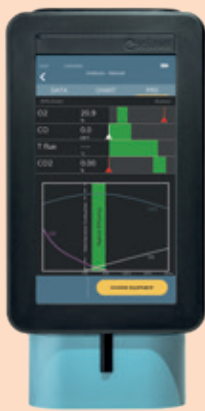# seitron Americas

INDUSTRIAL CATALOG

INDUSTRIAL COMBUSTION & EMISSIONS GAS ANALYZERS

PERSONAL GAS DETECTORS

Industrial Emissions Analysis Range

Our dedicated team is always on the forefront of designing and manufacturing the most suitable, custom and innovative instruments to match almost every industrial application.

Standards regulating exhaust gas emissions in industrial systems are also becoming more strict, being of great relevance for both climate and health protection.

In high intensity processes, great quantities of toxic gases are produced, such as carbon monoxide (CO), carbon dioxide (CO_2), nitrogen oxides (NOX), sulfur dioxide (SO_2) amongst others.

Often performed in extreme environments, featuring high levels of humidity, high temperatures and presence of particulate matter coming from combustion gases, accurate emissions measurements are needed in order to verify the quality, efficiency and safety of the process.

The analysis 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 emissions monitoring.

Applications

Chemical Industries

Boilers

Industrial Burners

Cement

Gas & Diesel Engine

Mining

Laboratories

Biogas Factories

Industrial
Emissions Analyzers Selection Guide

PARAMETERS	Novo	Novo-P	S6000
# of gases	2-4	2-4	5 or 6
O_2 Long Life, 0 - 25.0%	✓	✓	✓
CO, 0 - 8,000 ppm	✓	✓	✓
Calculated CO_2	✓	✓	✓
CO_2 Sensor for Direct Measurement (0 .. 50%)	-	-	✓
Automatic CO Dilution Auto-Range	✓	✓	✓
NO Sensor, 0 - 5,000 ppm	Optional	Optional	✓
NO_2 Sensor, 0 - 1,000 ppm	Optional	Optional	Optional
SO_2 Sensor, 0 - 5,000 ppm	Optional	Optional	Optional
Low NO, NO2, SO_2 Sensor, 0 - 100.0 ppm	Optional	Optional	Optional
CxHy (HC) Pellistor, 0 - 5% vol CH_4	Optional	Optional	Optional
H_2S Sensor (standard or low range)	Optional	Optional	Optional
H_2 Sensor, 0 - 2,000 ppm	Optional	Optional	Optional
NH_3 Sensor, 0 - 500.0 ppm	-	-	Optional
CH_4 NDIR Sensor, 0 - 100% v/v	-	-	Optional

FEATURES

	Novo	Novo-P	S6000
BUILT-IN Printer (NON-FADING PAPER)	-	✓	✓
Wireless Bluetooth Printer	Optional	-	-
FIELD-REPLACEABLE Pre-Calibrated Sensors	✓	✓	✓
Reporting & Storage Software with Bluetooth	✓	✓	✓
Real-Time Software & Data Logging	-	-	-
Internal Memory	100,000 Tests	100,000 Tests	2,000 Tests
Automatic Data Logging	✓	✓	✓
External Cooler	Optional	Optional	Optional
Draft / Differential Pressure	✓	✓	✓
Gas Velocity	✓	✓	✓

phone (215) 660-9777 - www.seitronamericas.com
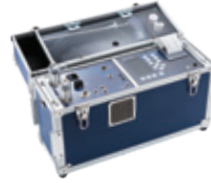
PARAMETERS	S9000	S9000-RACK
# of gases	up to 12	up to 8
Heated Hose & Probe Head	Optional	Optional
Continuous 24/7 Measurement	-	✓
O_2 Long Life, 0 - 25.0%	✓	✓
CO, 0 - 8,000 ppm	✓	✓
Calculated CO_2	-	-
CO_2 Sensor for Direct Measurement (0 .. 50%)	Optional	Optional
Automatic CO Dilution Auto-Range	✓	✓
NO Sensor, 0 - 5,000 ppm	✓	✓
NO_2 Sensor, 0 - 1,000 ppm	Optional	Optional
SO_2 Sensor, 0 - 5,000 ppm	Optional	Optional
Low NOx / SO_2 Sensor, 0 - 500.0 ppm	Optional	Optional
CxHy (HC) Pellistor, 0 - 5% vol CH_4	Optional	Optional
H_2S Sensor (standard or low range)	Optional	Optional
H_2 Sensor, 0 - 2,000 ppm	Optional	Optional
NH_3 Sensor, 0 - 500.0 ppm	Optional	Optional
NDIR Bench configured for one or more gases of the following: CO_2 (0 - 50%), CO (0 -15%) & HC (calibrated for CH_4 or C_3H_3)	Optional	Optional

FEATURES

	S9000	S9000-RACK
Calculated CO2, Efficiency, & Excess Air	✓	✓
BUILT-IN Printer (NON-FADING PAPER)	✓	-
Wireless Bluetooth Printer	-	Optional
FIELD-REPLACEABLE Pre-Calibrated Sensors	✓	✓
Reporting & Storage Software with Bluetooth	✓	✓
Real-Time Software & Data Logging	✓	✓
Internal Memory	16,000 Tests	Data saved via Modbus® on PC
Automatic Data Logging	✓	✓
Built-In Thermo-Electric Peltier Chiller	Optional	✓
Draft / Differential Pressure	✓	✓
Gas Velocity	✓	✓

Novo Series

Emissions Analyzers Selection Guide

2022 DEALER DESIGN AWARDS theNEWS | GOLD

PARAMETERS	Novo 1	Novo 1-P	Novo 3	Novo 3-P	Novo 4	Novo 4-P
# of Gases	2-4	2-4	3	3	4	4
O2 Long-Life (4 years)	✓	✓	✓	✓	✓	✓
CO2, (Calculated from O2), 0 - 100%	✓	✓	✓	✓	✓	✓
CO Measurement w/NOx filter, 0 - 8000 ppm	✓	✓	✓	✓	✓	✓
CO Over Range Protection 0 - 100,000 ppm	✓	✓	✓	✓	✓	✓
NO/NOx included 0 - 5,000 ppm	-	-	✓	✓	✓	✓
Low-NOx Capable 0 - 500.0 ppm	-	-	✓	✓	✓	✓
TOTAL NOx (NO + NO2 Included)	-	-	-	-	✓	✓
Ambient Temperature Measurement	✓	✓	✓	✓	✓	✓
Stack Temperature Measurement	✓	✓	✓	✓	✓	✓
Differential Pressure Manometer	✓	✓	✓	✓	✓	✓
Draft Measurement	✓	✓	✓	✓	✓	✓
Excess Air Calculation	✓	✓	✓	✓	✓	✓
Ambient CO Monitor	✓	✓	✓	✓	✓	✓
Simultaneous Measurement of Combustion + Pressure	✓	✓	✓	✓	✓	✓
Capable of measuring NO2, SO2, CxHy, H2S, H2, NH3, Direct CO2	-	-	-	-	✓	✓
High Altitude Adjustment	✓	✓	✓	✓	✓	✓

FEATURES

	Novo 1	Novo 1-P	Novo 3	Novo 3-P	Novo 4	Novo 4-P
Built-In Printer (Non-Fading Paper)	Optional	✓	Optional	✓	Optional	✓
Wireless Bluetooth® Printer	Optional	-	Optional	-	Optional	-
FIELD-REPLACEABLE Pre-Calibrated Sensors	✓	✓	✓	✓	✓	✓
Mobile App + QR code	✓	✓	✓	✓	✓	✓
PC Software	✓	✓	✓	✓	✓	✓
Automatic data Logging	✓	✓	✓	✓	✓	✓
Combustion Efficiency Measurements for All Atmospheric & Condensing Systems	✓	✓	✓	✓	✓	✓
Rechargeable Battery w/ AC Charger	✓	✓	✓	✓	✓	✓
Display Screen	7" Touch	7" Touch	7" Touch	7" Touch	7" Touch	7" Touch
Carrying Case	Hard	Hard	Hard	Hard	Hard	Hard

phone (215) 660-9777 - www.seitronamericas.com

**SIMULTANEOUS GAS PRESSURE + COMBUSTION READING**

Thanks to the Novo's ability to measure combustion parameters and gas pressure simultaneously, Novo the service time is drastically reduces and limits the need to use different devices.

NEW

PRO/CHART ANALYSIS MODES

• Select Equipment Type

• Stabilize Combustion readings in GREEN Zone for optimal combustion

• View Stoichiometric Chart/Graph
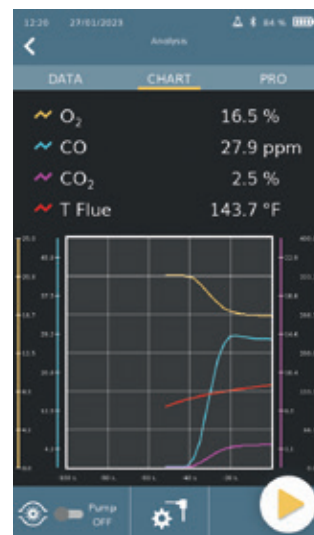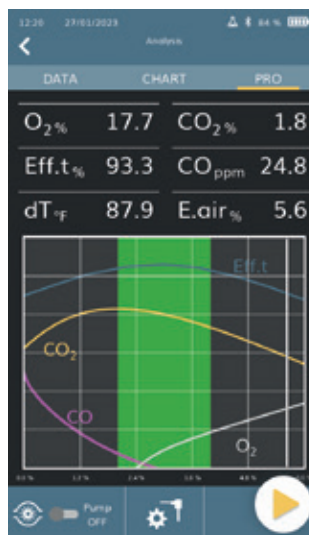
7" RESPONSIVE TOUCH SCREEN

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.

GAS PRESSURE + COMBUSTION

• View LIVE Gas Pressure along with Combustion results at the SAME TIME

• Print or Save Gas Pressure

• No need for separate external manometer

DEALER DESIGN AWARDS 2022
theNEWS | GOLD

Novo
ALL-IN-ONE EMISSIONS ANALYZER

Fast / Easy / Robust / Accurate

- 7" Touch Screen for easy menu navigation
- Optional Built-in Printer
- Long Life O2 Sensor (4 Years)
- New Dual Range (Low/High) Sensor Technology
- Simultaneous Gas Pressure + Combustion Measurements
- Low NOx and SOx sensors
- 15 Preprogrammed Fuels Including Natural Gas, Oil, Propane & Biofuels
- **BIO 5%, B20, B50, B80,B100 Fuels**
- CO Protection Dilution Pump
- Rechargeable Li-Ion Batteries
- Integrated water trap with LED backlight for easy maintenance
- Differential Pressure Manometer
- Cracked Heat Exchanger Test
- Draft Measurement
- Mobile App for iOS and Android

LOW NOx

NEW!

Built-in printer

Field Replaceable Sensors

Up to 4 gases

7" Touch Color Display

Mobile App - iOS, Android

Simultaneous Gas Preassure + Combustion

Bluetooth®

Seitron Smart Analysis

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

Windows Software
Seitron Smart Analysis

Windows 7 or later

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O_2 Long life	Electrochemical	0 .. 25.0% vol	0.1% vol	±0.2% vol	
CO sensor with Over Range protection (NOx filter) - Dual Range	Electrochemical	0 .. 500 ppm	0.1ppm	±2 ppm 0 .. 40.0 ppm ±5% measured value 40.1 .. 500.0 ppm	
		501 .. 8000 ppm	1 ppm	±5% measured value 501 .. 2000 ppm ±10% measured value 2001 .. 8000 ppm	
CO Mid	Electrochemical	0...20000 ppm	1 ppm	±10 ppm ±5% v.m. ±10% v.m.	0 .. 200 ppm 201 .. 4000 ppm 4001 .. 20000 ppm
CO High	Electrochemical	0...100000 ppm	1 ppm	±100 ppm ±10% v.m.	0 .. 1000 ppm 1001 .. 100000 ppm
NO	Electrochemical	0...500.0 ppm	0.1 ppm	±2 ppm ±5% v.m.	0 .. 40 ppm 40.1 .. 500.1 ppm
		501...5000 ppm	1 ppm	±10% v.m.	501 .. 5000 ppm
NO2	Electrochemical	0...100.0 ppm	0.1 ppm	±2 ppm ±5% v.m.	0 .. 40 ppm 40.1 .. 100.1 ppm
		101...1000 ppm	1 ppm	±10% v.m.	101 .. 1000 ppm
SO2	Electrochemical	0...500.0 ppm	0.1 ppm	±2 ppm ±5% v.m.	0 .. 40 ppm 40.1 .. 500.1 ppm
		501...5000 ppm	1 ppm	±10% v.m.	501 .. 5000 ppm
H2	Electrochemical Sensor	0...2000 ppm	1 ppm	± 10 ppm ± 10% v.m.	0 ppm - 100 ppm 101 ppm - 2000 ppm
H2 High	Electrochemical Sensor	0...40000 ppm	10 ppm	± 100 ppm ± 10% v.m.	0 ppm - 1000 ppm 1001 ppm - 40000 ppm
H2S	Electrochemical Sensor	0...5000 ppm	1 ppm	± 10 ppm ± 10% v.m.	0 ppm - 100 ppm 101 ppm - 5000 ppm
H2S Low	Electrochemical Sensor	0...500.0 ppm	0.1 ppm	±5 ppm ±5% v.m.	0 .. 100.0 ppm 101 .. 500.0 ppm
NH3 Low	Electrochemical Sensor	0...500.0 ppm	0.1 ppm	±10 ppm ±10% v.m.	0 .. 100.0 ppm 100.1 .. 500.0 ppm
CxHy	Pellistore Sensor	0..5% vol CH4	0.01% vol	±0.25% abs	
CH4 NIDR	NDIR Sensor	0..100% vol	0.01% vol	±0.3 vol ±10% v.m.	0 .. 10% vol 10.01% .. 100.00% vol
CO2 NDIR	NDIR Sensor	0..50% vol	0.01% vol	±1 vol ±2% fs	0 .. 10.00% vol 10.01% .. 50.00% vol
CO_2	Calculated	0 .. 99.9% vol	0.1% vol		
NOx	Calculated				
Air Temperature	TcK sensor	-4.0 .. 2282.0 °F -20.0 .. 1250.0 °C	32.18 °F 0.1 °C	±0.5 °C 32 .. 212 °F (0 .. 100 °C) ±0.5% 213.8 .. 2282.0°F (101 .. 1250 °C)	
Stack Temperature	TcK sensor	-4.0 .. 2282.0 °F -20.0 .. 1250.0 °C	32.18 °F 0.1 °C	±0.5 °C 32 .. 212 °F (0 .. 100 °C) ±0.5% 213.8 .. 2282.0°F (101 .. 1250 °C)	
Pressure (draft & differential)	Piezo Resistive	-40.1 .. +80.4 inH$_2$O	0.004 inH$_2$O	±1% measured value -40.1 .. -0.81 inH$_2$O ±0.08 inH$_2$O -0.80 .. +0.80 inH$_2$O ±1% measured value +0.81 .. +80.4 inH$_2$O	
Differential Temperature	Calculated	32.0 .. 2282.0 °F 0 .. 1250.0 °C	33.8 °F 0.1 °C		
Air Index	Calculated	0.00 .. 9.50	0.01		
Excess Air	Calculated	0 .. 850 %	1%		
Stack losses	Calculated	0.0 .. 100.0 %	0.1 %		
Efficiency	Calculated	0.0 .. 100.0 %	0.1 %		
Warranty	4 years on O2 Sensors and 2 years on Analyzer, CO Sensor, Probe				

Novo Kits Include:
- Combustion Analyzer
- Gas probe with 12" (300 mm) interchangeable tip
- 10 ft (3m) Single Connection Hose
- Integrated water trap
- Manometer Hoses
- Outdoor Combustion Air Temp Probe
- AC Power Adapter & Cable
- Hard plastic kit case
- Quick Guide
- Calibration Certificate

Features:
- Built-in Printer
- CO Air Free
- Altitude Adjustment
- Field Replaceable Sensors
- Combustion Efficiency, Losses, Excess Air
- CO sensor protection
- Draft & Differential Pressure
- Temperature Measurements
- 7" Color Touch Screen
- Bluetooth Connectivity
- Long Lasting Rechargeable Battery & AC Charger
- Gas Sampling Probe & Hose

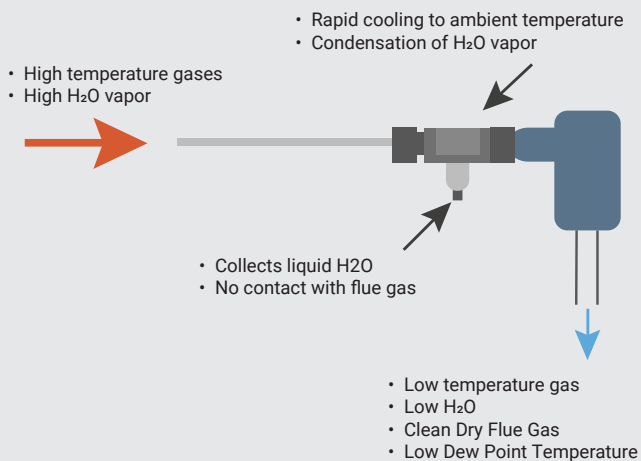| Model	Description
Novo 1	Analyzer w/ O2, CO, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included
Novo 1-P	All In One Kit with BUILT-IN Printer. Analyzer w/ O2, CO, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included. Bult-in Printer included.
Novo 3	Analyzer w/ O2, CO, NO/NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.
Novo 3-P	All In One Kit with BUILT-IN Printer. Analyzer w/ O2, CO, NO/NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.
Novo 4S	Analyzer w/ O2, CO, NO, SO2, Total NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.
Novo 4S-P	All In One Kit with BUILT-IN Printer. Analyzer w/ O2, CO, NO, SO2, Total NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.
Novo 4N	Analyzer w/ O2, CO, NO, NO2, Total NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.
Novo 4N-P	All In One Kit with BUILT-IN Printer. Analyzer w/ O2, CO, NO, NO2, Total NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.
Novo 4C	Analyzer w/ O2, CO, NO, CxHy, Total NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.
Novo 4C-P	All In One Kit with BUILT-IN Printer. Analyzer w/ O2, CO, NO, CxHy, Total NOx, CO2, Efficiency, Excess Air, Draft, Pressure, Temp, Rechargeable Battery & AC Plug, 12" (300mm) Probe with 10 ft (3 m) Hose, Hard Case, Calibration Certificate, Operating Manual, Cheat Sheet, Integrated Water Trap, Data Storage, PC Software, Bluetooth, Differential Pressure Manometer Kit, Outdoor Air Temperature Probe + iOS and Android App included.

phone (215) 660-9777 - www.seitronamericas.com

Sample Conditioning Unit (SCU)
FOR LOW NOX & LOW SOX MEASUREMENTS

When using a portable gas analyzer for monitoring NO, NO2 and/or SO2 ranges **below 50 ppm** or if you are doing Long-term testing (over 40+ min), we need a sampling system designed **to minimize or eliminate** the residence time of the soluble gases in contact with condensing water droplets forming in side the walls of the sampling lines. Otherwise, the measured readings **could be in excess of 20% lower** than the actual values in the process.

Part # AACP01 - (1500/4500/6000) - **PASSIVE SCU**
Part # AJCP01 - (Novo) - **PASSIVE SCU**

Part # AACE01 - **ACTIVE SCU** (All Models)

- High temperature gases
- High H_2O vapor

- Rapid cooling to ambient temperature
- Condensation of H_2O vapor

- Collects liquid H2O
- No contact with flue gas

- Low temperature gas
- Low H_2O
- Clean Dry Flue Gas
- Low Dew Point Temperature

ACTIVE SCU

High temperature gases
High H_2O vapor

cooler

Low temperature gas
Low H_2O

pump

Collects liquid H_2O
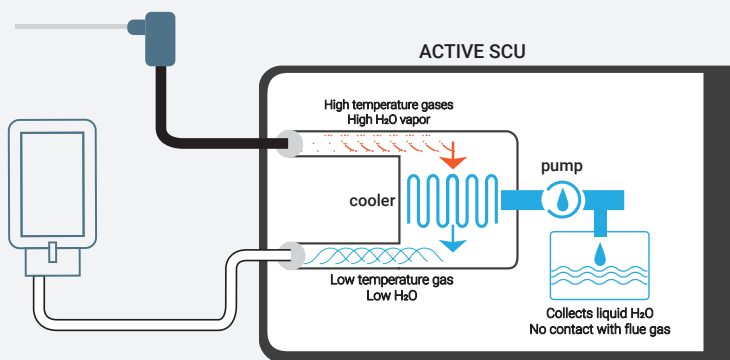No contact with flue gas

Features:

- Easy Plug & Play Installation
- Rapid Cooling to Ambient Temperature
- Easy Maintenance
- Compatible with 1500/4500/6000 (AACP01) and Novo (AJCP01) probe handles

Features:

- Integrated Thermoelectric Peltier Cooler
- Rapid Cooling and Drying of Flue Gas Samples
- Compatible with All Portable Seitron Gas Analyzers
- Automatic Condensate Drain Pump
- Protective Hard Plastic Carrying Case
- Connect to AC Power or Optional Portable DC Charger

Compatible with:

AAPT07	12" gas probe. Working temperature: 266°F (130°C)
AAPT08	7" gas probe. Working temperature: 752°F (400°C)
AAPT09	12" gas probe. Working temperature: 1112°F (600°C)
AAPT10	30" gas probe. Working temperature: 1472°F (800°C)
AAPT11	40" gas probe. Working temperature: 2192°F (1200°C)

S6000
INDUSTRIAL / COMMERCIAL

EMISSIONS ANALYZER
Fast / Easy / Robust / Accurate

- Built In Printer
- Up to 6 gas (O_2, CO, NO, NH_3, NO_2, CO_2, SO_2, CxHy (HC), H_2, H_2S, CH_4)
- NOx & SOx in one Instrument
- Low NOx & Low SOx Capable
- True NOx (Low NO+NO2) Available
- Automatic data logging
- Diluition pump for CO Auto range up to 100,000 ppm
- Smartphone Real Time + QRcode App (iOS, Android)
- Built in Manometer
- Draft/Pressure included
- PC Software Included
- New Ammonia (NH3) and Hydrogen (H2) Measurement

Seitron Smart Analysis

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

**Windows Software
Seitron Smart Analysis**

Windows 7 or later

Features
- Draft & Differential Pressure
- Temperature Measurements
- Large Color Display
- 2000 Test Internal Memory
- Bluetooth Connectivity
- Long Lasting Rechargeable Battery & AC Charger
- Gas Sampling Probe & Hose
- Gas velocity w/optional Pitot tube
- Longer probes: extension hoses available

Up to 6 Gas Sensors

Field Replaceable Sensors

Built-in Printer

Full Color Graphic Display

Mobile App - iOS, Android

MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O_2 Long life	Electrochemical	0 .. 25.0% vol	0.1% vol	±0.2% vol	
CO sensor w/ Over Range protection NOx filter	Electrochemical	0 .. 500 ppm	0.1ppm	±2 ppm ±5% measured value	0 .. 40.0 ppm 40.1 .. 500.0 ppm
		501 .. 8000 ppm	1 ppm	±5% measured value ±10% measured value	501 .. 2000 ppm 2001 .. 8000 ppm
CO_2	Calculated	0 .. 99.9% vol	0.1% vol	-	
H_2	Electrochemical	0 .. 2000 ppm	1 ppm	± 10 ppm 0 ppm - 100 ppm	± 10 % 100 ppm - 2000 ppm
Low NO / Standard NO	Electrochemical	0 .. 500 ppm	0.1ppm	±2 ppm ±5% measured value	0 .. 40.0 ppm 40.1 .. 500.0 ppm
		501 .. 5000 ppm	1 ppm	±5% measured value	501 .. 5000 ppm
Low NO_2 / Standard NO_2	Electrochemical	0 .. 500 ppm	0.1ppm	±2 ppm ±5% measured value	0 .. 40.0 ppm 40.1 .. 500.0 ppm
		501 .. 1000 ppm	1 ppm	±5% measured value	501 .. 1000 ppm
Low SO_2 / Standard SO_2	Electrochemical	0 .. 500 ppm	0.1ppm	±2 ppm ±5% measured value	0 .. 40.0 ppm 40.1 .. 500.0 ppm
		501 .. 5000 ppm	1 ppm	±5% measured value	501 .. 5000 ppm
NOx	Calculated	-	-	-	
NH3	Electrochemical	0 .. 500.0 ppm	0.1 ppm	±10 ppm ±10%	0 .. 100.0 ppm 100.1 .. 500.0 ppm
CxHy (HC)	Pellistor	0 .. 5%	0.01 %	±5% full scale	
Air Temperature	Pt100	- 4 to 248 °F - 20 to 120 °C	33.8 °F 32.2°F (0.1 °C)	33.8 °F 32.2°F (0.1 °C)	
Gas Temperature	TcK	- 4 to 2280 °F - 20 to 1250 °C	33.8 °F 32.2°F (0.1 °C)	33.8 °F 32.2°F (0.1 °C)	
Differential temperature	Calculated	- 4 to 2280 °F - 20 to 1250 °C	32.2°F (0.1 °C)	-	
Pressure/Draft	Piezo Resistive	-40.1 .. +80.4 inH_2O	0.004 inH_2O	±1% measured value ±0.08 inH_2O ±1% measured value	-40.1 .. -0.81 inH_2O -0.80 .. +0.80 inH_2O +0.81 .. +80.4 inH_2O
Excess air	Calculated	0 .. 850%	1%	-	
Efficiency	Calculated	0 .. 100%	0.1%	-	
Warranty	2 years on Sensors and 2 years on Analyzer				

Standard Probe Detail:
- 12" (300mm) probe
- 1112 °F (600 °C) max
- 10' (3m) Dual Hose

Long Probe Detail:
- 30" (750mm) probe
- 1472 °F (800 °C) max
- 10' (3m) Dual Hose

Extra Long & High Temp Probe Detail:
- 40" (1m) Probe or 60" (1.5m) probe
- 2192 °F (1200 °C) max
- 10' (3m) Hose

Hose Extention:
- 10' (3m) Length Available

**Windows Software
Seitron Smart Analysis**

- Remote display of real-time analysis from the portable analyzer and data saving
- Display and/or export and stored data
- Analyzer configuration

Model	Description
S6000-5DS	O2, CO, NO/NOx, NO2 & SO2 Gas Sensors
S6000-5DC	O2, CO, NO/NOx, NO2 & CxHy/HC Gas Sensors
S6000-5SC	O2, CO, NO/NOx, SO2 & CxHy/HC Gas Sensors
S6000-5SH	O2, CO, NO/NOx, SO2 & H2S Gas Sensors
S6000-6DSC	O2, CO, NO/NOx, NO2, SO2 & CxHy/HC Gas Sensors
S6000-6DSH	O2, CO, NO/NOx, NO2, SO2 & H2S Gas Sensors

(*) All models above are available also with: Low NO, Low NO2, Low SO2 - (**) Ammonia (NH3) Available upon request on any Model
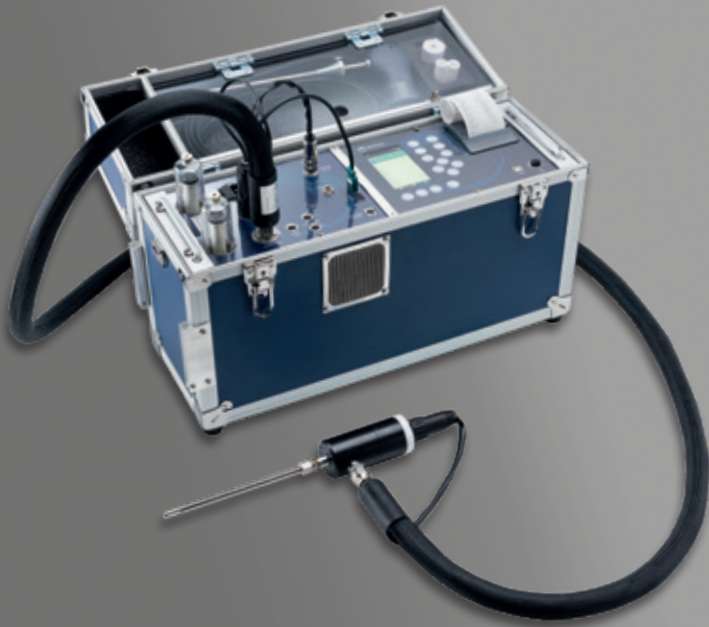
S9000
SEMI-CONTINOUS EMISSIONS ANALYZER

UP TO 12 TOTAL GAS SENSORS

- Ability to simultaneously measure up to 12 different gases, with up to 9 single gas measuring sensors and one infrared bench (NDIR) for High CO, Direct CO2 & Hydrocarbons (HC)
- Measurable gases: O2, CO, CO2, CxHy, NO, NO2, SO2, H2S, H2, NH3 with different ranges and accuracies
- Selectable Fuels: methane, LPG, propane, butane, light oil, heavy oil, biogas, wood, pellets, natural gas, coal. Up to 16 additional fuels can be added by the user
- Pump for gas sample and 2nd dilution pump for CO cell protection
- Withstand very high stack temperatures
- Double particulate filter system
- Standard expansion water trap or Peltier quick Cooler
- Automatic condensate drainage with peristaltic pump
- Power supply from Lithium Ions Batteries or mains 90...260 Vac
- Datalogger function
- Industrial Grade Metal Case

Up to 9 Gas Sensors
+ 3 Gas Sensors (NDIR Bench)

Field Replaceable Sensors

Built-in Printer

Full Color Graphic Display

Real-Time PC Software included

Optional: Heated Line and Probe

Bluetooth®

**Windows Software
Seitron Smart Analysis**

Features
- Real-time data logging PC Software included
- Built in Thermometric Chiller with auto Condensate Drain
- Large Color Display
- 16000 Test Internal Memory
- Bluetooth Connectivity
- Gas Sampling Probe & Hose
- Heated probe and head available
- Positive, negative and Pressure Differential measurement
- AC Charger / power supply
- Gas sampling probes of different type and length

S9000 - FEATURES

**Windows Software
Seitron Smart Analysis**

- Data Storage
- Remote display of real-time analysis from the analyzer
- Display and/or export and stored data
- Analyzer configuration

- **Heated Lines/Probe**
- **Application**

• **Built In Thermoelectric Chiller with Auto Condensate Drain**

• **Customizable of Gas Sensors/probes for any Industrial application:**
  O2, CO Low, CO High, NOx, Low NOx, SO2, Low SO2, H2S, CO2, High CO, H2 and now with NH3!

S9000 - TECHNICAL FEATURES

Power supply: **Battery charge:** **Charging time:** **Instrument battery life:**	100 .. 260V~, or Li-ion battery pack with internal protection circuit, rechargeable. 8 hours from 0% to 90%. 10 hours of continuous operation (except printer and Peltier Chiller). 2 hours with Cooler running.
Display:	Backlit TFT graphical color 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%).
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 additional 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 indicator. Analyzer batteries. With fully charged batteries up to 40 analysis reports.
Internal Data Memory:	16,000 complete data analysis, time and customer's name can be stored.
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 120inH2O (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:** **Anti-condensation trap** **Type:** **Condensate emptying pump:** **Operating temperature:**	 Rapid water condensation using cyclone system Peltier cell +41°F (+5°C) +50°F (+10°C) from set point Peristaltic hose 38 ml/min 30s On .. 30s Off ~ 15 .. 20 minutes 23°F (-5°C) .. 113°F (113°F / 45°C) Integrated Peristaltic hose 38 ml/min 23°F (-5°C) .. 113°F (45°C)
Working temperature: **Storage temperature:** **Humidity limit:** **Protection level:** **External dimensions:** **Weight:**	23°F (-5°C) .. 113°F (45°C) -4°F (-20°C) .. 122°F (50°C) 20% .. 80% RH IP21 20" x 14" x 8" (50 x 36 x 20 cm) (W x H x D). 20" x 18" x 5" (50 x 46 x 13 cm) (W x H x D) with intermediate drawer for heated head and sensor transportation. ~ 26.5 lb (12kg) (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). ~ 28.6 lb (13kg) (Typical configuration with additional accessories such as: 3m extension for smoke sensor - auxiliary air sensor - 12" (300mm) Pitot Tube - draught gauge). ~ 36.8 lb (16.7kg) (Typical configuration with additional accessories and intermediate drawer containing: heated head sensor with 12" (300mm) tip and heated tube).

- Emissions Measurements
- Thermoelectric Chiller with Automatic Condensate Drain
- Built-In Printer
- New iOS & Android App (Remote Display & QR Scanning)
- CO2: Direct CO2 measurement and/or % Calculation
- Low Ranges available for most sensors
- True NOx Measurement
- Combustion Efficiency, Losses, & Excess Air Calculations
- Draft & Differential Pressure
- Temperature Measurements
- Large Color Display
- 16,000 Test Internal Memory
- Bluetooth Connectivity
- Rechargeable Battery Pack & AC Charger
- Gas Sampling Probe & Hose
- PC Software & USB Cable
- Operating Manual
- Calibration Certificate
- Aluminum Carrying Case

ORDERING CODE:

Model # S9000-A-B-C	Description Standard S9000 Kit Configuration with O2 sensor and 12" probe as standard

Example:
S9000-OCNL-IR-12H = O2, Standard CO, Low Range NO, IR Bench (CO2, CxHy & High CO), with 12" Heated Line & Probe

TABLE A (Gas Sensor Options – Choose up to 8)

O	O2 Sensor (0 .. 25.0% vol) **Included with standard kit**
C	Standard CO Sensor w/ H2 Compensation (0-8000 ppm)
CL	LOW-Range CO Sensor (0-500 ppm)
CM	MID-Range CO Sensor (0-20,000 ppm)
CH	HIGH-Range CO Sensor (0-100,000 ppm)
N	Standard NO/NOx Sensor (0-5000 ppm)
NL	LOW NO/NOx Sensor (0-500 ppm)
D	Standard NO2 Sensor (0-1000 ppm)
DL	LOW NO2 Sensor (0-500 ppm)
S	Standard SO2 Sensor (0-5000 ppm)
SL	LOW SO2 Sensor (0-500 ppm)
H	Standard H2S Sensor (0-5000 ppm)
HL	LOW H2S Sensor (0-500 ppm)
G	H2 Sensor (0-2000 ppm)
C	Standard CxHy Sensor (0-5 %)
A	Standard Ammonia (NH3) Sensor (0-500 ppm)

TABLE B (NDIR Bench Options)

IR*	CO2 NDIR Sensor (0-50%), CxHy NDIR Sensor (0-100,000ppm), and High CO NDIR Sensor (0-50%)
O	No IR Bench Included

* IR Bench counts as 3 gas sensors

TABLE C - Probe Options

12	12" (300mm) Probe, 1112F (600C) max, with 10' (3m) **Included With Standard Kit**
30	30" (750mm) Probe, 1470F (800C) max, with 10' (3m) Dual Hose (AASF35)
40	40" (1000mm) Probe, 1470F (800C) max, with 10' (3m) Dual Hose (AASF36)
12H	12" (300mm) Probe, 1112F (600C) max, with 10' (3m) HEATED Hose and HEATED Probe Head (AASR03)
40H	40" (1m) Probe, 2190F (1200C) max, with 10' (3m) HEATED Hose and HEATED Probe Head (AASR04)

OPTIONAL - Accessories and Consumable Parts

AARC10	Non-Fading Paper Roll (pack of 10)
AAFS02	Sintered Filter with Support for probe
AAFS01	Replacement Inox filter for AASF02
AATTA03	36" (900mm) Pitot Tube for Gas Velocity Measurements
AACEX02S	10' (3m) Dual Hose Extension
WFILA0001	Particulate Filter (Internal)
WFILX0016	Particulate Filter (External)
AAFA04	Anti-Dust filter (2pcs), only with NH3 installed
AASP01	Heat Protection Shield for probes
AAEB01	Trunk Extension
AATY01	Trunk Trolley
AACSA04	4" (100mm) Auxiliary Temperature Probe w/ 10ft (3m) hose

S9000-RACK
CONTINUOUS EMISSIONS GAS ANALYZER (CEM)

UP TO 8 TOTAL GAS SENSORS

- 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 probes available up to 20 ft (6m) connection
- Efficiency calculations
- Condensing efficiency calculation
- PCI efficiency calculation
- PCS efficiency calculation
- 15 default fuels
- 32 programmable fuels
- CO sensor protected by an automatic dilution system

Bluetooth®

Windows Software
Seitron Smart Analysis

Features

- up to 8 gas sensors in total
- NDIR bench (measuring up to 3 gases)
- Electrochemical gas measurement sensors (up to 5)
- Rotary Flow Meter for immediate visualization of pump flow rate
- Stack temperature measurement (2 temperatures)
- Ambient or Primary Air Source Temperature
- Thermal Compensation
- Draft in the stack with automatic autozero
- Measurement of the differential pressure
- Stack Air Velocity measurement with the use of Pitot tube
- Suction pump flow rate measurement

Up to 5 Gas Sensors + 3 Gas Sensors (NDIR Bench)

Continuous Emissions Analysis (CEM)

Field Replaceable Sensors

Full Color Graphic Display

PC Software included

Optional: Heated Line and Probe

SAMPLING LINE SELECTION SYSTEM

4 .. 20 mAh

Relay electro valve

alarm

SAMPLING

Gas Velocity

USB

PC

RS485

PLC
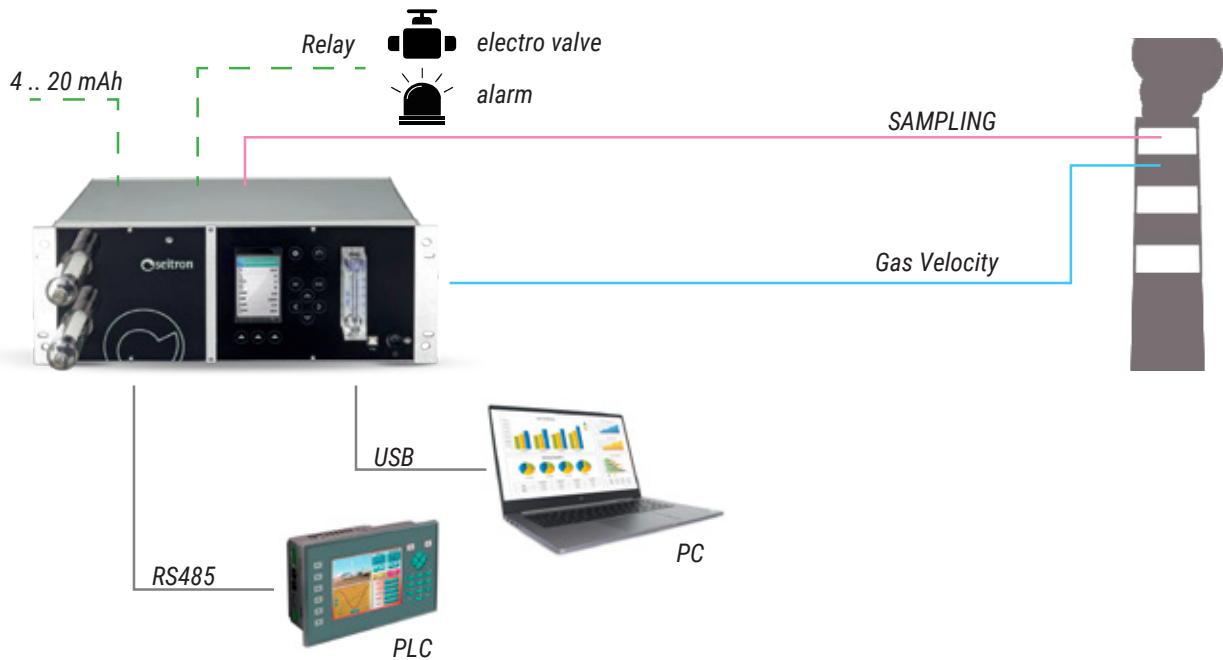
S9000-RACK FEATURES

**Windows Software
Seitron Smart Analysis**

Windows 7 or later

- Data Storage
- Remote display of real-time analysis from the analyzer
- Display and/or export and stored data
- Analyzer configuration

- **Serial communication port type RS485 according to protocol MODBUS RTU USB communication**

- **Customizable Gas Sensor/probe configurations for any Industrial application:**
  O2, CO Low, CO High, NOx, Low NOx, SO2, Low SO2, H2S, CO2, High CO, H2 and now with NH3!)

- **Built In Thermoelectric Chiller with Auto Condensate Drain**

- **Heated Lines/Probes**

S9000-RACK 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
Internal Sampling 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	32°F .. 113°F (+0°C .. + 45°C)
Storage temperature	-4°F .. 122°F (-20°C .. + 50°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 0.25" (6mm) 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

Standard Equipment

Code	Description
WFUS5X20004R	4A 5x20 delayed fuse
WFILA0001	Filtering cartridge for gas line and autozero line
WFILX0016	Particulate filter grade 7 for IR bench protection
WCAV0048	USB-A / USB-B adapter cable
AACCV01	Power cable
AACCV06	US power cable and plug
AASW17	S9000 Smart Analysis PC Software

• Emissions Measurements - Up to 8 total Gas Sensors
• Optional NDIR Sensor Bench – Includes CO2, High CO, & CxHy Hydrocarbons (3 sensors)
• Thermoelectric Chiller with Automatic Condensate Drain
• Serial communication port type RS485 according to protocol MODBUS® RTU USB Communication
• 4 .. 20 mA isolated output (4 configurable channels – active loop)
• Four alarm relays outputs SPDT, AC/DC 24V 1A.
• Data saved via Modbus® on PC
• Real-Time Data Logging Software
• Stack and Ambient Air Temperature Measurements
• Differential Pressure Measurement
• Stack Gas Velocity Measurement (with optional pitot tube)

Included: filters, power cable, calibration certificate, Seitron Smart Analysis PC software and mobile App

ORDERING CODE:

Model # S9000-RACK-A-B-C	Description Standard S9000-RACK Kit Configuration

Example:
S9000-RACK-IR-OCNL-12H = O2, Standard CO, Low Range NO, IR Bench (CO2, CxHy & High CO), with 12" Heated Line & Probe

TABLE A (NDIR Bench Options)

IR*	CO2 NDIR Sensor (0-50%), CxHy NDIR Sensor (0-100,000ppm), and High CO NDIR Sensor (0-50%)
O	No IR Bench Included

* IR Bench includes as 3 gas sensors.

TABLE B (Gas Sensor Options **)

O	O2 Sensor (0 .. 25.0% vol)
C	Standard CO Sensor w/ H2 Compensation (0-8000 ppm)
CL	LOW-Range CO Sensor (0-500 ppm)
CM	MID-Range CO Sensor (0-20,000 ppm)
CH	HIGH-Range CO Sensor (0-100,000 ppm)
N	Standard NO/NOx Sensor (0-5000 ppm)
NL	LOW NO/NOx Sensor (0-500 ppm)
D	Standard NO2 Sensor (0-1000 ppm)
DL	LOW NO2 Sensor (0-500 ppm)
S	Standard SO2 Sensor (0-5000 ppm)
SL	LOW SO2 Sensor (0-500 ppm)
H	Standard H2S Sensor (0-5000 ppm)
HL	LOW H2S Sensor (0-500 ppm)
G	H2 Sensor (0-2000 ppm)
C	Standard CxHy Sensor (0-5 %)
A	Standard Ammonia (NH3) Sensor (0-500 ppm)

** If you selected IR Bench, you can choose up to 3 gas.
If you DON'T select IR Bench, you can choose up to 5 gases.

TABLE C - Probe Options

12	12" (300mm) Probe, 1112F (600C) max, with 10' (3m)
30	30" (750mm) Probe, 1470F (800C) max, with 10' (3m) Dual Hose (AASF35)
40	40" (1000mm) Probe, 1470F (800C) max, with 10' (3m) Dual Hose (AASF36)
12H	12" (300mm) Probe, 1112F (600C) max, with 10' (3m) HEATED Hose and HEATED Probe Head (AASR03)
40H	40" (1m) Probe, 2190F (1200C) max, with 10' (3m) HEATED Hose and HEATED Probe Head (AASR04)

OPTIONAL - Accessories and Consumable Parts

AARC10	Non-Fading Paper Roll (pack of 10)
AAFS02	Sintered Filter with Support for probe
AAFS01	Replacement Inox filter for AASF02
AATTA03	36" (900mm) Pitot Tube for Gas Velocity Measurements
AACEX02S	10' (3m) Dual Hose Extension
WFILA0001	Particulate Filter (Internal)
WFILX0016	Particulate Filter (External)
AAFA04	Anti-Dust filter (2pcs), only with NH3 installed
AASP01	Heat Protection Shield for probes
AACSA04	4" (100mm) Auxiliary Temperature Probe w/ 10ft (3m) hose

Sensors for S9000 & S9000-RACK: 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 with dilution	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
H2S	Electrochemical sensor	0 .. 5,000 ppm	0.1 ppm 1 ppm	±5 ppm 0 .. 100.0 ppm ±5% measured value 100.1 .. 500.0 ppm ±10% measured value 501 .. 5000 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
CO 0..50% *	NDIR bench	vol 500.000 ppm	100 ppm	0-2500 ppm : +/- 50 ppm 1 ppm 2501 -100000 ppm : +/- 3% vm 10ppm 100001 -250000 ppm : +/- 5% vm 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	-4 .. 248 °F (-20.0 .. 120.0°C)	32.2°F (0.1 °C)	-30 .. +34 °F (±1°C)
Flue gas temperature	TcK sensor	-4 .. 2282 °F (-20.0 .. 120.0°C)	32.2°F (0.1 °C)	-30 .. +34 °F (±1°C) 32 .. 212 °F (0 .. 100 °C) ±1% measured value 214 .. 2282 °F (101 .. 1250°C)
Auxiliary sensor temperature	PT100	-4 .. 392 °F (-20.0 .. 200.0°C)	32.2°F (0.1 °C)	-31 .. +33 °F (±0.5°C)
Pressure (draft and differential)	Piezoelectric sensor	-4 .. 80 inH2O	0.004 inH2O	±1% measured value -4 .. -0.81 inH2O ±0.008 inH2O -0.8 .. +0.8 inH2O ±1% measured value +0.81 .. +80 inH2O
Temperature Differential	Calculated	32 .. 2282°F (0 .. 1250.0 °C)	32.2°F (0.1 °C)	
Excess Air	Calculated	0 .. 850%	1%	
Stack heat losses	Calculated	0.0 .. 100.0%	0.1%	
Efficiency	Calculated	0.0 .. 100.0%	0.1%	
Efficiency (condensation)	Calculated	0.0 .. 120.0%	0.1%	

(*): The NDIR bench always measures the 3 gases CO, CO2, HC (ref. to methane CH_4) or HC (ref. to propane C_3H_8)

be safe

be safe

NEW

Single Gas

AVAILABLE GASES

CO   H2S   O2   SO2

9.1%

seitron

Portable Gas Detector

- 24 months of continuous operation
- Reliable low level gas detection
- Solid and Robust
- Intrinsically Safe
- Fast Bump Test and calibration
- Self test function
- Event Logging download
- **ATEX**/IECEx/QPS Approved

II 1G Ex da ia IIC T4 Ga
II 2G Ex db ia IIC T4 Gb
II 1G Ex ia IIC T4 Ga

IECEx

c PS us CERTIFIED

Main Applications of *be safe* line

- Site Maintenace
- Power Generation
- Water Management
- Aerospace
- Manufacturing
- Government & Defense
- Chemical and processing

be safe
NEW

Multi Gas

AVAILABLE GASES

O2	CO	NO	NO2	H2S
SO2	H2	NH3	CL2	CH4

Portable Multi Gas Detector (up to 4 gases)

- Rechargeable Li-Ion battery powered (up to 18 hours of battery life)
- Protection Grade IP65
- LCD display for actual concentration values readout
- Buzzer, vibrating motor and LED for alarm signaling
- Solid and Robust
- Intrinsically Safe
- Fast Bump Test and calibration kit included
- **Available for ATEX Zone 1**
- **ATEX**(*) /IECEx/QPS Approved

II 1G Ex da ia IIC T4 Ga
II 2G Ex db ia IIC T4 Gb
II 1G Ex ia IIC T4 Ga

IECEx   cPSus CERTIFIED

(*) Protection classification dependent on device configuration

- **Steel and Heavy Industry**
- **First response and fire service**
- **Food & Beverage**
- **City and infrastructure**
- **Wastewaters treatment**
- **Sewer & Underground Safety**

Maintenance and Service

A high-quality, up-to-date and certified instrument in compliance with current standards is essential in carrying out your work in the best possible way, while minimizing liability.

- Gases (O_2, CO, CO_2, NO, NO_2, SO_2, CxHy)
- Temperature
- Pressure
- Humidity
- Current
- Air Flow
- Refrigeration Gases
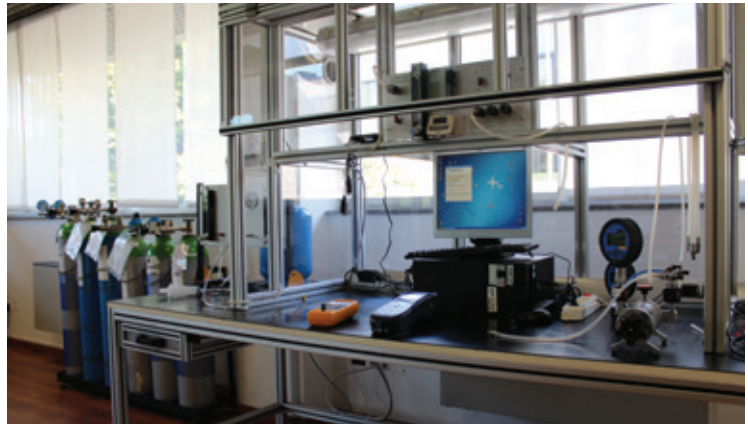
24-48 Hr Turnaround

Services offered:
- Calibration
- Annual certification
- Training
- Repairs
- Field technical support in real time
- Field calibrations

On-Site Services

Calibration/Adjustments

Training

CONTACT INFO

service@seitronamericas.com   Phone (215) 660-9777   Fax (215) 660-9770

For more information visit Customer Service page: www.seitronamericas.com

Seitron Americas Inc. 140 Terry Drive - Suite 101 - Newtown, PA 18940