seitron

EMISSIONS INDUSTRIAL ANALYZERS

MADE IN ITALY

CHEMIST SERIES for Industrial Emissions Analysis

Our team is committed to provide the most suitable & custom version of any instrument to match almost any application & need. Standards regulating exhaust gas emissions in industrial systems are also becoming more and more strict, being of great relevance for both climate and health protection
In high intensity and high resources consuming processes, great quantities of toxic gases are produced, such as carbon monoxide (CO), carbon dioxide (CO2), nitrogen oxides (NOX) or sulfur dioxide (SO2).
Often performed in extreme environments, featuring high levels of humidity, high temperatures and presence of particulate matter coming from combustion gases, the emissions measurements are needed in order to verify the measure and the quality of the combustion. The analyses are typically performed by special laboratories, maintenance technicians of industrial plants or by the industries themselves.
In order to answer these needs, Seitron has developed a line of industrial emissions analyzers, either portable for periodical measurements or fixed for continuous analysis.

The CHEMIST 600 and CHEMIST 600 BE GREEN are compact, hand-held instruments, which can measure up to 6 different gases, which can be customized based on the type of application.

The analyzer CHEMIST 900 offers the maximum flexibility as it incorporates both NDIR and electro-chemical technologies, which allow for the measurement of up to 12 different gases, all in a convenient portable format.

The analyzer CHEMIST 900 RACK is the instrument dedicated to the continuous measurement of industrial emissions. Thanks to its rack mounting, it is ideal for research and development environments as well as process monitoring.

Applications

Chemical Industries

Laboratories

Biogas Factories

Industrial Motors

Industrial Burners

Waste-to-energy Plants

Pellet Boilers

Industrial Cement Furnaces

CHEMIST 600 BE GREEN (image caption)

CHEMIST 600 Built-in Printer (image caption)

CHEMIST 600 BE GREEN / 600
UP TO 6 SENSORS

INDUSTRIAL EMISSIONS ANALYZER

Blue Backlit Lcd (55 X 95 Mm)

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

CO Protection Dilution Pump

Rechargeable Lithium Ion Batteries

Qr Code To Acquire Analysis With Smartphone

External Water Trap with Dust Filter

4 Pa Ventilation Measurement

Draught Measurement

Tightness Test

1 YEAR WARRANTY ON INSTRUMENT AND GAS SENSORS

Seitron Smart Analysis

GET IT ON Google Play | Download on the App Store | EXPLORE IT ON AppGallery

Seitron Smart Analysis Windows 10

Windows 7 or later

EVERY KIT INCLUDES:

- Instrument
- 300 mm Smoke Probe with 3 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

MAIN FEATURES
- Precalibrated gas sensors
- 3 consecutive analysis with average calculation
- Automatic autozero with sampling probe in the stack
- Self diagnostic function with sensors status
- 10 different preprogrammed languages
- Automatic calculation of gas pipes volume
- Hard plastic body with magnets
- Internal memory for 1000 analysis
- Dimensions:
  Analyzer 270Ax93Lx68Pmm, weight 0,8 Kg
  Kit 130Ax510Lx430Pmm, weight 3,4 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	605 / 605 BG	606 HC / 606 HC BG	606 CO2 / 606 CO2 BG
up to 6 senosrs	✓	6 sensors	6 sensors
O2 Sensor	✓	✓	✓
CO/H2 (0 .. 8000 ppm) Sensor	✓	✓	✓
NO Sensor	✓	✓	✓
NO2 Sensor	✓	✓	✓
SO2 Sensor	✓	✓	✓
CxHy Measured	-	✓	-
C02 Sensor	-	-	✓
NOx Measured (NO+NO2)	✓	✓	✓

CHEMIST 600 X BE GREEN / X 600
Modular Gas Analyzer Kit up to 6 sensori of your choice

AACE01 - Case with active external cooler
Possibility to equip the analyzer case with the active external cooler.
We suggest to use it in environments with high humidity to measure NO2, SO2, NH3 and H2S.
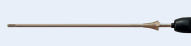- Power supply 230V
- Power supply by external power-bank 12V
- For probes AASF32, AASF35, AASF36, AASF37

Gas Analysis Probes

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
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	✓		
AASF65A		750 mm flue gas sampling probe, cable length 3m, maximum temperature 800 ° C, without anti-condensation unit	✓		
AASF66A		1000 mm flue gas sampling probe, cable length 3m, maximum temperature 1200 ° C, without anti-condensation unit	✓		
AASL05A		300 mm flue gas sampling probe, cable length 2m, maximum temperature 600 ° C, without anti-condensation unit	✓		
AASF31		180 mm flue gas sampling probe, cable length 3m, maximum temperature 400 ° C		✓	✓
AASF32		300 mm flue gas sampling probe, cable length 3m, maximum temperature 600 ° C		✓	✓
AASF35		750 mm flue gas sampling probe, cable length 3m, maximum temperature 600 ° C		✓	✓
AASF36		1000 mm flue gas sampling probe, cable length 3m, maximum temperature 1200 ° C		✓	✓
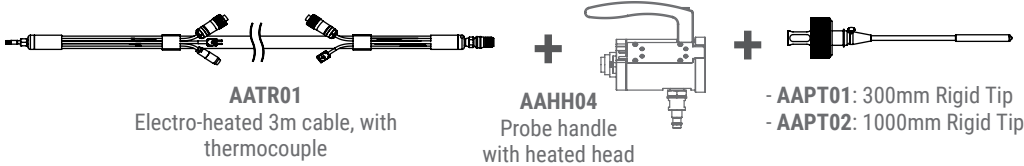
Modular Probes

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
AAPT07		300mm flexible tip (*). Measuring range temperature 130°c - for AASJ02 / AASJ03 / AASJ05 handle	✓	✓	✓
AAPT08		180mm rigid tip (*). Temperature measurement range 400°C - for AASJ02 / AASJ03 / AASJ05 handle	✓	✓	✓
AAPT09		300mm rigid tip (*). Measuring range temperature 600°C - for AASJ02 / AASJ03 / AASJ05 handle	✓	✓	✓
AAPT10		750mm rigid tip (*). Temperature measurement range 800°C - for AASJ02 / AASJ03 / AASJ05 handle	✓	✓	✓
AAPT11		1000mm rigid tip (*). Temperature measuring range 1200°C - for AASJ02 / AASJ05 handle	✓		
AASJ02		Flue gas suction probe handle; without ferrule. Cable: 3 m. Fitting diameter 9 mm, without anti-condensation unit	✓		
AASJ03		Flue gas suction probe handle, without tip, rubber hose length 3 m. Fitting diameter 9 mm, without anti-condensation unit		✓	✓
AASJ05		Flue gas suction probe handle; without ferrule. Cable: 1,8 m. Fitting diameter 9 mm,without anti-condensation unit	✓		

Accessories for Residential Applications

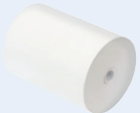| CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
AACKP01		ressure Differential measurement kit 2 x 1 m hoses + fittings	✓	✓	✓
AACTO01		Silicone conical fitting 44 - 22 mm	per kit prova tenuta		
AACTO02		Silicone conical fitting 32 - 18 mm	per kit prova tenuta		
AAKT05		Kit for 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)	per kit prova tenuta		
AARA02		Gas valve hose adapter: d.i. 7 mm	✓		
AASA08		Outdoor air temperature 200 mm TcK probe, with 2 m cable	✓		
AASG01		Gas sniffer probe for Chemist 500 analyzers 1 m + fitting	✓		
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	✓	✓	✓

Accessories for Industrial Applications

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
AACEX01		3 m extension cable for flue gas probe (code AASFxxx)	✓	✓	✓
AAPM02		Bacharach hand Pump for carbon measurements	✓	✓	✓
AACE01		Active external cooler (compatible with AASF3xx probes)	✓		

Automatic Carbon Measurement Probe

AASY01: Handle with 3,5m cable + **AAPT04** 750 mm Rigid Tip

	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
Automatic Carbon Measurement Probe		✓	

Probe with electro-heated head and tube

AATR01 Electro-heated 3m cable, with thermocouple + **AAHH04** Probe handle with heated head + - **AAPT01**: 300mm Rigid Tip / - **AAPT02**: 1000mm Rigid Tip

	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
Probe with electro-heated head and tube		✓	✓

Accessories for industrial measurements, high temperatures and particularly dirty smokes

AAxxx Gas Analysis Probe + *** AACTA03A** Water Trap + **AASP01** Guard shield + **AASF02** Stainless steel filter with adapter

	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
Accessories for industrial measurements	✓	✓	✓

* : If not included in the probe AASFxxx

PRINTERS AND CONSUMABLES

CODE	PHOTO	DESCRIPTION	CHEMIST 500 BG	CHEMIST 600	CHEMIST 600 BG	CHEMIST 900
AARC09		Long life plain thermal paper roll 57x35 (for thermical printer AAST04)	✓		✓	
AARC10		Long life plain thermal paper roll 57x30		✓		✓
AAST04	batteries included	Thermal printer with Bluetooth connection	✓		✓	

SPARE REPLACEMENT PARTS

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
AAPB01		Rechargeable Li-Ion battery, 3,7 V, 4,8 Ah	✓		
AAPB12		Rechargeable Li-Ion battery; 11,6V - 6200mAh		✓	
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	✓		
AAFA02		Spare Part Filter; dimensions 12x57mm; (2PCS)		✓	✓
AAFA03		HDPE filter for industrial engine probe (2PCS); dimensions 12x32mm; suggested use for NH3 measurements with passive probes	✓		
AAFA04		HDPE filter for industrial engine probe (2PCS); dimensions 12x57mm; suggested use for NH3 measurements with passive probes		✓	✓
AAFS01		Inox filter for industrial engine probe; dimensions 12x57mm (AAFS02 Spare Part)	✓	✓	✓

CASE, HOLSTER AND ACCESSORIES

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG	CHEMIST 900	CHEMIST 900 RACK
AACR10		Hard plastic kit case	✓		
AASM06		Rubber holster	CHEMIST 600		
AASM10		Rubber holster	CHEMIST 600 BG		
AAEB01		Trunk Extension - Chemist 900		✓	
AATY01		Trolley for Trunk - Chemsit 900		✓	

CALIBRATION CERTIFICATE

COD	DESCRIPTION
CER012	ISO 9001 calibration certificate for 2 sensors analyzers: Gamma Chemist
CER013	ISO 9001 calibration certificate for 3 sensors analyzers: Gamma Chemist
CER 014	ISO 9001 calibration certificate for 4 sensors analyzers: Gamma Chemist 500 e 500 BE GREEN
Calibration certificates on analyzers with more than 4 sensors can be performed by request.	

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

MAINTENANCE CONTRACTS

COD	DESCRIPTION
CON009	Annual maintenance contract for 2 sensors analyzers: Gamma Chemist
CON010	Annual maintenance contract for 3 sensors analyzers: Gamma Chemist
CON011	Annual maintenance contract for 4 sensors analyzers: Gamma Chemist

GAS SENSORS

GAS	CODE	RANGE	GAS SENSOR	RESOLUTION	ACCURACY	CHEMIST 600/600 BG	CHEMIST 900/900 RACK
O2 Long Life	AACSE44	0...25% v/v	Electrochemical sensor	0.1% vol	±0.2% vol	✓	✓
CO / H2	AACSE12	0...8000 ppm	Electrochemical sensor	1 ppm	±10 ppm ±5% ±10%	✓	✓
CO / H2 Low Range	AACSE24	0...1000 ppm	Electrochemical sensor	0.1 ppm	±2 ppm ±5%	✓	✓
CO	AACSE17	0...10.00% Vol (100.000 ppm)	Electrochemical sensor	0.01% vol	±0.1% vol ±5%	✓	✓
CO	AACSE18	0...20000 ppm	Electrochemical sensor	1 ppm	±100 ppm ±5% ±10%	✓	✓
CO2	AACSE47	0...50% v/v	NDIR Sensor	0.1% vol	±1% ±2%	✓	✓
NO	AACSE10	0...5000 ppm	Electrochemical sensor	1 ppm	±5 ppm ±5%	✓	✓
NO Low Range	AACSE25	0...500,0 ppm	Electrochemical sensor	0.1 ppm	±2 ppm ±5%	✓	✓
NO2	AACSE14	0...1000 ppm	Electrochemical sensor	1 ppm	±5 ppm ±5%	✓	✓
NO2 Low Range	AACSE26	0...500,0 ppm	Electrochemical sensor	0.1 ppm	±2 ppm ±5%	✓	✓
SO2	AACSE13	0...5000 ppm	Electrochemical sensor	1 ppm	±5 ppm ±5%	✓	✓
SO2 Low Range	AACSE28	0...500,0 ppm	Electrochemical sensor	0.1 ppm	±2 ppm ±5%	✓	✓
CH4	AACSE73	0...100% v/v	NDIR single band Sensor	0,01% Vol	0-10% 10%-100%	✓	
CxHy	AACSE39	0...5.00% Vol CH4	Pellistor sensor	0.01% vol	±0.25% vol	✓	✓
H2	AACSE57	0...2000 ppm	Electrochemical sensor	1 ppm	± 10 ppm ± 10 %	✓	✓
H2S	AACSE72	0...5000 ppm	Electrochemical sensor	1 ppm	+/- 5ppm +/- 5% m.v. +/- 10% m.v.	✓	✓
H2S Low Range	AACSE35	0...500,0 ppm	Electrochemical sensor	0.1 ppm	±5 ppm ±5% m.v.	✓	✓
NH3	AACSE56	0...500,0 ppm	Electrochemical sensor	0.1 ppm	+/-10ppm +/-10% m.v.	✓	✓