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

HD

Real-Time PC Software included

Optional: Heated Line and Probe

Bluetooth®

Windows Software Seitron Smart Analysis

Windows 7 or later

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
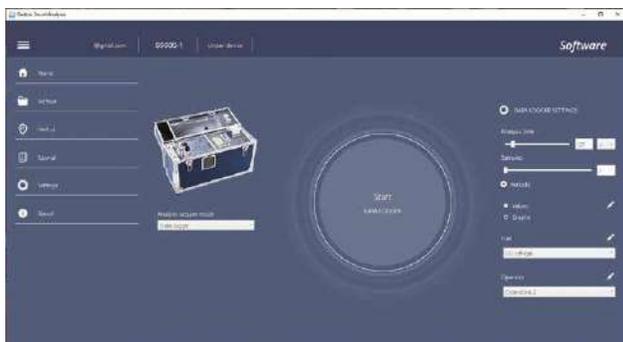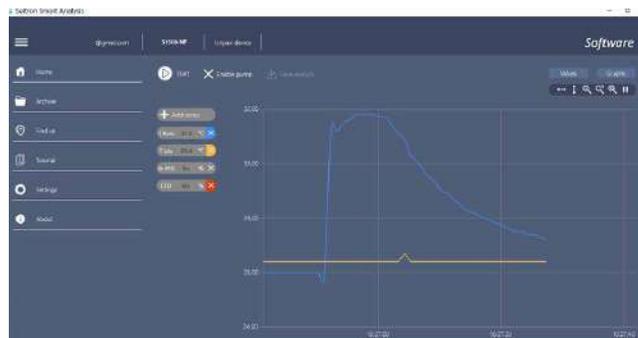- Gas sampling probes of different type and length

S9000 - FEATURES

**Windows Software
Seitron Smart Analysis**

Windows 7
or later

- 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:
  O_2, CO Low, CO High, NOx, Low NOx, SO_2, Low SO_2, H_2S, CO_2, High CO, H_2 and now with NH_3!

S9000 - TECHNICAL FEATURES

Power supply:	100 .. 260V~, or Li-ion battery pack with internal protection circuit, rechargeable.
Battery charge:	8 hours from 0% to 90%.
Charging time:	10 hours of continuous operation (except printer and Peltier Chiller).
Instrument battery life:	2 hours with Cooler running.
Display:	Backlit TFT graphical color display. 4.3" 480×272 pixel.
Connectivity **Communication port:**	TYPE B USB connector.
Bluetooth:	Communication distance: <100 metres (open field).
Autozero:	Automatic autozero cycle with gas sampling probe in stack.
Dilution:	CO sensor measurement range expansion system up to 100,000ppm (10.00%).
Gas measurement sensors:	Up to 9, configurable among electrochemical, NDIR (single cell) and Pellistor.
Infrared bench:	3 gases NDIR bench: CO, CO_2, CxHy.
Fuel type:	12 preprogrammed and 16 additional programmable by the user.
Self diagnostics:	Check all functions and internal sensors with status indication.
Temperature measurement:	TcK double input with mini connector (ASTM E 1684-96) for Temperature Differential measurement (supply and return).
Ambient temperature measurement:	Via internal sensor or via T2 TcK input with remote sensor.
Printer:	Integrated, thermal, with easy paper loading and paper level indicator.
Printer power supply:	Analyzer batteries.
Printer battery life:	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:	2.0 l/min flow rate in the stack up to 120inH2O (300hPa) head.
Capacity pump:	Internal sensor measuring pump flow rate.
Cooler sample treatment **Drying system:**	Rapid water condensation using cyclone system
Type:	Peltier cell
Set point temperature cooler:	+41°F (+5°C)
Max. temp. deviation from set point:	+50°F (+10°C) from set point
Condensate emptying pump:	
Peristaltic duty cycle pump:	Peristaltic hose 38 ml/min
Warm-up time:	30s On .. 30s Off
Operating temperature:	~ 15 .. 20 minutes 23°F (-5°C) .. 113°F (113°F / 45°C)
Anti-condensation trap **Type:**	
Condensate emptying pump:	Integrated
Operating temperature:	Peristaltic hose 38 ml/min 23°F (-5°C) .. 113°F (45°C)
Working temperature:	23°F (-5°C) .. 113°F (45°C)
Storage temperature:	-4°F (-20°C) .. 122°F (50°C)
Humidity limit:	20% .. 80% RH
Protection level:	IP21
External dimensions:	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.
Weight:	~ 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 (0-1000 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