

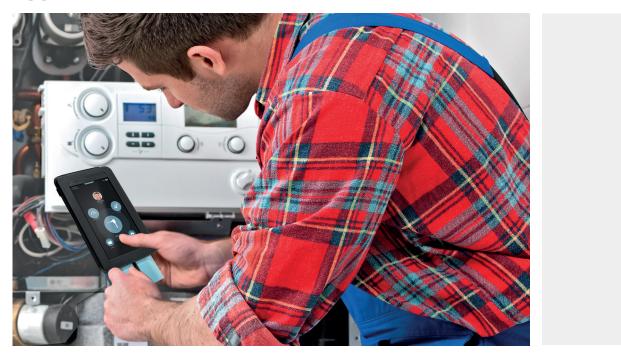
The periodic boiler analysis, also known as boiler combustion analysis/smoke test, is the key to ensure the safety of the boiler, by improving its efficiency and reducing the emissions. Seitron combustion analyzers meet the needs of any operator who has to perform combustion analysis in a simple and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

- Tightness test on gas systems
- Differential temperature measurement
- Gas pressure measurement
- Draft measurement
- Calculation of boiler heat losses and efficiency
- Detection of CO values in closed rooms

Seitron portable instruments have been designed for HVAC professionals, supporting them with installation and maintenance of any kind of boiler and burner. Seitron analyzers are the ideal instruments to monitor the combustion processing, helping the optimization of energy efficiency. The products are completely made in Italy, starting from the project to the production, to guarantee the best quality, design and performances.



# **Applications**





Combustion analysis of residential Boilers





Combustion analysis of Pellet Boilers





## 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

batteries included



Seitron Smart Analysis

#### **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
- Preassure Measures Kit
- Power Adapter and International Plug
- Hard plastic kit case
- Quick Guide
- Calibration Certificate

#### **COMBUSTION ANALYZERS**

#### **MAIN FEATURES**

- Precalibrated gas sensors
- Self diagnostic function with sensors status
- QR code generation
- Automatic recognition of condensing boiler
- · Internal memory for 5 analysis
- Up to 10 hrs. autonomy of continuous operation
- Dimensions: Analyzer 70Hx60Lx170D mm, weight 0,35 Kg Kit 122Ax406Lx290D mm, weight 2,35 Kg

#### **MEASURED VALUE**

- Flue gas temperature and Temperature Differential
- Outdoor air temperature and room temperature
- Differential Draft and Pressure
- CO in the environment

#### **CALCULATED VALUES**

- Boiler efficiency, including condensation
- Stack losses

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

GAS	CODE	RANGE	RESOLUTION	PRECISION
02 *	AACSE50	025% v/v	0.1% vol	±0.2% vol
CO high immunity H2 with NOx filter	AACSE58	04000 ppm	1 ppm	±20 ppm 0 400 ppm   ±5% 401 4000 ppm   ±10% 4001 8000 ppm
N0**	AACSE60	02000 ppm	1 ppm	±5 ppm 0 100 ppm   ±5% v.m. 101 1000 ppm   ±10% v.m. 1001 2000 ppm

\* : Sensor replaceable by the user

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

## Gas Analysis Probes

CODE	РНОТО	DESCRIPTION
AASF51A	-0	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	Ó	180 mm flue gas sampling probe, cable length 1.5m, maximum temperature 400 ° C, without anti-condensation unit
AASF72A	0	300 mm flue gas sampling probe, cable length 1.5m, maximum temperature 600 ° C, without anti-condensation unit
AASL05A	Ó	300 mm flue gas sampling probe, cable length 2m, maximum temperature 600 ° C, without anti-condensation unit

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

CODE	рното	DESCRIPTION
AACTO01		Silicone conical fitting 44 - 22 mm (for tightness test)
AACT002		Silicone conical fitting 32 - 18 mm (for tightness test)
AAKT05	No and Andrews	Kit for tightness test with 4 ways manifold, manual pump, 100 ml syringe, hoses, 1 silicone conical fitting
AARA01		Threaded 9 mm diameter fitting, 1/4" gas coupling, 1/4" to 1/8" gas nipple (for tightness test)
AARA02		Gas valve hose adapter: d.i. 7 mm
AASA08	* 0	Outdoor air temperature 200 mm TcK probe, with 2 m cable

## **Accessories for Residential Applications**

## Accessories for Industrial Applications

CODE	рното	DESCRIPTION
A	Axxx as Analysis Probe	- Stainless steel filter
AATL01		S probe with clamp for 8mm tips, for use on waste systems
AACP01		External unit for passive sample treatment, for NO2 and SO2 measurement, compatible with AASJ probe

\* : If not included in the probe AASFxxx

#### SPARE REPLACEMENT PARTS

CODE	РНОТО	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	Ster	Water trap with dust filter, stainless steel fittings and silicon hose suitable for all combustion analyzers

#### CASE, HOLSTER AND ACCESSORIES

CODE	рното	DESCRIPTION
AACR09	Creition	Hard plastic kit case
AASM07	Receipt	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