

# seitron Americas

## HVAC-R CATALOG

### COMBUSTION ANALYZERS



### AC/REFRIGERATION TOOLS



### GAS LEAK DETECTORS MANOMETERS



### PERSONAL GAS DETECTORS

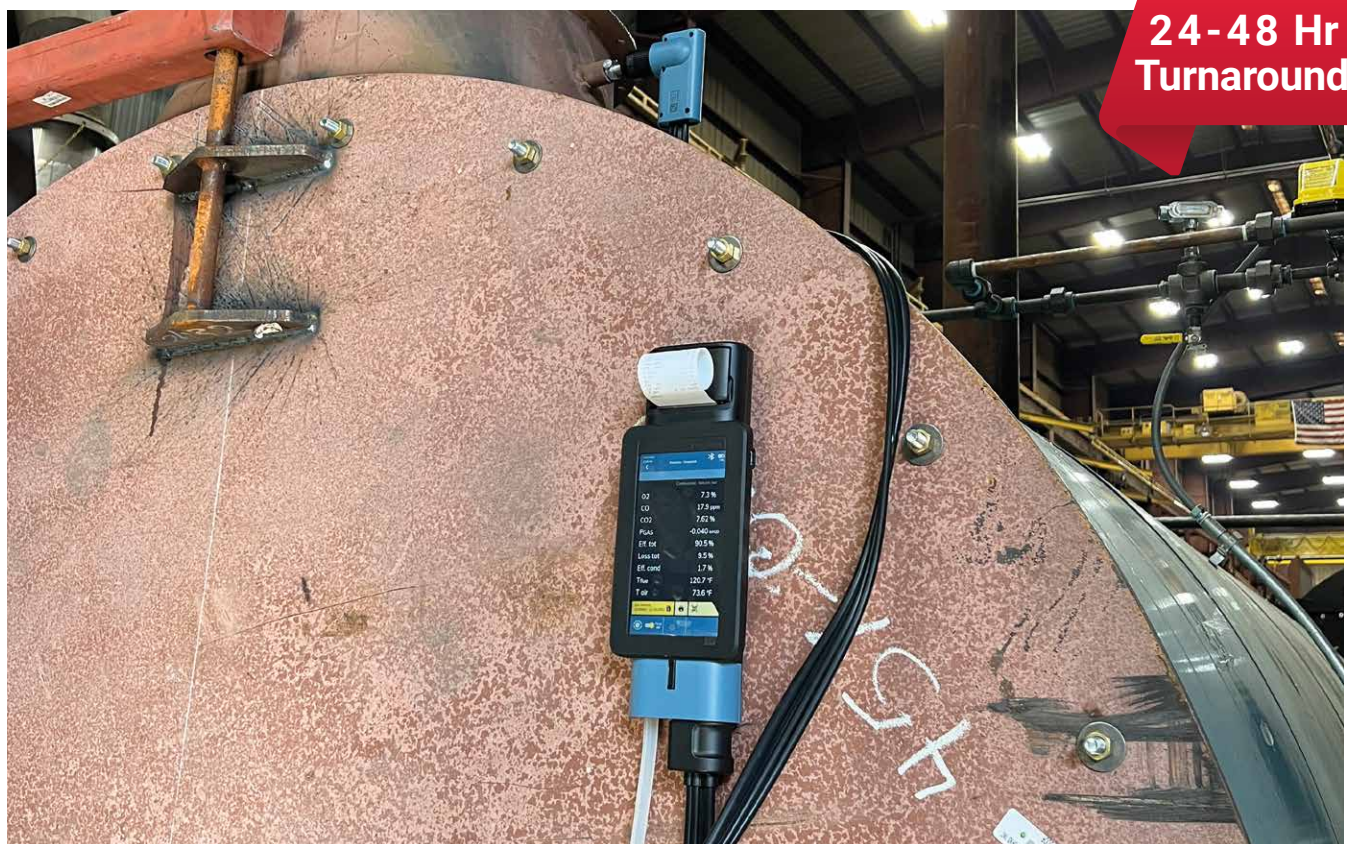


# HVAC Combustion Analyzers

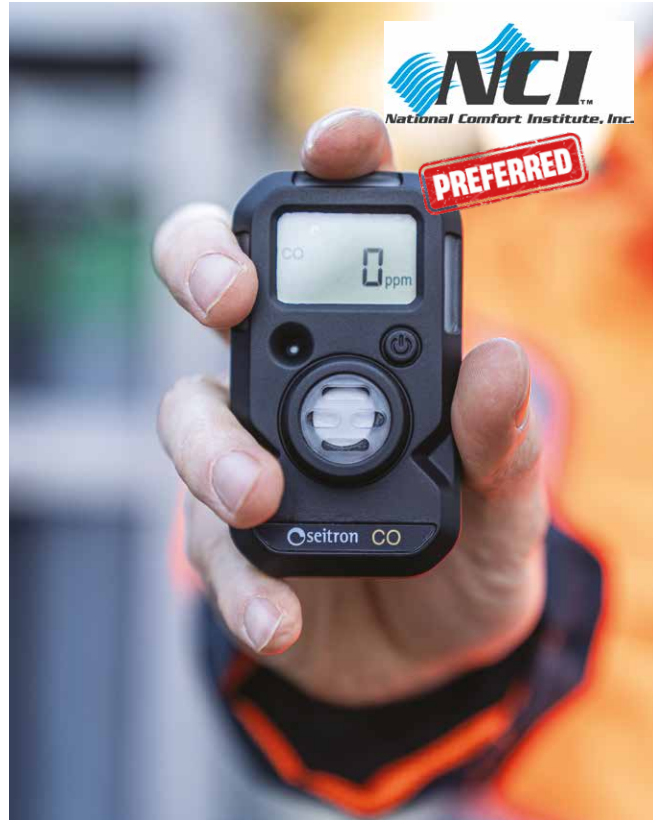


Seitron's portable combustion gas analyzers are designed to help maximize the safety and efficiency of all types of heating systems, and are ideal for setup, installation, and maintenance of furnaces, boilers, water heaters, and other residential and commercial combustion processes. The Seitron NOVO analyzer series features unique characteristics that meet the various requirements, preferences, and budgets of HVAC professionals. All of our analyzers are designed and manufactured in Italy to provide the highest level of quality and durability, while incorporating the latest technologies to achieve highly intuitive functionality.

**Seitron Americas provides industry leading service & calibration turnaround to meet our customer's needs even during the busiest time of year. We guarantee a 24-48 hour turnaround time on any service & calibration to make sure we drastically minimize the downtime our technicians are without their essential equipment especially during the busiest times of year.**



# PERSONAL GAS MONITORS AND FIXED REFRIGERATION LEAK DETECTION



**SIMULTANEOUS GAS PRESSURE + COMBUSTION READING + DRAFT**

Thanks to Novo's ability to measure combustion parameters and gas pressure simultaneously, service time is drastically reduced and the need for separate devices is minimized.

**PRO/CHART ANALYSIS MODES**



- Select Equipment Type
- Stabilize Combustion readings in GREEN Zone for optimal combustion
- View Stoichiometric Chart/Graph
- Customize Manufacturer's Specific Ranges

**GAS PRESSURE + COMBUSTION + DRAFT**



- View LIVE Draft, Gas Pressure & Combustion Results at the SAME TIME
- Print or Save Gas Pressure
- No need for separate external manometer



**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.

**NEW CRACKED HEAT EXCHANGER TEST**



- Detects potential cracks in forced-air furnace heat exchangers by comparing oxygen levels with the blower off and on
- Quick and reliable process to identify potential hazards before they escalate

**NEW DRAFT PROBE (#AJDR01)**



- External probe for NoVO enables measurements at alternate flue points
- Offers enhanced flexibility and diagnostic accuracy
- Perfect for technicians needing precision across multiple stack zones

# Residential & Commercial HVAC

Product Configurations	Novo-LTE	Novo 1	Novo 1P	Novo 3	Novo 3P
7" Touch Screen	✓	✓	✓	✓	✓
PRO/Chart analysis mode		✓	✓	✓	✓
Cracked Heat Exchanger Test		✓	✓	✓	✓
2 Year O2 Sensor	✓				
4 Year O2 Sensor		✓	✓	✓	✓
CO Sensor with Protection	✓	✓	✓	✓	✓
CO Air Free	✓	✓	✓	✓	✓
NOx Sensor				✓	✓
Pressure Manometer	✓	✓	✓	✓	✓
Manometer Hoses Included		✓	✓	✓	✓
LIVE Draft	✓	✓	✓	✓	✓
Bluetooth & QR Code	✓	✓	✓	✓	✓
iOS & Android App	✓	✓	✓	✓	✓
Kit with Built-In Printer			✓		✓
Optional Bluetooth Printer	Optional	Optional		Optional	
Probe Included	7"	12"	12"	12"	12"
Hose Included	6 ft	6 or 10 ft	6 or 10 ft	10 ft	10 ft
Integrated Water Trap	✓	✓	✓	✓	✓
Hard ABS Case		✓	✓	✓	✓
Li-Ion Battery & Charger	✓	✓	✓	✓	✓
Calibration Certificate	✓	✓	✓	✓	✓
Quick Guide	✓	✓	✓	✓	✓



**PREFERRED**



# Novo

## ALL-IN-ONE EMISSIONS ANALYZER

### Fast / Easy / Robust / Accurate

- O2, CO, CO2, Temperature, Draft & Pressure Included
- Simultaneous Gas Pressure + Combustion Measurements
- **Cracked Heat Exchanger Test** NEW
- Optional Built-in Printer
- Long Life O2 Sensor (4 Years)
- New Dual Range (Low/High) Sensor Technology
- 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
- Draft Measurement
- Mobile App for iOS and Android

Built-in printer



Field Replaceable Sensors



O<sub>2</sub>, CO Gas Sensors



7" Touch Color Display



Mobile App - iOS, Android



Simultaneous Combustion + Gas Pressure



**Bluetooth®**



Seitron Smart Analysis



Windows Software  
Seitron Smart Analysis



MEASUREMENT	SENSOR	RANGE	RESOLUTION	ACCURACY	
O <sub>2</sub> 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
		501 .. 8000 ppm	1 ppm	±5% measured value	40.1 .. 500.0 ppm
CO <sub>2</sub>	Calculated	0 .. 99.9% vol	0.1% vol	±5% measured value	501 .. 2000 ppm
NO sensor	Electrochemical	0 .. 500 ppm	0.1ppm	±10% measured value	2001 .. 8000 ppm
		501 .. 5000 ppm	1 ppm	±5% measured value	40.1 .. 500.0 ppm
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)
Stack Temperature	TcK sensor	-4.0 .. 2282.0 °F -20.0 .. 1250.0 °C	32.18 °F 0.1 °C	±0.5%	213.8 .. 2282.0°F (101 .. 1250 °C)
Pressure (draft & differential)	Piezo Resistive	-40.1 .. +80.4 inH <sub>2</sub> O	0.004 inH <sub>2</sub> O	±1% measured value	-40.1 .. -0.81 inH <sub>2</sub> O
				±0.08 inH <sub>2</sub> O	-0.80 .. +0.80 inH <sub>2</sub> O
				±1% measured value	+0.81 .. +80.4 inH <sub>2</sub> 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 O <sub>2</sub> 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
<b>Novo 1</b>	Analyzer w/ O <sub>2</sub> , CO, CO <sub>2</sub> , 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
<b>Novo 1-P</b>	All In One Kit with BUILT-IN Printer. Analyzer w/ O <sub>2</sub> , CO, CO <sub>2</sub> , 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. Built-in Printer included.
<b>Novo 1-OIL</b>	Standard Novo-1 Kit plus Oil smoke pump, smoke filters and comparison chart
<b>Novo 1-P-OIL</b>	Standard Novo-1-P Kit plus Oil smoke pump, smoke filters and comparison chart
<b>Novo 3</b>	Analyzer w/ O <sub>2</sub> , CO, NO/NO <sub>x</sub> , CO <sub>2</sub> , 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.
<b>Novo 3-P</b>	All In One Kit with BUILT-IN Printer. Analyzer w/ O <sub>2</sub> , CO, NO/NO <sub>x</sub> , CO <sub>2</sub> , 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 light KIT

## Includes:

- ▶ NOVO Combustion Analyzer
- ▶ Sensors for O2 & CO
- ▶ 7" Probe & 6ft Sample Hose
- ▶ USC-C Cable
- ▶ Qty. 1 Particulate Filter
- ▶ Certificate of Calibration
- ▶ Quick-Start Guide
- ▶ Reporting Mobile Apps



## What's Included?

Sensors	O2 & CO
CO2, Temp, Efficiency, Draft	✓
Probe	7" Probe, 6' Hose
USB-C Charging Cable	✓
Mobile Apps	BT & QR Code
Particulate Filter	Qty. 1 Included
Calibration Cert	✓
Quick Start Guide	✓
Internal Memory	2,000 Tests
Printer	X (*)
Carrying Case	X
PRO Mode	X
Cracked HX Test	X
AC Plug	X
Gas Pressure Hose	X

## Seitron Smart Analysis App

- ▶ Data logging
- ▶ Report creation
- ▶ QR code or real-time App
- ▶ Sharing via e-mail (csv, pdf, xml)



(\*) 1 Bluetooth Printer (Part# AAST04) Available for Purchase



# GAS-T-ONE

## Dual Pressure Manometer + Thermometer in ONE

Easy to Use / Accurate / Robust

- Differential Pressure (-40 to +80" H2O)
- Temperature (-4 to 1472 °F)
- QR Code Mobile App for saved/emailed reports
- Li-Ion Rechargeable Batteries
- Bluetooth
- Optional Printer



Seitron Smart Analysis



### Kit Includes

- Gas-T-One Manometer
- Dual Pressure Hoses
- Hard Plastic ABS Carrying Case
- AC Charger
- Quick Reference Guide

### Ordering Code:

- **Part #: GT1**  
Description: Gas-T-One Manometer + Thermometer
- **Part #: GT1-P**  
Description: Gas-T-One Manometer + Thermometer + Bluetooth Printer



GT1-P

safe guardian

NEW



CO O2 CH4

## COMBUSTIBLE & TOXIC GAS LEAK DETECTION

The Safe Guardian enables the constant monitoring of the ambient room air to detect & alarm the presence of **toxic and/or combustible gases**. With its configurable analog output and Modbus® RTU interface, the Safe Guardian is suitable for use in multiple applications, adapting to different needs.

The Safe Guardian gas transmitter provides safety, accuracy, fast response times and built-in audio and visual alarms. In addition, the Seitron Guard mobile app facilitates the commissioning, configuration and maintenance of the device.

### TECHNICAL FEATURES

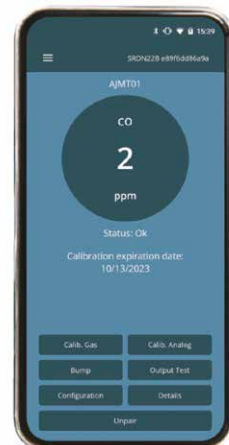
Power supply: 12 ... 24 Vac ± 10% or 12 . 24 Vdc ± 10%  
 Power consumption: 5 W  
 Relay outputs: 3x1 A 30 Vac (voltage-free contacts)  
 Analog output: 4 ... 20 mA, 0-5 V, 0-10 V, 1-5 V, 2-10 V configurable via app  
 Modbus® output via RS485 with Modbus® RTU protocol  
 up to 32 connectable devices  
 IP Rating: IP65 (with cables/caps inserted in cable glands)  
 Working temperature: -40 .. +50 °C (-40 ... +122 °F)  
 Humidity: 20% .. 90% RH (without condensation)  
 Dimensions (HxWxD): 6.93x3.62x3.27 in.

Code	Gas	Sensor Type	Range
Safe Guardian CO	CO	Electrochemical	0 .. 500 ppm
Safe Guardian O2	O2	Electrochemical	0 .. 25 % v/v
Safe Guardian CH4	CH4	Pellistor	0 .. 50 % LEL



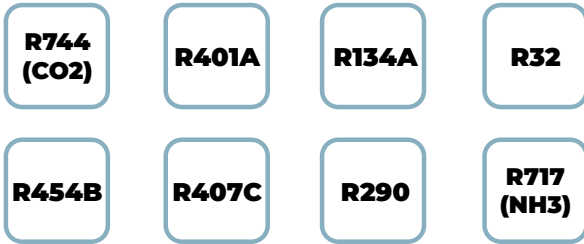
The Seitron Guard mobile app simplifies configuration, maintenance and interaction with Safe Guardian gas transmitters.

- Bump test/calibration
- Product configuration: renaming of device for easy localisation, alarm
- Setting thresholds and managing output settings
- Maintenance: LED test, buzzer function and relay check
- Intuitive monitoring





REFRIGERANT GAS LEAK DETECTION



**OUTPUTS**  
Configurable analog output  
(4-20mA, 0-5V, 0-10V, 1-5V, 2-10V)



**MODBUS COMMUNICATION**  
Up to 32 devices connectable via RS485 interface



**RELAY OUTPUTS**  
Three relays to serve as fault detector, low and high-level alarm triggers



**INCREASED SAFETY**  
Built-in audible and visual alarms for an immediate danger warning, in compliance with safety standards



**EASY TO USE**  
Commissioning and maintenance without special tools

Cool Guardian **refrigerant gas** leak detector, characterized by fast response time, **low-temperature performance** (-40°), and **integrated audio and visual alarms**, simplifies and facilitates compliance to safety regulations. Modern refrigeration systems are engineered for optimal efficiency and airtight integrity. However, improper installation, unintentional damage, or mechanical wear and tear can potentially lead to hazardous leaks. The Cool Guardian gas transmitter **serves as a vigilant guardian against unforeseen leaks**, which could compromise both the environment and human health.

Code	Gas	Sensor Type	Range
Cool Guardian R744 (CO2)	R744 (CO2)	NDIR	0 .. 10.000 ppm
Cool Guardian R410A	R410A	Semiconductor	0 .. 1.000 ppm
Cool Guardian R134A	R134A	Semiconductor	0 .. 1.000 ppm
Cool Guardian R32	R32	Semiconductor	0 .. 1.000 ppm
Cool Guardian R454B	R454B	Semiconductor	0 .. 1.000 ppm
Cool Guardian 407C	R407C	Semiconductor	0 .. 1.000 ppm
Cool Guardian R290	R290	Semiconductor	0 .. 2.500 ppm
Cool Guardian R717 (NH3)	R717 (NH3)	Electrochemical	0 .. 100 ppm

## Complete range of refrigerant gas sensors for different applications

Selection of the appropriate gas sensor to monitor the presence of refrigerants in **industrial processes, commercial cooling systems, or refrigeration facilities** is crucial when it comes to fixed gas transmitters. These transmitters are designed to accurately detect and measure various refrigerant gases, providing essential data for maintaining the integrity of refrigeration systems and preventing potential leaks.

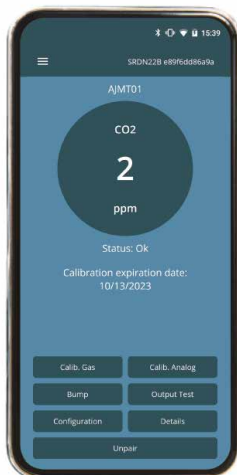
## Calibration Kit for easy in-field calibration

Seitron Cool Guardian periodic calibration is very easy, thanks to our calibration kit and Seitron Guard mobile App. The optional calibration kit includes a magnetic stick and a gas adapter. These items allow to operate on the field, without removing the detector's cover. By following step-by-step instructions on the App, the user can fine-tune the device ensuring high performing operations. Periodic Bump test and Calibration of Cool Guardian Stand Alone Transmitter help to maintain the safety and efficiency of refrigeration systems.

## Technical Features

Power supply voltage:	12 .. 24 Vac $\pm$ 10% or 12 .. 24 Vdc $\pm$ 10%
Power absorption:	5 W
Relay outputs	
Contact rating:	3 x 1A 30 Vac (voltage free)
Analog Output:	4-20mA, 0-5V, 0-10V, 1-5V, 2-10V - configurable via App
Modbus® output:	Via RS485 with Modbus® RTU protocol Up to 32 connectable devices
Protection degree:	IP65 (With cables/plugs inserted in the cable glands)
Operating temperature:	-40 .. +50 °C (-40 .. +122 °F)
Operating humidity:	20% .. 90% RH (non-condensing)
SIZE (W x H x D):	190 x 176x 112 mm (7.5 x 7 x 4.4 inch)

## App Seitron Guard



The Seitron Guard mobile app simplifies configuration, maintenance, and interaction with Cool Guardian gas transmitters.

Setup, calibration and use of the detectors is made simple and immediate, thanks to Bluetooth® connectivity:

- **Bump test / Calibration**
- **Product Configuration:** device renaming for easy locating, alarm thresholds setting and output settings management
- **Maintenance:** LED tests, buzzer function and relay control
- **User friendly monitoring**



Seitron Guard





# RYF01M

## CONTROL UNIT FOR MECHANICAL ROOM

To be used in **Mechanical and Refrigerant Rooms**, designed for wall mounting.

180x128 **graphic LCD display**

**8 LED indicators and signaling buzzer.**

**9 buttons keyboard**

**Power supply:** 85 .. 254 Vac 50/60 Hz

12 Vdc

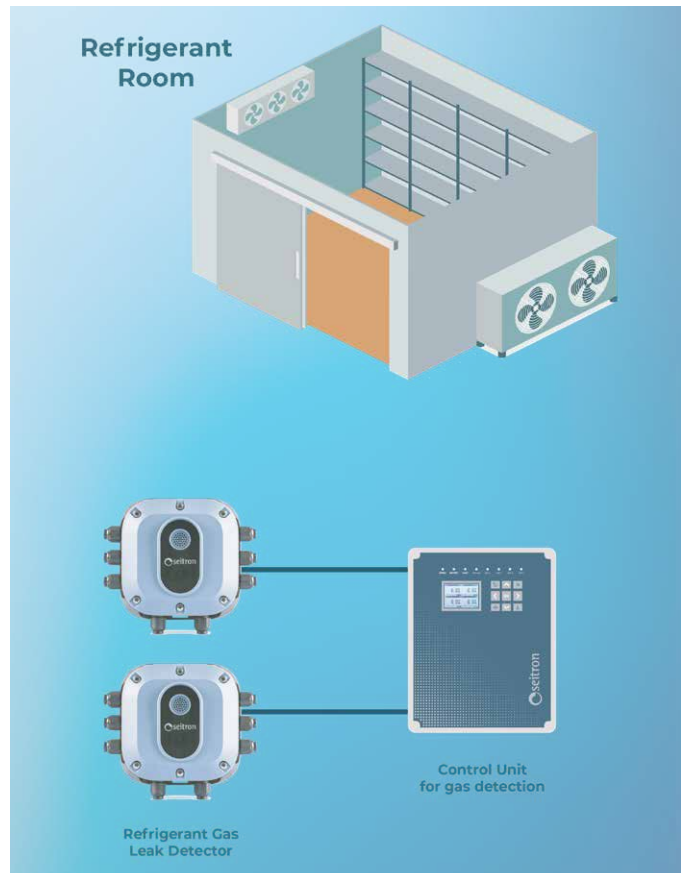
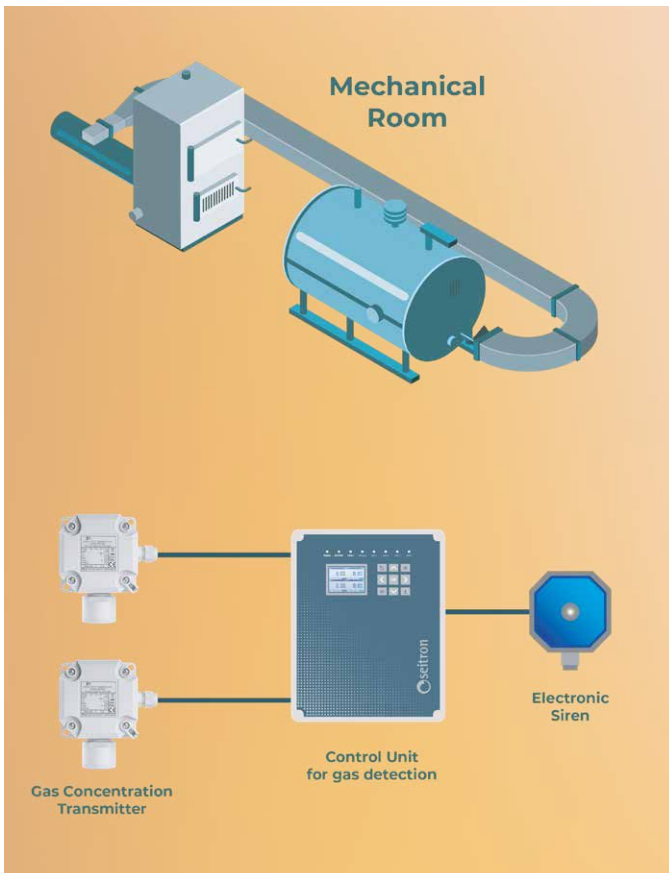
**Inputs:** 8 x 4..20 mA

1 external input for Fire Alarm

1 external input for Manual Reset

**Modbus** for up to 32 gas concentration transmitters

**Outputs:** 5 x 5 A 250 Vac SPDT





Single Gas



AVAILABLE GASES



Portable Gas Detector

- 24 months of continuous operation
- Reliable detection of low concentration of toxic and flammable gases
- Solid and robust
- Integrated crocodile clip
- Intrinsically Safe
- Self test function
- Event logging download
- Approved for **ATEX Zone 0**



Main Applications of *be safe* line

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

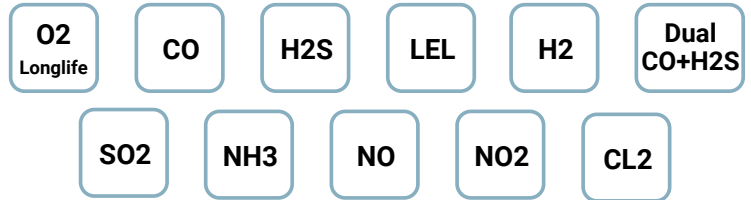




Multi Gas



AVAILABLE GASES



Portable Multi Gas Detector (up to 4 gases)

- Customisable configuration up to 4 gases
- Intrinsically Safe
- Product warranty for 3 years
- IP67 Protection Rating
- LCD display for actual concentration values readout
- Audible, visual and vibrating alarm
- Integrated crocodile clip
- Fast Bump Test and Calibration Kit included
- Approved for **ATEX Zone 0**
- Manual External Pump Kit Optional



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



### 7899 . PORTABLE COMBUSTIBLE GAS LEAK DETECTOR

- => ppm => %vol => % L.E.L.
- 11" Flexible probe
- 6 "AAA" batteries
- Natural gas, Propane, Methane and all combustible gases
- Field replaceable sensor
- Hold: auto zero
- Lightweight
- Quick Response Time

### 7900 . PORTABLE COMBUSTIBLE GAS LEAK DETECTOR WITH RECHARGEABLE BATTERY

- => ppm => %vol => % L.E.L.
- 11" Flexible probe
- Rechargeable battery
- Natural gas, Propane, Methane and all combustible gases
- Field replaceable sensor
- Hold: auto zero
- Lightweight
- Quick Response Time
- AC Charger/Cord included



### REFRIGERANT LEAK DETECTOR

be cool evo

- Sensor: with heated diode
- Minimum sensitivity: 3 g/year
- Display: LCD
- Refrigerants available: CFCs, HCFCs, HFCs, HCs and HFOs
- Flexible probe length: 16.5" (420mm)

# AC/Refrigeration Range

**NEW**



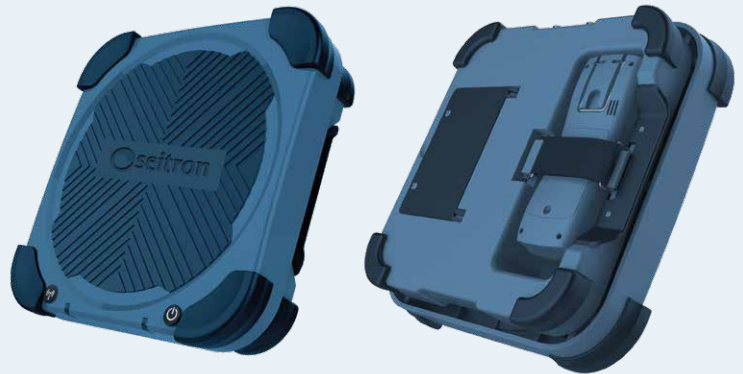
**A2L**  
COMPATIBLE

## 4-Way Digital Manifold be cool evo

- Pressure reversal set by the user on the instrument
- Selection from more than 80 refrigerant gases (included R410, R32, R404)
- Intuitive and simple interface
- Real-time data analysis, also with mobile App
- Possibility to read and export data via USB
- Ideal for commissioning, servicing and maintenance of refrigeration and air conditioning systems and heat pumps

## Refrigerant Scale (up to 100 kg / 220 lb) be cool B100

- Stable and accurate sensor for a reliable measurement
- Robust aluminum scale, with impact-resistant rubber corners, easy to transport in the handy case
- Scale measurement with handheld controller or via smartphone



**NEW**



**A2L**  
COMPATIBLE

## Smart Vacuum Gauge be cool evo

- Simple data visualization on wide display
- Real-time data monitoring and transfer via mobile App
- Offline data recording

# Training



## Class Topics Include

### Combustion Process:

- What is combustion?
- 3 T's of combustion (combustion theory)
- Excess air
- CO<sub>2</sub> (carbon dioxide)
- Direct O<sub>2</sub> vs. CO<sub>2</sub> (why measuring is important)
- CO (carbon monoxide)
- CO Safety
- Draft
- Heat exchanger test
- How to use analyzer
- Why perform combustion test and why use analyzers?
- Typical Combustion Results
- System Measuring points
- Why do we need to measure?
- How contractors can make money (\$\$) using an analyzer
- Atmospheric vs. High Efficiency condensing boilers / furnaces!
- Seitron's series of analyzers and leak detectors
- Combustible gas leak detection: soap bubbles vs. actual detection

Webinar Trainings Available!



## Class Counts for:



**2 NATE CEU Credits**  
The Gold Standard for HVACR Technician Certification



**3 NORA CEU Credits**  
National Oil Heat Research Alliance

# 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 (O2, CO, CO2, NO, NO2, SO2, 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

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For more information visit Customer Service page: [www.seitronamericas.com](http://www.seitronamericas.com)

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