seitron

EMISSIONS INDUSTRIAL ANALYSERS

MADE IN ITALY

CHEMIST RANGE for Industrial Emissions Analysis

Our team is always available to build the most suitable custom version of the instrument to match every 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   2-6 GAS SENSORS

INDUSTRIAL EMISSIONS ANALYZER

PERFORMS CONCURRENTLY FROM 2 TO 6 GAS MEASUREMENTS

BLUE BACKLIT LCD (55 x 95 mm) WITH ZOOM FUNCTION

**15 PREPROGRAMMED FUELS
(INCLUDING WOOD, PELLETS, BIOGAS AND COAL)**

EXTERNAL WATER TRAP WITH DUST FILTER

**POSITIVE, NEGATIVE AND DIFFERENTIAL
PRESSURE MEASUREMENT**

PRICE ON REQUEST
CHEMIST 600 BE GREEN WARRANTY:
2 YEARS ON INSTRUMENT AND GAS SENSORS

Bluetooth® di serie

Chemist Smart Analysis

Chemist QR Code

**Windows Software
Chemist Smart Analysis**

MAIN FEATURES

- Compliant with EN 50379-1 and EN 50379-2 standards
- Single gas sensors combinations can generate hundreds of different versions
- Precalibrated and field replaceable gas sensors
- Different gas sampling probes avalaible
- External water trap with dust filter
- Sucking pump / second CO dilution pump for measurements up to 100.000 ppm
- Integral thermal printer
- Wide colour LCD, with backlight.
- 10 preprogrammed languages
- TPV holster
- Rechargeable Lithium Ion Batteries
- 15 preprogrammed fuels + 16 user programmable
- Memory up to 2000 complete analysis
- Flue gas, external and ambient air temperatures measurement
- Positive, negative and Pressure Differential measurement
- USB output
- Bluetooth® connectivity, Class 1 < 100 m
- Dimensions 270x93x68 mm, weight 0,8 kg

MEASURED VALUES

- O_2, CO/H_2, NO, NO_2, SO_2, H_2S (electrochemical sensors)
- $CxHy$ (Pellistor cell)
- CO_2 (Infrared NDIR sensor)

Several ranges and accuracies are available.

CHEMIST 600 BE GREEN FEATURES

FUELS	
Natural Gas	Coal
Propane	Biogas
LPG	Pellet 8% (RH)
Butane	Wood 20% (RH)
Diesel Oil	Wood Chips
Fuel Oil	Propane Air
Olive pits	Rice husks
CO of gas	

LANGUAGES	
Italian	Dutch
English	Rumanian
French	Slovak
Spanish	Portuguese
German	Galician
Russian	Catalan
Polish	Czech

CHEMIST 600 BE GREEN KITS

CHEMIST 605 BE GREEN

- 5 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2)
- Expandable up to 6 sensors
- With dilution pump for CO
- Ready for tightness test

CHEMIST 606 HC BE GREEN

- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CxHy)
- With dilution pump for CO
- Ready for tightness test

CHEMIST 606 CO2 BE GREEN

- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CO2)
- With dilution pump for CO
- Ready for tightness test

CHEMIST 600 X BE GREEN

Kit expandabile up to 6 gas measuring sensors. The 6 gas sensors can be chosen from the 15 available. The number of different gas sensors combinations is close to one thousand.

EVERY KIT INCLUDES:

Instrument - Protective rubber holster - Flue gas probe 300 mm with 3 m cable - Combustion air temperature probe Water Trap with dust filter, stainless steel fitttings and silicon hose - EU Plug - Hard plastic Case
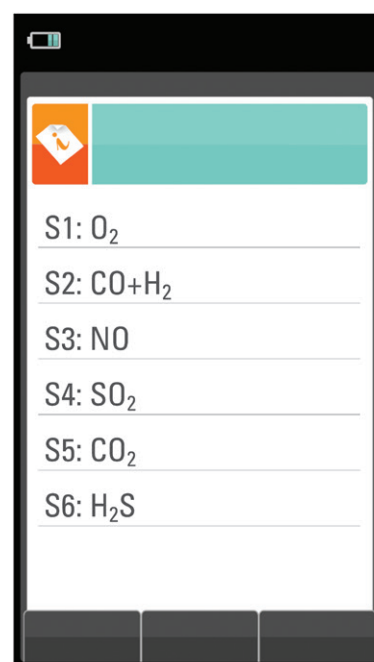
CHEMIST 600 X BE GREEN : 6 SENSORS MODULAR GAS ANALYZER KIT

The Chemist 600 X is our basic configuration that allows you to create a customized kit.
In this version there is no sensor. It is possible to add sensors up to a maximum of 6, choosing from the wide range available in the catalogue. This enormous versatility enables to generate different configurations, which satisfy a large number of needs in plenty of sectors and applications.

SENSOR TYPE AND POSITION

SENSORS	COD	S1	S2	S3	S4	S5	S6
CH_4 - 100% vol	AACSE73	✓	✓	✓	✓	✓	✓
CO / H_2 - 8000 ppm	AACSE12		✓				
CO / H_2 - 500.0 ppm	AACSE24	✓					
CO - 10.00%	AACSE17	✓	✓	✓	✓	✓	✓
CO - 20000 ppm	AACSE18	✓	✓	✓	✓	✓	✓
CO_2 NDIR - 50.0% vol	AACSE47	✓	✓	✓	✓	✓	✓
C_xH_y - 5.00% vol	AACSE39	✓	✓	✓	✓	✓	✓
H_2 - 2000 ppm	AACSE57	✓	✓	✓	✓	✓	✓
H_2S - 5000 ppm	AACSE72	✓	✓	✓	✓	✓	✓
H_2S - 500.0 ppm	AACSE35	✓	✓	✓	✓	✓	✓
NH_3 - 500.0 ppm	AACSE56	✓	✓	✓	✓	✓	✓
NO - 5000 ppm	AACSE10	✓	✓	✓			
NO - 500.0 ppm	AACSE25	✓	✓	✓			
NO_2 - 1000 ppm	AACSE14	✓	✓	✓	✓	✓	✓
NO_2 - 500.0 ppm	AACSE26	✓	✓	✓	✓	✓	✓
O_2 LL - 25.0%	AACSE43	✓	✓	✓			
SO_2 - 5000 ppm	AACSE13	✓	✓	✓	✓	✓	✓
SO_2 - 500.0 ppm	AACSE28	✓	✓	✓	✓	✓	✓

S1: O_2
S2: CO+H_2
S3: NO
S4: SO_2
S5: CO_2
S6: H_2S

Internal sensors arrangement on LCD screen

CHEMIST 600 BE GREEN TECHNICAL FEATURES

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CH4	Electrochemical sensor	0 .. 100.0% vol	0.01% vol	±0,3% Vol ±10%	0 .. 10% 10 .. 100%
CO with H2 compensation	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±10 ppm ±5% ±10%	0 .. 200 ppm 201 .. 2000 ppm 2001 .. 8000 ppm
CO Low range with H2 compensation	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CO Mid range	Electrochemical sensor	0 .. 20000 ppm	1 ppm	±100 ppm ±5% ±10%	0 .. 2000 ppm 2001 .. 4000 ppm 4001 .. 20000 ppm
CO Hi range	Electrochemical sensor	0 .. 10.00% vol	0.01% vol	±0.1% vol ±5%	0 .. 2.00 % 2.01 .. 10.00 %
NO	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
NO Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
SO2	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
SO2 Low range	Electrochemical sensor	0 .. 500 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NO2	Electrochemical sensor	0 .. 1000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 1000 ppm
NO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CxHy	Pellistor sensor	0 .. 5.00% vol	0.01% vol	±0.25% vol	
H2S	Electrochemical sensor	0 .. 5000 ppm	0.1 ppm 0 .. 500 ppm 1 ppm 501 .. 5000 ppm	±5 ppm ±5% ±10%	0 .. 100 ppm 100.1 .. 500 ppm 500.1 .. 5000 ppm
CO2	Calculated	0 .. 99.9% vol	0.1% vol		
CO2	NDIR sensor	0 .. 50.0% vol	0.1% vol	±1% vol ±2% FS	0,00 .. 10,00 % 10,0% a 50,0%
H2S	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±5 ppm ±5%	0 .. 100.0 ppm 100.1 .. 500 ppm
NH3	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±10 ppm ±10%	0 .. 100.0 ppm 100.1 .. 500.0 ppm
Air Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Smoke Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Pressure (draught & diffrential)	Piezoelectric sensor	-10.00 .. 200.00 hPa	0.01 hPa	±1% measured value ±0.02 hPa ±1% measured value	-10.00 .. -2.01 hPa -2.00 .. +2.00 hPa +2.01 .. +200.00 hPa
Temperature Differential	Calculated	0 .. 1250.0 °C	0.1 °C	-	
Air Index	Calculated	0.00 .. 9.50	0.01	-	
Air excess	Calculated	0 .. 850 %	1 %	-	
Stack losses	Calculated	0.0 .. 100.0 %	0.1 %	-	
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %	-	
Condensing Efficiency	Calculated	0.0 .. 120.0 %	0.1 %	-	
Smoke index	External Instrument	0 .. 9	-	-	

O2   17.0 %
CO2   2.2 %
λ, n   5.35
T fumi   81.6 °C
T aria   18.9 °C
ΔT   62.7 °C
Qs   11.2 %
ηs   88.8 %
ηc   0.0 %
ηt   88.8 %
CO   27 ppm
Rif. O2   0.0 %
CO rif   145 ppm
Tiraggio   0.116 hPa
Note:

CHEMIST 600 2-6 GAS SENSORS

INDUSTRIAL EMISSIONS ANALYZER

PERFORMS CONCURRENTLY FROM 1 TO 6 GAS MEASUREMENTS

BLUE BACKLIT LCD (55 x 95 mm) WITH ZOOM FUNCTION

BUILT-IN THERMAL PRINTER ON UNERASABLE THERMAL POLYESTER

**15 PREPROGRAMMED FUELS
(INCLUDING WOOD, PELLETS, BIOGAS AND COAL)**

EXTERNAL WATER TRAP WITH DUST FILTER

POSITIVE, NEGATIVE AND DIFFERENTIAL PRESSURE MEASUREMENT

**PRICE ON REQUEST
CHEMIST 600 WARRANTY:
2 YEARS ON INSTRUMENT, GAS SENSORS AND PRINTER**

Bluetooth® di serie

Chemist Smart Analysis

Chemist QR Code

**Windows Software
Chemist Smart Analysis**

MAIN FEATURES

- Single gas sensors combinations can generate hundreds of different versions
- Precalibrated and field replaceable gas sensors
- Choice of many different gas sampling probes
- External water trap with dust filter
- Sucking pump / second dilution pump to allow CO measurements up to 100.000 ppm
- Integral thermal printer
- Wide colour LCD, with backlight. 10 preprogrammed languages
- TPV holster
- Lithium ions rechargeable batteries
- 15 preprogrammed fuels + 16 more user programmable
- Memory up to 2000 complete analysis
- Measurement of flue gas , external and ambient air temperatures
- Positive, negative and pressure differential measurement
- USB output
- Bluetooth® connectivity, Class 1 < 100 m
- Dimensions 310x90x60 mm , weight 1.1 kg
- Compliant with EN 50379-1 and EN 50379-2 standards

MEASURED VALUES

- O2, CO/H2, NO, NO2, SO2, H2S (electrochemical sensors)
- CxHy (Pellistor cell)
- CO2 (Infrared NDIR sensor)

Several ranges and accuracies are available.

CHEMIST 600 FEATURES

FUELS	
Natural Gas	Coal
Propane	Biogas
LPG	Pellet 8% (RH)
Butane	Wood 20% (RH)
Diesel Oil	Wood Chips
Fuel Oil	Propane Air
Olive pits	Rice husks
CO of gas	

LANGUAGES	
Italian	Dutch
English	Rumanian
French	Slovak
Spanish	Portuguese
German	Galician
Russian	Catalan
Polish	Czech

CHEMIST 600 KITS

CHEMIST 605

- 5 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2)
- Expandable up to 6 sensors
- Integrated printer
- With CO dilution pump
- Ready for tightness test

CHEMIST 606 HC

- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CxHy)
- Integrated printer
- With CO dilution pump
- Ready for tightness test

CHEMIST 606 CO2

- 6 sensors (O2, CO/H2 0 .. 8000 ppm, NO, NO2, SO2, CO2)
- Integrated printer
- With CO dilution pump
- Ready for tightness test

CHEMIST 600 X

Kit expandable up to 6 sensors, which can be chosen from the 15 available.
1 thousand possible combinations.

EVERY KIT INCLUDES:

Instrument - Protective rubber holster - Flue gas probe 300 mm with 3 m cable - Combustion air temperature probe Probe - Water Trap with dust filter, stainless steel fitttings and silicon hose - EU plug - Hard plastic Case
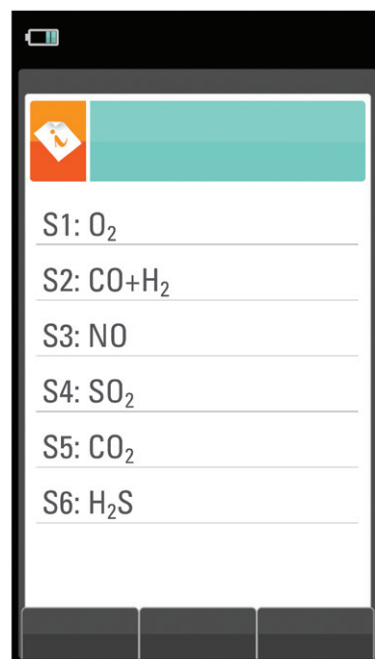
CHEMIST 600 X : MODULAR GAS ANALYZER KIT WITH 6 SENSORS

The Chemist 600 X is our basic configuration that allows you to create a customized kit.
In this version there is no sensor. It is possible to add sensors up to a maximum of 6, choosing from the wide range available in the catalogue. This enormous versatility enables to generate different configurations, which satisfy a large number of needs in plenty of sectors and applications.

SENSOR TYPE AND POSITION

SENSORS	COD	S1	S2	S3	S4	S5	S6
CH_4 - 100% vol	AACSE73	✓	✓	✓	✓	✓	✓
CO / H_2 - 8000 ppm	AACSE12		✓				
CO / H_2 - 500.0 ppm	AACSE24	✓					
CO - 10.00%	AACSE17	✓	✓	✓	✓	✓	✓
CO - 20000 ppm	AACSE18	✓	✓	✓	✓	✓	✓
CO_2 NDIR - 50.0% vol	AACSE47	✓	✓	✓	✓	✓	✓
C_xH_y - 5.00% vol	AACSE39	✓	✓	✓	✓	✓	✓
H_2 - 2000 ppm	AACSE57	✓	✓	✓	✓	✓	✓
H_2S - 5000 ppm	AACSE72	✓	✓	✓	✓	✓	✓
H_2S - 500.0 ppm	AACSE35	✓	✓	✓	✓	✓	✓
NH_3 - 500.0 ppm	AACSE56	✓	✓	✓	✓	✓	✓
NO - 5000 ppm	AACSE10	✓	✓	✓			
NO - 500.0 ppm	AACSE25	✓	✓	✓			
NO_2 - 1000 ppm	AACSE14	✓	✓	✓	✓	✓	✓
NO_2 - 500.0 ppm	AACSE26	✓	✓	✓	✓	✓	✓
O_2 LL - 25.0%	AACSE43	✓	✓	✓			
SO_2 - 5000 ppm	AACSE13	✓	✓	✓	✓	✓	✓
SO_2 - 500.0 ppm	AACSE28	✓	✓	✓	✓	✓	✓

S1: O_2
S2: $CO+H_2$
S3: NO
S4: SO_2
S5: CO_2
S6: H_2S

Internal sensors arrangement on LCD display

CHEMIST 600 TECHNICAL FEATURES

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O2	Electrochemical sensor	0 .. 21.0% vol	0.1% vol	±0.2% vol	
CH4	Electrochemical sensor	0 .. 100.0% vol	0.01% vol	±0,3% Vol ±10%	0 .. 10% 10 .. 100%
CO with H2 compensation	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±10 ppm ±5% ±10%	0 .. 200 ppm 201 .. 2000 ppm 2001 .. 8000 ppm
CO Low range with H2 compensation	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CO Mid range	Electrochemical sensor	0 .. 20000 ppm	1 ppm	±100 ppm ±5% ±10%	0 .. 2000 ppm 2001 .. 4000 ppm 4001 .. 20000 ppm
CO Hi range	Electrochemical sensor	0 .. 10.00% vol	0.01% vol	±0.1% vol ±5%	0 .. 2.00 % 2.01 .. 10.00 %
NO	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
NO Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
SO2	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 5000 ppm
SO2 Low range	Electrochemical sensor	0 .. 500 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
NO2	Electrochemical sensor	0 .. 1000 ppm	1 ppm	±5 ppm ±5%	0 .. 100 ppm 101 .. 1000 ppm
NO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm ±5%	0 .. 40.0 ppm 40.1 .. 500.0 ppm
CxHy	Pellistor sensor	0 .. 5.00% vol	0.01% vol	±0.25% vol	
H2S	Electrochemical sensor	0 .. 5000 ppm	0.1 ppm 0 .. 500 ppm 1 ppm 501 .. 5000 ppm	±5 ppm ±5% ±10%	0 .. 100 ppm 100.1 .. 500 ppm 500.1 .. 5000 ppm
CO2	Calculated	0 .. 99.9% vol	0.1% vol		
CO2	NDIR sensor	0 .. 50.0% vol	0.1% vol	±1% vol ±2% FS	0,00 .. 10,00 % 10,0 a 50,0%
H2S	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±5 ppm ±5%	0 .. 100.0 ppm 100.1 .. 500 ppm
NH3	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±10 ppm ±10%	0 .. 100.0 ppm 100.1 .. 500.0 ppm
Air Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Smoke Temperature	TcK Sensor	-20.0 .. 1250.0 °C	0.1 °C	±0.5 °C ±0.5%	0 .. 100 °C 101 .. 1250 °C
Pressure (draught & diffrential)	Piezoelectric sensor	-10.00 .. 200.00 hPa	0.01 hPa	±1% measured value ±0.02 hPa ±1% measured value	-10.00 .. -2.01 hPa -2.00 .. +2.00 hPa +2.01 .. +200.00 hPa
Temperature Differential	Calculated	0 .. 1250.0 °C	0.1 °C	-	
Air Index	Calculated	0.00 .. 9.50	0.01	-	
Air excess	Calculated	0 .. 850 %	1 %	-	
Stack losses	Calculated	0.0 .. 100.0 %	0.1 %	-	
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %	-	
Condensing Efficiency	Calculated	0.0 .. 120.0 %	0.1 %	-	
Smoke index	External Instrument	0 .. 9	-	-	

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CHEMIST 900 1-12 GAS SENSORS

EMISSIONS INDUSTRIAL ANALYZER

Chemist 900 is an industrial emissions and combustion analyzer, mainly used for industrial burners, cogeneration groups, gas turbines, industrial ovens and processes, laboratories and generally everywhere the need is to measure and register for long periods the gas emissions, in compliance with existing regulations.

Bluetooth® di serie

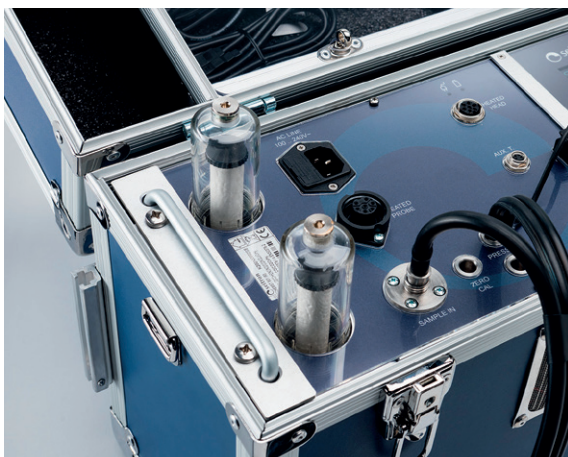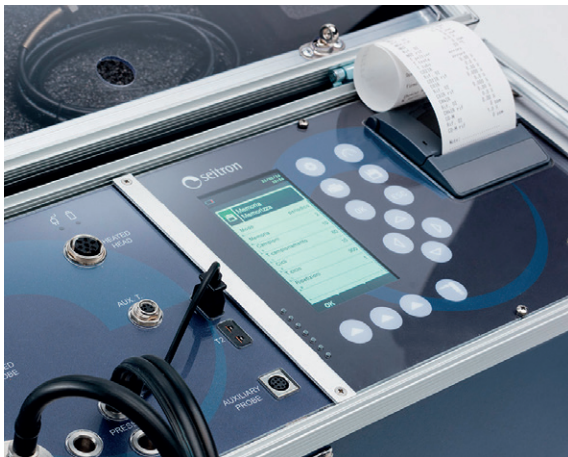PRICE ON REQUEST
CHEMIST 900 WARRANTY:
2 YEARS ON INSTRUMENT, GAS SENSOR AND PRINTER

**Windows Software
Chemist Smart Analysis**

Windows 7 or later

Chemist Smart Analysis

GET IT ON Google Play   Download on the App Store

MAIN FEATURES

- Compliant with EN 50379-1 and EN 50379-2 standards
- Possibility to measure simultaneously up to 12 different gases, with up to 9 single gas measuring sensors and one infrared bench (NDIR) for CO/CO2/CH4
- Measurable gases: O2, CO, CO2, CxHy, NO, NO2, SO2, H2S with different ranges and accuracies
- Standard fuels in memory: methane, LPG, propane, butane, light oil, heavy oil, biogas, wood, pellets, coal.Other 16 fuels user defined can be added
- Sucking pump for gas sample and 2nd dilution pump for CO cell protection
- Flue gas temperature, combustion and outdoor air measurement
- Positive, negative and Pressure Differential measurement
- Gas sampling probes of different type and length / heated head and hose probe
- Double dust filter
- Standard expansion water trap or Peltier quick Cooler
- Automatic condensate drainage with peristaltic pump
- Memory up to 16.000 complete analysis
- USB output for PC connection
- Bluetooth® Class 1 <100 m connectivity
- Power supply from Lithium Ions Batteries or mains 90…260 Vac
- Charger / power supply inside the instrument. It is also possible to work with the batteries completely discharged, connecting to the 90 ... 260 Vac mains power supply. The supplied AC cable is in place.
- Datalogger function
- Bulky metal frame

Composition: central unit and gas sampling system

The Chemist 900 industrial analyzer is made up of two parts:
- the central unit
- the gas sampling system

Central Unit Version	Flex gas sensors (max 9)	NDIR bench (CO2/CO/CxHy)	Anti-condensation cyclone Cooler with Peltier cell	Anti-condensation trap
Chemist 901	✓	-	-	✓
Chemist 901 IR3	✓	✓	-	✓
Chemist 902	✓	-	✓	-
Chemist 902 IR3	✓	✓	✓	-

N.B. A gas sampling probe with heated head and tube, powered by mains electricity, must always be installed together with the Chemist 902 central unit.

GAS SAMPLING SYSTEMS

- Passive Type: utilises sensors with different tip lengths and fittings, made of different materials, with flexible tube connection to the central unit in various lengths.

- Active Type: utilises gas sampling sensor with heated head and flexible tube. This characteristic prevents water vapour condensation to reach the central unit, since it affects measurements of gases easily soluble in water, such as NO2 and SO2.
  The active sensor maintains the gas sample at a higher temperature than the dew point and keeps it stable as far as the cooling system: this is a fast, cyclone type with Peltier cell. The water vapour condenses so quickly that the NO2 and SO2 gases do not have time to dissolve in water.

Active gas sampling probe with heated head and hose

Passive gas sampling probe

750 mm gas sampling probe for industrial motors

CHEMIST 900 - ACCESSORIES

AAC CV01	Schuko plug cable
AAC CV04	European plug cable
AAC DP02	Draught gauge for draught measurement
AAC SA04	100mm Auxiliary temperature sensor PT100 4W, with 3m cable
AA SA08	Combustion air temperature sensor, 200 mm distance, with 3m cable
AA SP01	Heat protection shield for probes
AA TT01	'L' shaped Pitot Tube (without Tc-K thermocouple): length 300mm - external ø 6 mm. Supplied with two silicone tubes, with 2 m length
AA TT02	'L' shaped Pitot Tube (without Tc-K thermocouple): length 800mm - external ø 6 mm. Supplied with two silicone tubes, with 2 m length
AAC KP01	Pressure Differential kit
AA KT05	Tightness test kit
AA PM02	Manual pump kit for smoke measurement
AA SW08	Configuration software on USB flash drive
AA UA03	USB-A / USB-B adapter cable
AA EB01	Trunk extension
AA TY01	Trunk trolley

CHEMIST 900 - GAS PROBES

AA SF31	180 mm gas sampling probe, extended temperature range to 400°C, with 3 m hose
AA SF32	300 mm gas sampling probe, extended temperature range to 600°C, with 3 m hose
AA SF35	750 mm gas sampling probe, extended temperature range to 800°C, with 3 m hose
AA SF36	1000 mm gas sampling probe, extended temperature range to 1100°C, with 3 m hose
AA SJ03	Impugnatura sonda per aspirazione fumi; senza puntale, lunghezza cavo 3 metri, con raccordo diametro 9 mm.
AA SX03	750mm smoke sampling sensor for industrial motors, with 3 m hose
AA SY01	Probe for carbon black measurement, with 3.5 m hose
AA PT03	300 mm tip for carbon black measurement probe (AASY01)
AA PT04	750 mm tip for carbon black measurement probe (AASY01)
AAC EX02S	3 m extension hose for smoke sampling sensors
AA SR03	Smoke sampling sensor with heated head, 300 mm tip and electrically heated 3 m hose, with thermocouple
AA SR04	Smoke sampling sensor with heated head, 1000mm tip and electrically heated 3m tube, with thermocouple

CHEMIST 900 - SPARE PARTS

AA PB12	Li-Ion battery pack 11.1V 6.2 Ah
AA RC08	Printer thermal paper roll, h=57mm, diameter =30mm
AA RC09	Unerasable printer thermal paper roll h=57mm, diameter =30mm
AAC ADX005	Dummy sensor
AA FS01	Inox filter for heated head
AA FA02	Anti-dust filetr (2 pcs)
AAFA04	Anti-dust filetr (2 pcs), only with NH3 sensors installed

CHEMIST 900 - TECHNICAL FEATURES

Power supply:	100 .. 260V~ or Li-ion battery pack with internal protection circuit, rechargeable. With mains cable with IEC C14 socket.
Battery charge:	8 hours from 0% to 90%.
Charging time:	10 hours of continuous operation (except printer and Peltier cell group).
Instrument battery life:	2 hours with Cooler working.
Display:	Backlit TFT graphical colour display. 4.3" 480×272 pixel.
Connectivity **Communication port:** **Bluetooth:**	 TYPE B USB connector. Communication distance: <100 metres (open field).
Autozero: **Dilution:**	Automatic autozero cycle with gas sampling probe in stack. CO sensor measurement range expansion system up to 100,000ppm (10.00%). Starting point programmable by the user.
Gas measurement sensors: **Infrared bench:** **Fuel type:**	Up to 9, configurable among electrochemical, NDIR (single cell) and Pellistor. 3 gases NDIR bench: CO, CO_2, CxHy. 12 preprogrammed and 16 programmable by the user.
Self diagnostics: **Temperature measurement:** **Ambient temperature measurement:**	Check all functions and internal sensors with status indication. TcK double input with mini connector (ASTM E 1684-96) for Temperature Differential measurement (supply and return). Via internal sensor or via T2 TcK input with remote sensor.
Printer: **Printer power supply:** **Printer battery life:**	Integrated, thermal, with easy paper loading and paper level sensor. Analyzer batteries. With fully charged batteries up to 40 analysis reports.
Internal Data Memory: **User data:** **Printer header:**	16.000 complete data analysis, time and customer's name can be stored. 8 programmable user names. 6 lines × 24 characters, user customisable.
In-line filter:	With replaceable cartridge, 99% efficiency with 20μm particles.
Vacuum pump: **Capacity pump:**	2.0 l/min flow rate in the stack up to 300hPa head. Internal sensor measuring pump flow rate.
Cooler sample treatment **Drying system:** **Type:** **Set point temperature cooler:** **Max. temp. deviation from set point:** **Condensate emptying pump:** **Peristaltic duty cycle pump:** **Warm-up time:** **Operating temperature:**	 Rapid water condensation using cyclone system Peltier cell +5°C +10°C from set point Peristaltic hose 38 ml/min 30s On .. 30s Off ~ 15 .. 20 minutes -5°C .. +45°C
Anti-condensation trap **Type:** **Condensate emptying pump:** **Operating temperature:**	 Integrated Peristaltic hose 38 ml/min -5°C .. +45°

|	
Carbon black:	Using a manual external pump; the smoke index can be uploaded and printed.
Tightness test (where required):	Tube gas tightness test with separate receipt printing, using AAKT05 accessory, subject to European standards UNI 7129 (new installations) and UNI 11137: 2012 (existing installations), with automatic calculation of the tube volume.
Condensing boiler efficiency :	Automatic assessment of the condensing boiler, with calculation and printing of the boiler efficiency.
Ambient gases:	Separate measurement and printing of the ambient CO concentration.
Draught test:	Draught test execution using external probe (AACDP02)
Working temperature:	-5°C .. +45°C
Storage temperature:	-20°C .. +50°C
Humidity limit:	20% .. 80% RH
Protection level:	IP21
External dimensions:	50 x 36 x 20 cm (W x H x D). 50 x 46 x 13 cm (W x H x D) with intermediate drawer for heated head and sensor transportation.
Weight:	~ 12 kg (Typical configuration: nine sensors - Cooler - IR bench - smoke sampling sensor - power cable - USB cable - carrying strap - two paper rolls - USB stick - condensate drain tube - remote air intake tube - combustive air sensor). ~ 13 kg (Typical configuration with additional accessories such as: 3m extension for smoke sensor - auxiliary air sensor - 300mm Pitot Tube - draught gauge). ~ 16,7 kg (Typical configuration with additional accessories and intermediate drawer containing: heated head sensor with 300mm tip and heated tube).
Compliant with European standards EN 50379-1 and EN 50379-2 for the following measurements:	• O2 • CO • NO • SO2 • Temperature (flue gas) • Temperature (combustion air) • Pressure (draught) • Pressure (differential)

MEASUREMENT RANGES AND ACCURACIES

MEASUREMENT	GAS SENSOR	MEASUREMENT RANGE	RESOLUTION	ACCURANCY
O2	Electrochemical sensor	0 .. 25.0% vol	0.1% vol	±0.2% vol
CO with H2 compensation	Electrochemical sensor	0 .. 8000 ppm	1 ppm	±10 ppm 0 .. 200 ppm ±5% measured value 201 .. 2000 ppm ±10% measured value 2001 .. 8000 ppm
CO with active dilution	Electrochemical sensor	0 .. 100000 ppm	100 ppm	±20% measured value
CO Low range with H2 compensation	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
CO Low range with active dilution	Electrochemical sensor	6.250 ppm	10 ppm	±20% measured value
CO	Electrochemical sensor	0 .. 20000 ppm	1 ppm	±100 ppm 0 .. 2000 ppm ±5% measured value 2001 .. 4000 ppm ±10% measured value 4001 .. 20000 ppm
CO con diluizione	Electrochemical sensor	0 .. 250000 ppm	100 ppm	±20% measured value
CO	Electrochemical sensor	0 .. 100000 ppm	100 ppm	±0.02% vol o ±5% m.v. 0 .. 2.00 % ±5% measured value 2.01 .. 10.00 %
NH3	Electrochemical sensor	0 .. 5000 ppm	0.1 ppm	±10 ppm 0 .. 100 ppm ±10% measured value 101 .. 500.0 ppm
NO	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm 0 .. 100 ppm ±5% measured value 101 .. 5000 ppm
NO Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
NOx	Electrochemical sensor			
SO2	Electrochemical sensor	0 .. 5000 ppm	1 ppm	±5 ppm 0 .. 100 ppm ±5% measured value 101 .. 5000 ppm
SO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
NO2	Electrochemical sensor	0 .. 1000 ppm	1 ppm	±5 ppm 0 .. 100 ppm ±5% measured value 101 .. 1000 ppm
NO2 Low range	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm
CxHy	Electrochemical sensor	0 .. 5.00% vol	0.01% vol	±0.25% vol
H2	Electrochemical sensor	0 .. 2000 ppm	1 ppm	±10 ppm 0 .. 100 ppm ±10% 100 .. 2000 ppm
H2S	Electrochemical sensor	0 .. 500.0 ppm	0.1 ppm	±5 ppm 0 .. 100.0 ppm ±5% measured value 100.1 .. 500.0 ppm
CO2	Calculated	0 .. 99.9% vol	0.1% vol	
CO2	NDIR sensor	0 .. 50.0% vol	0.01% vol	±1% Vol 0.00 .. 10.00 % ±2% Full-scale 10.01 .. 50.00 %
CO2 0-50% *	NDIR bench	0 .. 50.0% vol	0.1% vol	+/- 0,3% Vol 0,00 .. 8,00% Vol +/- 5% vm 8,01% .. 40,00% Vol +/-10% vm 40,01% .. 50,00% Vol

MEASUREMENT	GAS SENSOR	MEASUREMENT RANGE	RESOLUTION	ACCURANCY	
CO 0..50% *	NDIR bench	vol 500.000 ppm	100 ppm	0-2500 ppm : +/- 50 ppm 2501 -100000 ppm : +/- 3% vm 100001 -250000 ppm : +/- 5% vm	1 ppm 10ppm 10ppm
HC * referred to methane	NDIR bench	0-1.000.000 ppm (100%Vol)	1 ppm	+/- 50ppm 0 .. 200 ppm +/- 2% vm 201 .. 50000 ppm +/- 3 % vm 50001 .. 1000000ppm	
HC * referred to propane	NDIR bench	0 .. 100000 ppm	1 ppm	+/- 10ppm 0 .. 300 ppm +/- 3% vm 301 .. 4000 ppm +/-5% vm 4001 .. 30000 ppm	
Air temperature	TcK sensor	-20.0 ..120.0 °C	0.1 °C	±1 °C	
Flue gas temperature	TcK sensor	-20.0 .. 1250.0 °C	0.1 °C	±1 °C 0 .. 100 °C ±1% measured value 101 .. 1250 °C	
Auxiliary sensor temperature	PT100	-20.0 .. 200.0 °C	0.1 °C	±0.5 °C	
Pressure (draught and differential)	Piezoelectric sensor	-10.00 .. 200.00 hPa	0.01 hPa	±1% measured value -10.00 .. -2.01 hPa ±0.02 hPa -2.00 .. +2.00 hPa ±1% measured value +2.01 .. +200.00 hPa	
Temperature Differential	Calculated	0 .. 1250.0 °C	0.1 °C		
Air index	Calculated	0.00 .. 9.50	0:01		
Air excess	Calculated	0 .. 850%	1%		
Stack heat loss	Calculated	0.0 .. 100.0%	0.1%		
Efficiency	Calculated	0.0 .. 100.0%	0.1%		
Efficiency (condensation)	Calculated	0.0 .. 120.0%	0.1%		
Smoke index	External instrument	0 .. 9			

Note: *: The NDIR bench always measures the 3 gases CO, CO2, HC (ref. to methane CH4) or HC (ref. to propane C3H8)
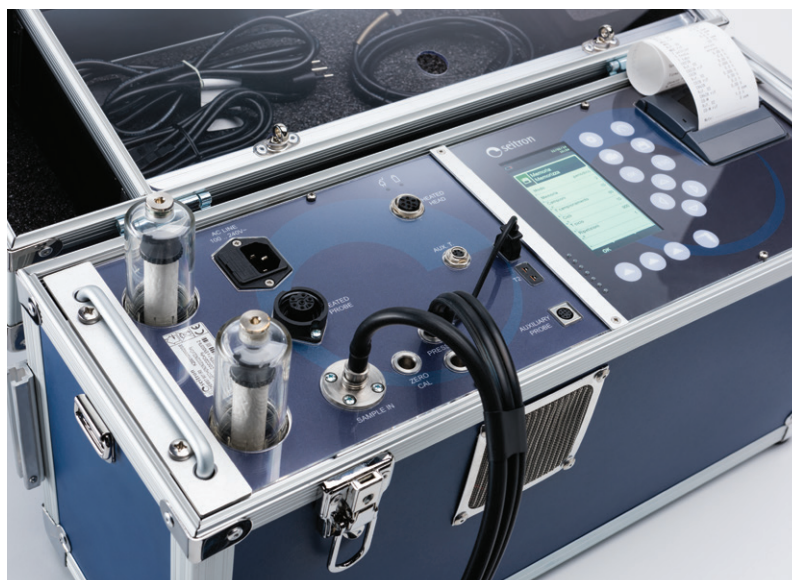
CHEMIST 900 RACK 1-6 SENSORI
ANALIZZATORE INDUSTRIALE DI EMISSIONI

The **CHEMIST 900 RACK** is an industrial emissions analyzer. This device can measure emissions generated by industrial combustion or transformation processes and it analyzes different gases thanks to the NDIR and electrochemical technology.

Combustions and emissions parameters are displayed in real time on a TFT color display, on a PC Software or on a PLC that receives data via RS485 serial connection. The sensors are thermally compensated in order to avoid measurement errors that could be caused by temporary thermal variation. The distinctive feature of the Chemist 900 Rack is its rack structure that allows to use it into standard 19'' cabinet or even in laboratories because it comes standard equipped with 4 rubber bumpers. The Chemist 900 Rack is designed to perform long-lasting analyses periods thanks to an automatic commutation system that allows to reset both the gas sensors and the pressure sensor used for draft measures or differential pressure measures. This, together with a Pitot tube, allows measure the smoke speed inside the evacuation duct. A relevant feature of the Chemist 900 Rack is a cooling system that causes a quick condensation of the moisture contained in the gas thus allowing the gas to reach the sensors without dissolving in water. The gases that benefit from this system are NO_2, SO_2, NH_3, H_2S. Condensation water is collected into a water tank and emptied on a timed basis by a membrane pump. The gas sample and the air used for sensors cleaning are filtered by two interchangeable dust filters. The Chemist 900 rack is equipped with a system that allows taking in gases from two different points (e.g. two stacks) and carry them into a single smoke suction line (image 1). All parameters and collected data are sent via serial communication port type RS485 and USB communication port in order to connect to the PC for the analysis reading. The user can archive and analyze the collected data with the dedicated software provided with the instrument, Chemist Smart Analysis. Files are saved with .csv extension.
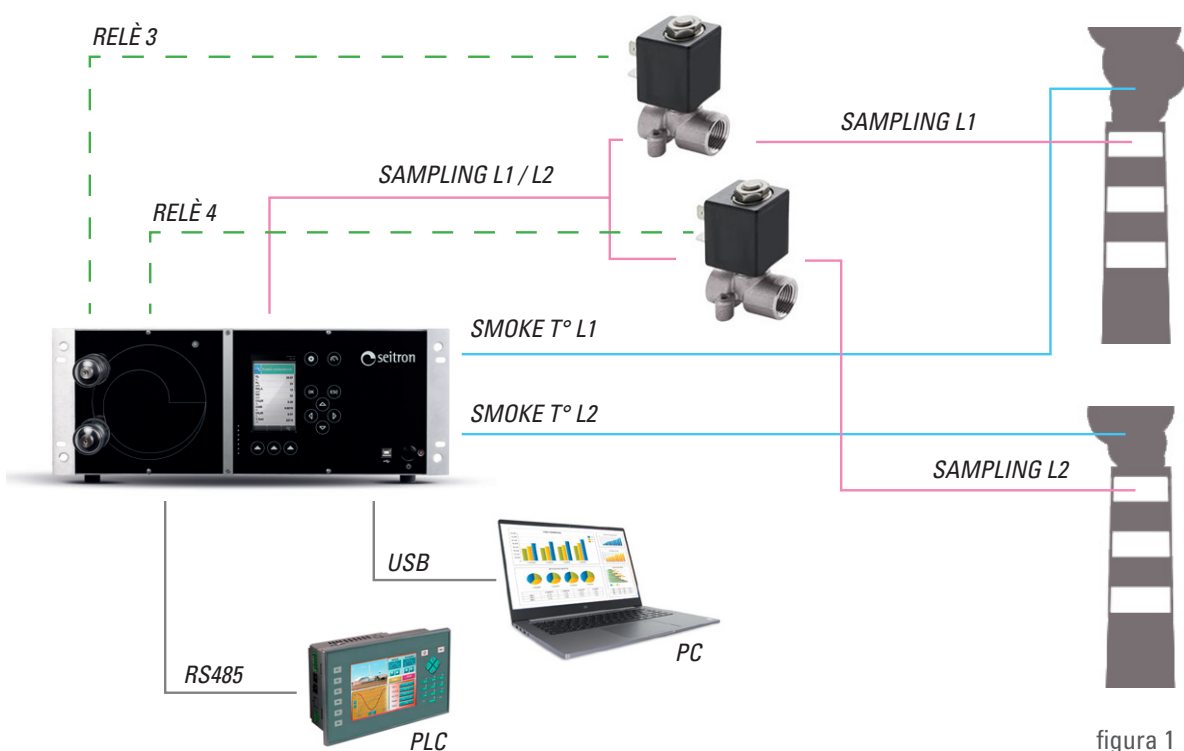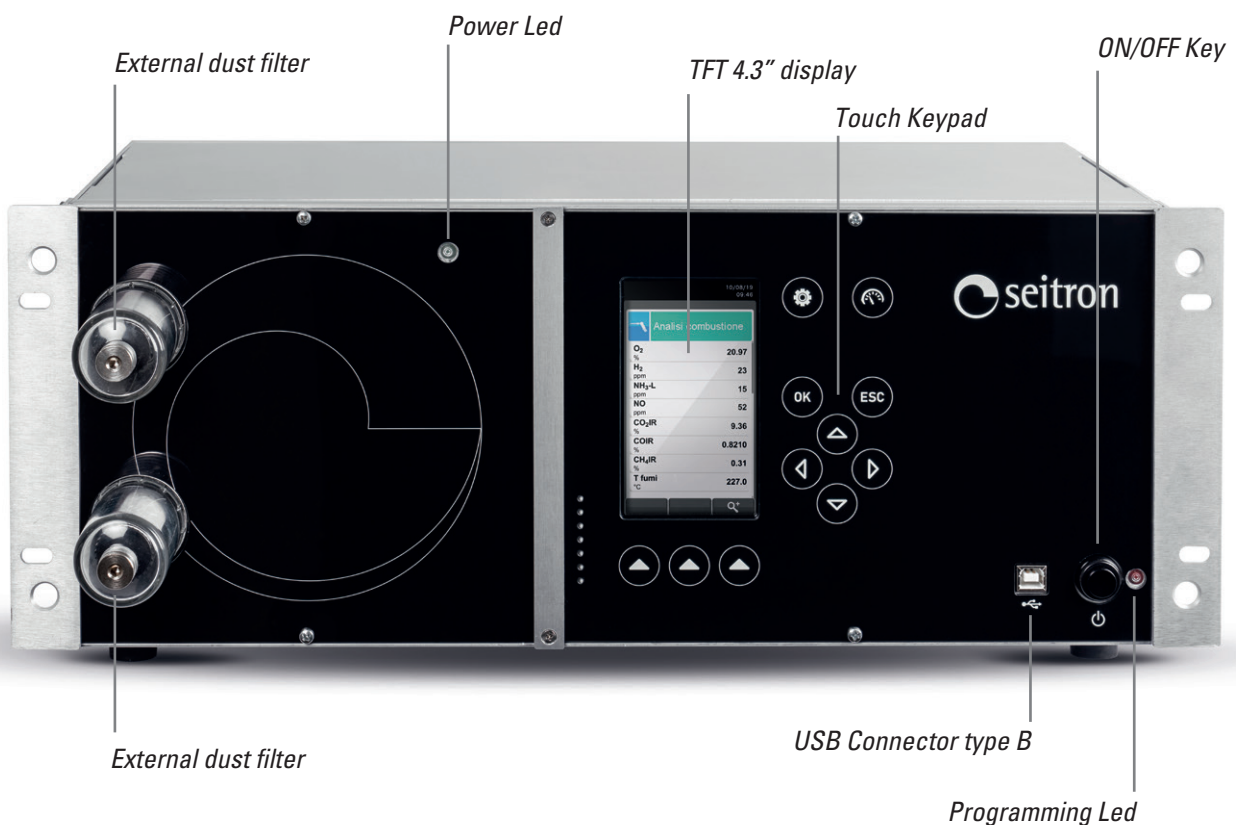
SAMPLING LINE SELECTION SYSTEM

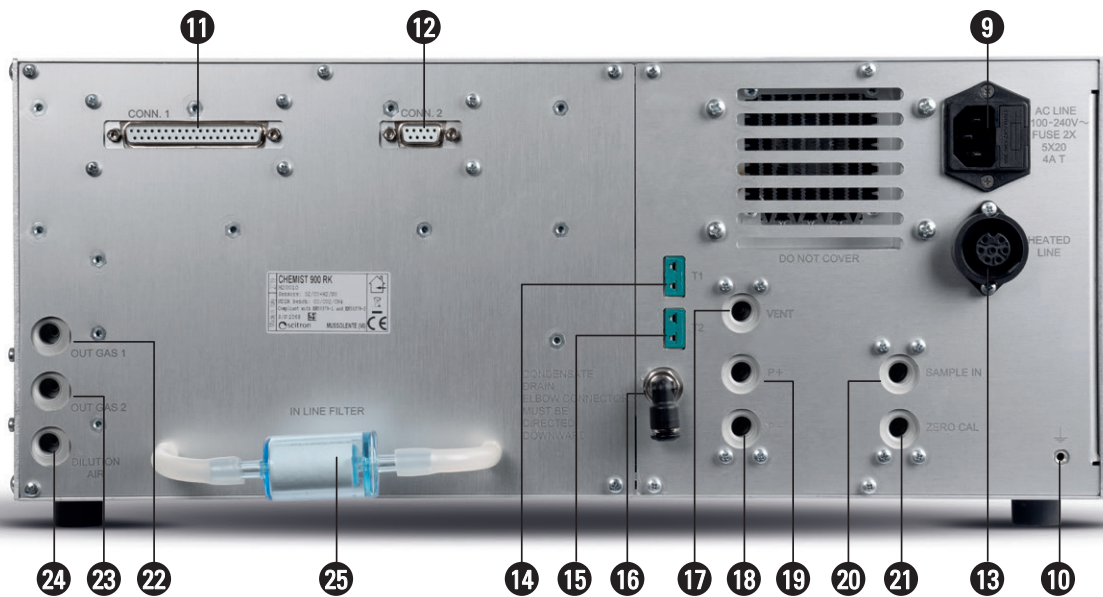figura 1

MAIN FUNCTIONS

- Serial communication port type RS485 according to protocol MODBUS® RTU USB Communication
- 4 .. 20 mA isolated output
- Output signal: from 4 to 20mA scalable up to 10% of the measurement range of the chosen sensor. Other calibrations beyond this limit on request
- 4 alarm relays outputs
- Heated smokes suction line (up to 6 meters) connection
- Efficiency calculations
- Condesing efficiency calculation
- PCI efficiency calculation
- PCS efficiency calculation
- 15 default fuels
- 32 settable fuels
- CO sensor protected by an automatic dilution system

MEASUREMENT

- NDIR bench (measuring up to 3 gases)
- Electrochemical gas measurement sensors (up to 3)
- Smoke temperature measurement (2 temperatures)
- Local or remote combustion air measurement
- Sensors temperature measurement through thermal compensation
- Draft in the stack with automatic autozero
- Measurement of the differential pressure
- Air speed for air or flue gas leaving the stack with the use of Pitot tube
- Suction pump flow rate measurement

External dust filter

Power Led

TFT 4.3″ display

Touch Keypad

ON/OFF Key

External dust filter

USB Connector type B

Programming Led

9. Power Supply 'AC LINE - 90 .. 264V-'
Plug IEC C14 to connect the power cable to the instrument, provided with the instrument itself. On the plug there is a fuse-holder hidden under a flap, containing 2 fuses 5x20 4A T.

10. Connection for grounding of the instrument.

11. 37 poles connector (4 outputs 4..20mA and 4 relay outputs)
Makes available for the user 4 4..20mA outputs and 4 relay outputs with potential free change over.

12. Serial connector RS485
Serial communication port type RS485 according to MODBUS® RTU protocol.

13. 'HEATED LINE' Connector
Plug for the heated line connection.

14. 'T1' Connector
Tc-K connector to plug in the male connector Tc-K of the probe for the measure of the smoke temperature.

15. 'T2' Connector
Tc-K connector to plug in the male connector Tc-K of the combustion air probe.

16. Condensation water drain

17. 'VENT' Connector - Female connector M5
Air vent used by the pressure sensor to perform the self-zeroing. If the instrument is installed on a rack or in pressurized environments, the air vent must be moved remotely at room temperature.

18. Pneumatic connector 'P-' - female connection 1/8 GAS BSPP.
Negative input (P-) to be used for the draft measurement.

19. Pneumatic connector 'P+' - female connection 1/8 GAS BSPP.
Positive input (P+) to be used for the measurement of the pressure in general.

20. Pneumatic connector 'SAMPLE IN' - female connection 1/8 GAS BSPP.
Input for the connection of the gas sampling probe.

21. Pneumatic connector 'ZERO CAL' - female connection 1/8 GAS BSPP.
Input for the line connection to the remote air vent in order to perform the self-zeroing. If the instrument is placed in a closed and polluted environment, it is possible to move the instrument air vent in a room with clean air using the 'ZERO CAL' connector

22. Connector 'OUT GAS 1' - female connection 1/8 GAS BSPP.
Analyzed gas remote output.

23. Connector 'OUT GAS 2' - female connection 1/8 GAS BSPP.
Analyzed gas remote output.

24. Connector 'DILUTION AIR' - female connection 1/8 GAS BSPP.
Remote air vent for CO dilution.

**25. Dust filter for NDIR (infrared) bench protection**

Chemist Smart Analysis

Dedicated PC Software that allows:
• Manual analysis
• Periodic data logger parameters set up (autozero time, autozero range, stand-by time, sampling range, number of analysis cycles, start and end date of the analysis)
• Pump control
• Graphical or numerical visualisation of the parameters
• Alarms visualisation
• Instrument parameters set up
• Fuels set up
• Alarms set up
• 4-20mA channels set up
• Operator data set up
• CSV files data storing

Windows Software
Chemist Smart Analysis

Windows 7
or later
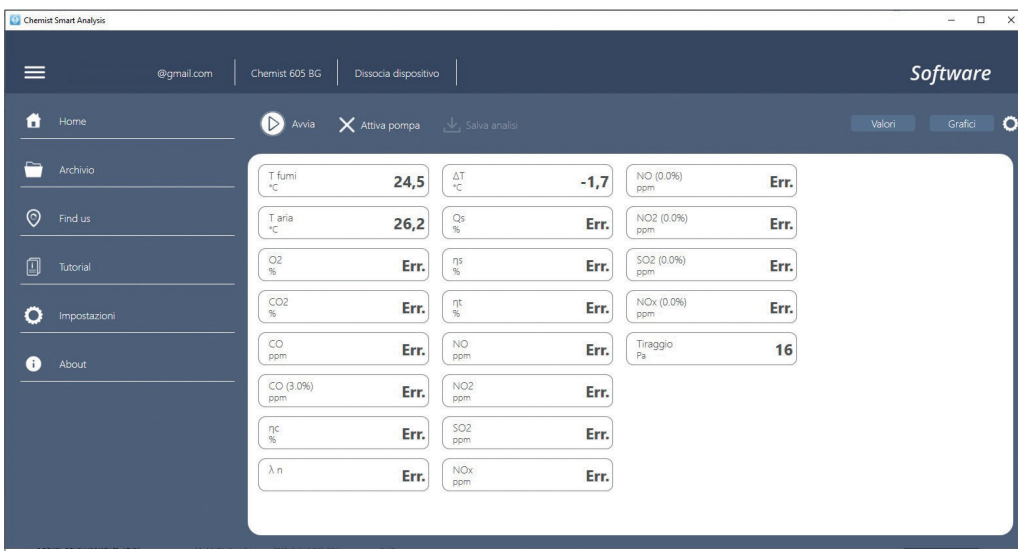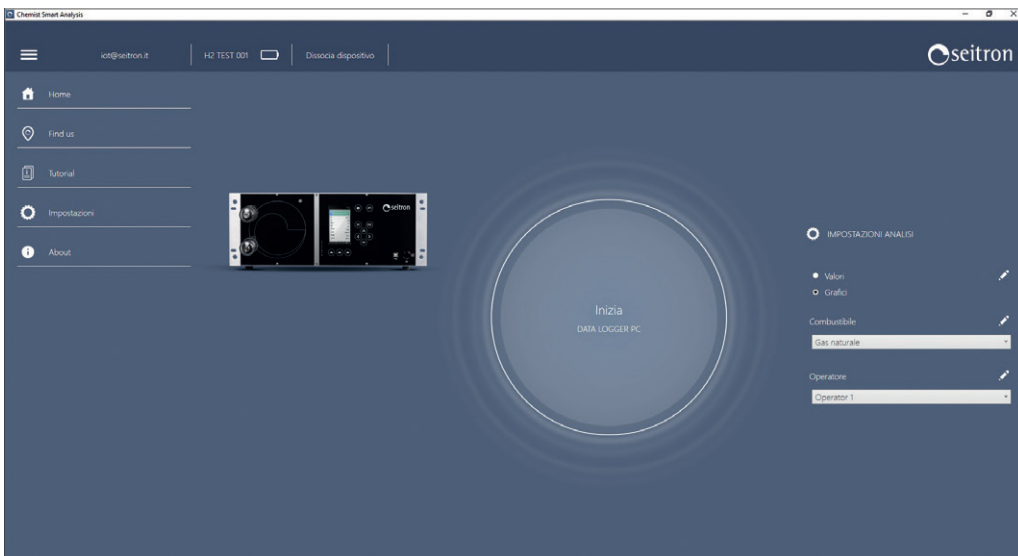
Technical Features

Power supply	90 .. 264 Vac
Power absorption at 230 V	100 VA
Display	TFT 4.3", 272 x 480 pixels graphic color with backlight
PC Communication port	USB Connector type A
Connectivity	USB-RS485 MODBUS RTU
Autozero	Automatic autozero cycle with the probe inserted in the chimney
Suction pump	2,2 l/min head at the stack up to 300 hPa.
Line Filters	Replaceable cartridge, 95% efficiency with 20um particles
Sample treatment	Peltier cooling system with automatic emptying of the condensation water
Size	19" /4 HE / 400 mm
Operation temperature	+0°C + 45°C
Stock temperature	-20°C + 60°C
Alarm relay	4 x SPDT AC/DC 24 V 1A
Protection fuses	2 x 4A 5 x 20 T
Analog Outputs	4 x 4-20 mA max resistance load 1 KOhm
Gas 1, Gas 2 Output Connector	1/8 BSPP
Gas Input Connector	1/8 BSPP
Pressure P1, P2 Input Connector	1/8 BSPP
Condensate drainage Output Connector	1 /8 BSPP - fast connection tube 6 mm diameter
Air Connector	1/8 BSPP
Compliant with European Standards	EN 50270, EN 50379-1 ed EN 50379-2
Compliant with USA Standard	CTM030 and CTM034

Smokes Probes

Code	Description
AA SF31	180 mm flue gas sampling probe with 3 mt cable. Working temperature range: 400°C.
AA SF32	300 mm flue gas sampling probe with 3 mt cable. Working temperature range: 600°C
AA SF35	750 mm flue gas sampling probe with 3 mt cable. Working temperature range: 800°C
AA SF36	1000 mm flue gas sampling probe with 3 mt cable. Working temperature range: 1200°C

Standard Equipment

Code	Description
WFUS5X20004R	4A 5x20 delayed fuse
WFILA0001	Filtering cartridge for gas line and autozero line
WFILX0016	Dust filter grade 7 for IR bench protection
WCAV0048	USB-A / USB-B adapter cable
AACCV04	European power cable and plug
AACCV01	Power cable and plug type schuko
AACCV06	US power cable and plug
AASW17	Software PC Chemist Smart Analysis

Measured Gases

Gas	Sensor	Range	Resolution	Response Time (t 90)
CH4	NDIR	0-1000000 ppm (100%Vol)	1 ppm	< 10 sec
CO	NDIR	0 .. 2500 ppm	1 ppm	< 10 sec
CO	NDIR	0-50% Vol (500000ppm)	0,01%	< 10 sec
CO2	NDIR	0-50% Vol	0,1 % Vol	< 10 sec
HC	NDIR	0 .. 30000 ppm	1 ppm	< 10 sec
CO	EC	0 .. 8000 ppm	1 ppm	< 50 sec
CO	EC	0 .. 500.0 ppm	0,1 ppm	< 50 sec
H2	EC	0 .. 500.0 ppm	0,1 ppm	< 90 sec
H2S	EC	0 .. 5000 ppm	0,1 ppm	< 50 sec
H2S	EC	0 .. 500.0 ppm	0,1 ppm	< 50 sec
NH3	EC	0 .. 500.0 ppm	0,1 ppm	< 90 sec
NO	EC	0 .. 5000 ppm	1 ppm	< 50 sec
NO	EC	0 .. 500.0 ppm	0,1 ppm	< 50 sec
NO2	EC	0 .. 1000 ppm	1 ppm	< 50 sec
NO2	EC	0 .. 500.0 ppm	0,1 ppm	< 50 sec
O2	EC	0 .. 25 % Vol	0,1 % Vol	< 20 sec
SO2	EC	0 .. 5000 ppm	1 ppm	< 50 sec
SO2	EC	0 .. 500.0 ppm	0,1 ppm	< 50 sec

Note: *: The NDIR bench always measures the 3 gases CO, CO2, HC (ref. to methane CH4) or HC (ref. to propane C3H8)

PRINTERS AND CONSUMABLES

CODE	PHOTO	DESCRIPTION	CHEMIST 600	CHEMIST 600 BG
AA RC06		Plain thermal paper roll 57x35	✓	
AA RC08		Plain thermal paper roll 57x30		✓
AA RC09		Long life plain thermal paper roll 57x35		✓
AA RC10		Long life plain thermal paper roll 57x30	✓	
AA ST04		Thermal printer with Bluetooth® connection		✓

CASE, HOLSTER AND ACCESSORIES

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG
AAC R10		Hard plastic kit case	✓
AA ZN01		Fabric bag with shoulder belt / backpack	✓
AA SM10		Rubber holster	CHEMIST 600 BG
AA SM06		EVA rubber holster	CHEMIST 600

ACCESSORIES AND SPARE PARTS

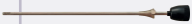| CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG
AA PB01		Rechargeable LiIon battery, 3,7 V, 4,8 Ah	✓
AA SP01		Guard shield for gas probe	✓
AA SI01		EU plug adapter	✓
AA AL05		90÷264V~ / 5V A2 = Power adapter with USB output and interchangeable AC connector	✓
AA UA01		USB A / USB B cable, 2 m lenght	✓

ACCESSORIES AND SPARE PARTS

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG
AAC ADX005		Dummy sensor (replaces not installed gas sensors)	✓
AAC FA01		Fine dust filters for AACTA03 (5 pcs. package)	✓
AAC TA03		Water trap with dust filter without stainless steel fittings and silicon hose	✓
AAC TA03A		Water trap with dust filter, stainless steel fittings and silicon hose suitable for all combustion analyzers	✓
AAC TO01		Silicone conical fitting 44 - 22 mm - for thightness kit	✓
AAC TO02		Silicone conical fitting 32 - 18 mm - for thightness kit	✓
AA PM02		Bacharach hand Pump for carbon measurements	✓
AA RA01		Threaded 9 mm diameter fitting, 1/4" gas coupling, 1/4" to 1/8" gas nipple (for tightness test)	✓
AA FA03		HDPE filter for industrial engine probe (2PCS)	✓
AA FS01		Inox filter for industrial engine probe	✓
AA FS02		Stainless steel filter with adapter for 8mm tips	✓

PROBES

COD	CODE	PHOTO	CHEMIST 600/600
AA SF51A		180 mm flue gas probe with 2 m cable	✓
AA SF62A		300 mm flue gas probe with 2 m cable	✓
AA SF65A		750 mm flue gas probe with 3 m cable	✓
AA SF66A		1000 mm flue gas probe with 3 m cable	✓
AA SL05A		300 mm flexible flue gas probe with 2 m cable	✓
AA SX02		750 mm industrial motors probe with 3 m cable	✓

KIT AND EXTENSIONS

CODE	PHOTO	DESCRIPTION	CHEMIST 600/600 BG
AAPT 07		300mm flexible tip (*). Measuring range temperature 130°c - for AASJ02 / AASJ03 handle	✓
AAPT 08		180mm rigid tip (*). Temperature measurement range 400°C - for AASJ02 / AASJ03 handle	✓
AAPT 09		300mm rigid tip (*). Measuring range temperature 600°C - for AASJ02 / AASJ03 handle	✓
AAPT 10		750mm rigid tip (*). Temperature measurement range 800°C - for AASJ02 / AASJ03 handle	✓
AAPT 11		1000mm rigid tip (*). Temperature measuring range 1200°C - for AASJ02 / AASJ03 handle	✓
AASJ 02		Flue gas suction probe handle; without ferrule. Cable: 3 m. Fitting diameter 9 mm	✓
AASJ 05		Flue gas suction probe handle; without ferrule. Cable: 3 m. Fitting diameter 9 mm.	✓

(*) Using the AA SP01 protective flange it is possible to increase the immersion depth of the tip while also protecting the plastic handle.

WARRANTY SUMMARY

ANALYZER	WARRANTY DURATION
CHEMIST 600 CHEMIST 600 BE GREEN	2 YEARS
CHEMIST 900 CHEMIST 900 RACK	1 YEARS

Sensors for Analyzers

GAS	RANGE	CODE	Chemist 600/600 BG	Chemist 900/ 900 Rack
CH4	0...100% v/v	AAC SE73	✓	
CO	0...10.00% Vol (100.000 ppm)	AAC SE17	✓	✓
CO	0...20000 ppm	AAC SE18	✓	✓
CO / H2	0...8000 ppm	AAC SE12	✓	✓
CO / H2 Lo Range	0...500,0 ppm	AAC SE24	✓	✓
CO2	0…50% v/v	AAC SE47	✓	✓
CxHy	0...5.00% Vol CH4	AAC SE39	✓	✓
H2	0...2000 ppm	AAC SE57	✓	✓
H2S	0...500,0 ppm	AAC SE35	✓	✓
H2S	0...5000 ppm	AAC SE72	✓	✓
NH3	0...500,0 ppm	AAC SE56	✓	✓
NO	0...5000 ppm	AAC SE10	✓	✓
NO Lo Range	0...500 ppm	AAC SE25	✓	✓
NO2	0...1000 ppm	AAC SE14	✓	✓
NO2 Lo Range	0...500 ppm	AAC SE26	✓	✓
O2 Long Life	0...25% v/v	AAC SE43	✓	✓
SO2	0...5000 ppm	AAC SE13	✓	✓
SO2 Lo Range	0...500 ppm	AAC SE28	✓	✓