

## Nuvair Analyzers



Nuvair manufactures gas analyzers for diving, medical, public safety, industrial, government, and military use. Our analyzers are portable, rugged, have large display screens, accurate and easy to operate with user-changeable batteries and sensors.

Analyzers can evaluate single or multiple gases including oxygen (O<sub>2</sub>), nitrogen (N<sub>2</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), and helium (He). For the technical diver, we offer several types of multigas analyzers including the **Pro Trio**, **Pro He-O<sub>2</sub>**, **Pro Trimix**, and **Multigas Color**. For the advanced diver who is looking for complete gas analysis, we manufacture the **Pro 4 Warn**, which tests for O<sub>2</sub>, CO, CO<sub>2</sub> and moisture (H<sub>2</sub>O).

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## NUVAIR GAS ANALYZERS

PAGE	SKU	PRODUCT NAME	GAS/GASES ANALYZED	OTHER FUNCTIONS
1	9641	Multigas Color Alarm	O <sub>2</sub> , CO, CO <sub>2</sub> , H <sub>2</sub> O, VOC	Case Mounted with Battery
2	9604	Pro 4 Warn Alarm	CO, CO <sub>2</sub> , O <sub>2</sub> , H <sub>2</sub> O	High Temperature Case Mounted with Battery
3	9609	Pro Trimix Alarm	He, O <sub>2</sub>	Case Mounted with Battery
4	9603	Pro Trio Alarm	CO, CO <sub>2</sub> , O <sub>2</sub>	Water Resistant Case w/Battery
5	9602	Pro He-O <sub>2</sub> Alarm	He, O <sub>2</sub>	Case Mounted with Battery
6	9618	Pro O <sub>2</sub> /CO <sub>2</sub> Alarm	CO <sub>2</sub> , O <sub>2</sub>	Case Mounted with Battery
7	9456	O <sub>2</sub> Quickstick	O <sub>2</sub>	9-volt Battery
8	9450 9611 9612 9452 9612	Pro O <sub>2</sub> Series	O <sub>2</sub>	Handheld without Alarm Handheld with Alarm Panel Mount with Alarm Handheld Remote without Alarm Handheld Remote with Alarm
9	9625 9624 9626-LB	Pro CO Alarm Series	CO	Handheld Panel Mount Case Mounted with Battery
10	9621	Pro CO with Low Pressure & High Temperature Alarm	CO	High Temperature Low Pressure Water Resistant Case w/Battery
11	9621.5-LB	Pro CO with Low Pressure Alarm	CO	Low Pressure Water Resistant Case w/Battery
12	9615-LB 9616 9617	Pro CO <sub>2</sub> Alarm Series	CO <sub>2</sub>	Case Mounted with Battery Handheld Panel Mount
13	9607	Pro H <sub>2</sub> O Alarm	H <sub>2</sub> O	Panel Mount
14	9607-LB	Pro H <sub>2</sub> O Alarm	H <sub>2</sub> O	Lithium Battery
15	9627 9628-LB 9608-LB	Pro He Alarm	He	Handheld Panel Mount Case Mounted with Battery
16	9613 9614	Pro N <sub>2</sub> Alarm	N <sub>2</sub>	Handheld Panel Mount

Customized analyzers, external relays, power options, and enclosures available to meet nearly any requirement.

### Gases/Vapors Abbreviations

CO: Carbon Monoxide | CO<sub>2</sub>: Carbon Dioxide | He: Helium | H<sub>2</sub>O: Moisture | N<sub>2</sub>: Nitrogen | O<sub>2</sub>: Oxygen  
VOC: Volatile Organic Compounds

Are you in search of a complete multigas monitoring solution? Look no further! The *Multigas Color* combines oxygen (O<sub>2</sub>), carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>) sensors with a moisture monitor and VOC (Volatile Organic Compound, including oil vapor) analyzer in a single water- and impact-resistant carrying case. The color display allows for continuous monitoring of ambient and compressed gases in a variety of environments. [SKU 9641]



## FEATURES

- Digital analyzer with color display
- Audible and visual alarms for O<sub>2</sub>, CO<sub>2</sub>, CO, Moisture & VOC
- Controlled by a rotary/push knob
- User replaceable batteries and sensors
- Low battery warning indicator
- Sensor status indicators
- Micro SD storage ready

## ADVANTAGES

- Programmable visual and audible alarm thresholds
- Fast response: 10 ms (min) per channel sampling
- Compact water resistant container (12 x 10.6 x 5.7 in)
- Easy to operate, reliable and accurate
- Optional relays for external alarm or compressor control

### PLEASE NOTE

Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

### O<sub>2</sub> Sensor

- 0-100% range
- Resolution: 0.1%

### CO<sub>2</sub> Sensor

- 0-500 ppm range
- 0.0-0.5% or 0-100%
- Resolution: 20 ppm

### CO Sensor

- 0-50 ppm or 0-300 ppm range
- Resolution: 1 ppm
- Available dew point sensor up to -110°C

### Moisture Monitor

- Moisture reading of relative humidity from 0.0 to 99.9%
- Absolute humidity in mg/m<sup>3</sup> or PPMv

### VOC Analyzer

- VOC gas mix in the range of 0.01 to 20 ppm related to isobutylene
- Resolution: 0.01 ppm



## NUVAIR PRO 4 WARN ALARM ANALYZER

Looking for a complete solution to monitor your air or nitrox compressor package? Look no further; we have created the Pro 4 Warn, a compact, water resistant enclosure containing all monitors and alarms in a simple to use and easy to read format. The Pro 4 Warn combines our oxygen, carbon monoxide and carbon dioxide analyzers into one enclosure with our electronic moisture monitor and compressor high temp alarm.



### FEATURES

- Audible and visual alarms for O<sub>2</sub>, H<sub>2</sub>O, CO, CO<sub>2</sub> and high temp
- On / off buttons for individual monitors
- Fast response and accurate
- Temperature compensated sensors
- User replaceable batteries and sensors
- Low battery warning indicators
- Factory reset

### ADVANTAGES

- Programmable alarm thresholds
- Audible and visual alarms
- Fast response
- High temp switch
- Compact water resistant container
- Made to test breathing gases
- Easy to operate, reliable and accurate
- Optional relays for external alarm or compressor control

#### SKU 9604

#### CO<sub>2</sub> Analyzer:

- 0-2000 ppm range CO<sub>2</sub>
- Better than 50 ppm accuracy

#### Moisture Monitor:

- Audible visual alarms for high moisture content in filters
- Warning light for filter changes

#### High Temp Alarm:

- Audible visual alarms for high temperatures at the final stage
- Relays to shut down compressor

#### Oxygen Analyzer:

- 0-100% range O<sub>2</sub> monitor
- 36 month electrochemical sensor
- ±1% accuracy

#### CO Analyzer:

- 0-50 ppm range CO monitor
- >24 month electrochemical sensor
- ±5% accuracy

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The Pro Trimix Alarm Analyzer measures helium (He) and oxygen (O<sub>2</sub>) levels in gases in the range of 0 to 100% of volume with up to a 1% resolution. It can be used to measure the He and O<sub>2</sub> content in all breathing gas mixes. The analyzer is designed to verify helium and oxygen concentrations in stored gas cylinders as well as to monitor the continuous flow of gas from a compressor. It is compatible with outdoor and marine environments, is self-calibrating and includes audible and visual alarms for user-defined set points. As an option, the analyzer can shut down a compressor by way of an analog output at a user-defined set point.

## FEATURES

- On / off switch
- Display range of 0.0-100% O<sub>2</sub>
- (2) Custom audible and visual alarms per gas
- 4-20 mA analog output for external devices
- Capable of shutting down compressor at set alarm with optional relay cable

## ADVANTAGES

- Fast response
- Made to test breathing gases
- Easy to operate, reliable and accurate
- Long-life electrochemical O<sub>2</sub> sensor
- Long-life thermal conductive He sensor
- Automatic calibration



## SPECIFICATIONS\*

SKU: 9609	Pro He	Pro O <sub>2</sub> Alarm
Flow Rate	0.5–1 L/min	0.5–5 L/min
Resolution	0.1%	0.1%
Linearity / Repeatability	±2% over full scale (Linearity)	± 1 % volume O <sub>2</sub> @ 100% O <sub>2</sub> , applied for 5 min (Repeatability)
Accuracy	±2% over full scale	±1% over full scale if sensor is well calibrated and at constant temperature, pressure, and gas flow
Sensor Type	Thermal conductivity	Electrochemical
Expected Sensor Life	>24 months under normal operating conditions	36 Months
Range	0.0–100.0% helium in air or nitrogen or oxygen	0–100% oxygen
Alarms	(2) User-programmable audible and visual alarms	(2) User-programmable audible and visual alarms
Response Time	<10 seconds for 90% response at 73°F (23°C)	<6 seconds for 90% of final value
Operating Temperature	41° to 104°F (5° to 40°C)	32° to 104°F (0° to 40°C)
Operating Humidity	0-90% rh, non-condensing	0 to 99% rh, non-condensing
Storage Temperature	5° to 122° F (-15° to 50° C)	32° to 122°F (0° to 50°C)
Power	Rechargeable lithium battery with 110/230 V charger	
Dimensions (L x W x H)	3.9 x 8.7 x 7.5 in (9.9 x 22.1 x 19.1 cm)	
Weight	2 lb 12 oz (1361 g)	

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

\*All specifications are at ambient / sea level, 77°F (25°C) and are subject to change without notice.

## FEATURES

- On / off switch
- Low battery warning indicator (9603-LB only)
- Capable of shutting down compressor at set alarm

## ADVANTAGES

- Fast response
- Made to test breathing gasses
- Easy to operate, reliable and accurate
- SKUs:
  - 9603-DP: DIN Rail Plug-in
  - 9603-E: Electrical Plug-In
  - 9603-LB: Lithium Battery



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## SPECIFICATIONS\*

	Pro CO	Pro CO <sub>2</sub>	Pro O <sub>2</sub>
Flow Rate	0.5–5 L/min	0.5–1 L/min	0.5–5 L/min
Resolution	1 ppm	1 ppm	1%
Repeatability	<+5%	±2% of full scale @ 68°F (20°C) ambient	N/A
Accuracy	±5%	N/A	±1% of full scale at constant temperature and pressure (0-1 atm) when calibrated with 100% oxygen
Sensor Type	Electrochemical	Non-dispersive infrared (NIDR)	Electrochemical
Expected Sensor Life	>24 months	5 years	36 Months in air at 25°C and 50% rh
Range	0–50 ppm CO	0–2000 ppm	0–100% oxygen
Alarms	(2) user-programmable audible and visual alarms	(2) user-programmable audible and visual alarms	N/A
Response Time	<50 seconds over complete temperature range	< 30 seconds @ 68°F (20°C) ambient	<6 seconds for 90% of final value
Operating Temperature	14° to 122°F (-10° to 50°C) continuous -4° to 122°F (-20° to 50°C) intermittent	-4° to 122°F (-20° to 50°C)	32° to 104°F (0° to 40°C)
Operating Humidity	15-90% continuous; 0-99% intermittent	0 to 95% rh, non-condensing	0 to 99% rh, non-condensing
Storage Temperature	14° to 140°F (-10° to 60°C)	-4° to 122°F (-20° to 50°C)	32° to 122°F (0° to 50°C)
Dimensions (L x W x H)	6 x 6 x 5 in (15 x 15 x 13 cm)		
Weight	4 lb (1.8 kg)		
Warranty	1 year limited		

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## NUVAIR PRO He-O<sub>2</sub> TRIMIX ALARM ANALYZER



The Pro He-O<sub>2</sub> Trimix Alarm Analyzer represents the most economical and contemporary model for the analysis of oxygen and helium in mixed gas with nitrogen. For an added cost savings, only one screen is used to cycle between He and O<sub>2</sub> readings.

### FEATURES

- Helium reading in any oxygen-helium-nitrogen mix in the range 0.0–100.0% of volume
- Oxygen reading in any oxygen-helium-nitrogen mix in the range 0.0–100.0% of volume
- Thermal conductivity helium sensor developed for a marine sport environment
- O<sub>2</sub> sensor life is up to four years
- He sensor life is up to 10 years
- Robust waterproof hard case
- Automatic calibration of O<sub>2</sub> and He

### SPECIFICATIONS\*

SKU 9602	Oxygen	Helium
Flow Rate	0.5–5 L/min	0.5–1 L/min
Resolution	±0.1%	0.1%
Repeatability / Linearity	±1% volume O <sub>2</sub> @100% O <sub>2</sub> applied for 5 min	±2% over full scale
Accuracy	±1% over full scale @ constant temperature, pressure and gas flow	±2% over full scale
Sensor Type	Electrochemical	Thermal conductivity
Expected Sensor Life	Up to 48 months	Up to ten years
Range	0.0–100% oxygen	0.0–100% helium in air, N <sub>2</sub> or O <sub>2</sub>
Alarms	(2) User-programmable audible and visual alarms	(2) User-programmable audible and visual alarms
Response Time	<15 sec for 90% response, <25 sec for 97% response	<10 sec for 90% response at 73°F (23°C)
Operating Temperature	41° to 104°F (5° to 40°C)	41° to 104°F (5° to 40°C)
Operating Humidity	0 to 95% rh, non-condensing	0 to 90% rh, non-condensing
Storage Temperature Range	5° to 122°F (-15° to 50°C)	5° to 122°F (-15° to 50°C)
Warranty	12 Months - 100% parts and labor 13-18 Months - 50% sensor only 19-24 Months - 25% sensor only	12 Months - 100% parts and labor
Power Requirements	Rechargeable lithium battery with 110/230 V charger	
Dimensions (L x W x H)	3.6 x 8.8 x 7.5 in (9.3 x 22.5 x 19 cm)	
Weight	2 lb (0.95 kg)	

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

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The Nuvair Pro O<sub>2</sub> / CO<sub>2</sub> multigas alarm analyzer is mounted in a rugged, water-resistant case. Each sensor has two user-programmable audible and visual alarms. The internal sensors are plumbed together to monitor a single input. The analyzer has visual and optional audible alarms for each gas. An audible alarm sounds if any alarm set point is reached. When in alarm, the analyzer's analog output can activate an optional relay that shuts down compressors automatically, sounds a remote alarm, or activates emergency backup systems. Comes equipped with a rechargeable lithium-ion battery and universal 110/230-volt charger.

## FEATURES

- Monitors oxygen and carbon dioxide levels to ensure compliance with breathing air standards for CGA, NFPA, OSHA, CSA, EN norms, and others
- Oxygen reading in any mix in the range 0.0-100.0% of volume
- Carbon dioxide reading in parts per million (ppm)
- Two (2) custom audible and visual alarms for each gas
- Oxygen sensor life up to 36 months
- User-replaceable oxygen sensor
- Carbon dioxide sensor life up to 10 years
- Robust waterproof hard case
- Automatic calibration of O<sub>2</sub> and CO<sub>2</sub> sensors

SKU 9618-LB



## SENSOR SPECIFICATIONS\*

Sensor	Pro O <sub>2</sub>	Pro CO <sub>2</sub>
Flow Rate	0.5-2 L/min	0.6-1 L/min
Resolution	±0.1%	50 ppm resolution from 0 to 1000 ppm, then 100 ppm up to full scale
Repeatability	N/A	±2% of full scale @ 68°F (20°C) ambient
Linearity	N/A	At ambient temperature and pressure: ± 2% FSD or ± 10% of the reading, whichever is greater
Accuracy	Within ±1% of full scale at constant temperature and pressure (0-1 atm) when calibrated with 100% oxygen	±2% over full scale
Sensor Type	Electrochemical	Non-dispersive infrared (NDIR)
Expected Sensor Life	Up to 36 months in air at 25°C/77°F and 50% rh	5-10 years based on analyzer handling and use. Check sensor accuracy frequently with test gas and attempt to recalibrate if reading is inaccurate. Replace sensor if recalibration fails.
Range	0-100% oxygen (max), 0-1% oxygen (min)	0-2000 ppm

## ANALYZER SPECIFICATIONS\*

Alarms	Two user-programmable audible and visual alarms
Power	Rechargeable lithium battery with 110/230V charger
Operating Temperature	32-104°F (0-40°C)
Storage Temperature	32-122°F (0-50°C)
Operating Humidity	0-95% rh (non-condensing)
Power	Rechargeable lithium battery or 110/220 V wall plug-in
Dimensions (L × W × H)	3.6 × 8.8 × 7.5 in (9.3 × 22.5 × 19 cm)
Weight	4 lb (0.95 kg)

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

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## Simple Oxygen Analysis for Every Nitrox Diver



The Nuvair O<sub>2</sub> Quickstick is the first diver-friendly oxygen analyzer available anywhere! Easy to use, effective, rugged and amazingly affordable, it is equally convenient for non-divers who need a quick and reliable oxygen analysis above water. The O<sub>2</sub> Quickstick is designed for anyone who wants the security and convenience of having their own oxygen analyzer without having to pay a small fortune to own one.

The O<sub>2</sub> Quickstick's dome-shaped end cover is designed to restrict gas flow to the sensor. If the tank valve and analyzer are not properly operated, sensor damage or false readings can occur. Inaccurate gas analysis can lead to serious personal injury or death. Consult the O<sub>2</sub> Quickstick User Manual for proper operation.

## SPECIFICATIONS

Flow Rate	0.5–2 L/min
Resolution	0.1%
Repeatability	N/A
Accuracy	Within $\pm 1\%$ of full scale at constant temperature and pressure (0–1 atm) when calibrated with 100%
Sensor Type	Electrochemical
Expected Sensor Life	36 months in air at 77°F (25°C) and 50% rh
Range	0–100% oxygen
Alarms	N/A
Response Time	<6 seconds for 90% of final value
Operating Temperature	32° to 104°F (0° to 40°C)
Operating Humidity	0 to 99% rh, non-condensing
Storage Temperature	32° to 122°F (0° to 50°C)
Power	9 V alkaline battery
Dimensions	9 in (22.9 cm) L x 1.5 in (3.8 cm) W
Weight	21.1 oz (600 g)
Warranty	<div>0 – 12 Months      Free replacement</div> <div>13 – 18 Months    50% off replacement</div> <div>19 – 24 Months    25% off replacement</div>

\*All specifications are at ambient / sea level, 77°F (25°C)



## FEATURES

- Fast response, thermally compensated sensor
- Completely sealed water resistant housing
- No hoses, adapters, or cables required
- Easy calibration
- User replaceable battery and sensor
- Waterproof on/off switch
- Anodized marine grade aluminum body
- Pocket size

The Pro O<sub>2</sub> Alarm is designed for in-line measurement of oxygen in a mixed gas. The alarms featured in this model include two audible alarms for high and low percentages and an analog output for shutting down your compressor automatically. It is compatible with nitrox, heliox and trimix.

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.



## SPECIFICATIONS\*

SKU 9612: Panel Mount | SKU 9611: Handheld

Flow Rate	0.5–5 L/min	
Resolution	±0.1% oxygen	
Repeatability	±1% volume O <sub>2</sub> @ 100% O <sub>2</sub> , applied for 5 min	
Linearity	±1% over full scale if sensor well calibrated and @ constant temperature, pressure and gas flow	
Sensor Type	Electrochemical	
Expected Sensor Life	Up to 48 months under normal operating conditions in air	
Range	0–100% oxygen	
Alarms	Two user-programmable audible and visual alarms	
Response Time	<15 seconds for 90% response; <25 seconds for 97% response	
Operating Temperature	41° to 104°F (5° to 40°C)	
Operating Humidity	0 to 95% rh, non-condensing	
Storage Temperature	5° to 122° F (-15° to 50° C)	
Power	9 V alkaline battery, rechargeable lithium battery, 110/220 V wall plug-in or 12 V DIN rail (panel mount only)	
Dimensions (L x W x H)	4 x 2 x 5.5 in (10.2 x 5 x 14 cm) panel mount 2.5 x 1.75 x 4.25 in (6.3 x 4.5 x 10.8 cm) handheld	
Weight	9 oz (255 g) panel mount   7.8 oz (221 g) handheld	
Warranty	0 - 12 months	100% parts and labor
	13 - 18 months	50% off sensor only
	19 - 24 months	25% off sensor only
	25+ months	no warranty coverage

## FEATURES

- On / off switch
- Display range of 0.0–100%
- Low battery warning indicator
- (2) High / low custom audible & visual alarms
- 4-20 mA analog output for external devices
- Capable of shutting down compressor at set alarm
- Replacement sensor: 9507M

## ADVANTAGES

- Fast response
- Made to test breathing gases
- Easy to operate, reliable and accurate
- Long-life electrochemical sensor
- Automatic calibration

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Nuvair CO analyzers detect levels of carbon monoxide that could be harmful to a diver before the gas reaches the diver. Our CO analyzers connect in-line with high pressure compressors to monitor tank fills or on low pressure compressors used by surface-supplied divers. Visual and audible alarms warn of potential CO hazards. Depending on your requirements, we have three styles of CO analyzers that can be portable or mounted directly to the compressor.

## FEATURES

- Tank readings through restrictor or in-line monitoring on compressor
- Temperature compensated sensor
- User replaceable battery options
- Low battery warning indicator
- Made to test breathing gases\*\*
- Optional relays for external alarm or compressor control



Handheld



Panel Mount



Waterproof Box

## SPECIFICATIONS\*

Flow Rate	0.5-5 L/min
Resolution	1 ppm
Repeatability	<+5%
Accuracy	±5%
Sensor Type	Electrochemical
Expected Sensor Life	>24 months in normal use from date of manufacture
Range	0-50 ppm CO
Alarms	Two user-programmable audible and visual alarms
Response Time	<50 seconds over complete temperature range
Operating Temperature	14° to 122°F (-10° to 50°C) continuous -4° to 122°F (-20° to 50°C) intermittent
Operating Humidity	Non-condensing: 15-90% continuous, 0-99% intermittent
Storage Temperature	14° to 140°F (-10° to 60°C)
Power	9 V battery, rechargeable lithium battery, 110/220 V wall plug-in or 12 V DIN rail (panel mount only)
Dimensions	4 x 2 x 5.5 in (10.2 x 5 x 14 cm) panel mount SKU: 9624 2.5 x 1.75 x 4.25 in (6.3 x 4.5 x 10.8 cm) handheld SKU: 9625 3.9 x 8.7 x 7.5 in (9.9 x 22.1 x 19.1 cm) waterproof box SKU: 9626
Weight	9 oz (0.3 kg) panel mount   7.8 oz (0.22 kg) handheld 2 lb 8 oz (1.27 kg) waterproof box
Warranty	12 months from date of purchase, covers parts and labor.

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\*\*Calibration must be confirmed with calibration CO test gas.

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This Pro CO Alarm Analyzer combines carbon monoxide detection, a low pressure alarm, an external high temperature sensor and a low pressure flow meter / regulator. Components are mounted in a water and impact resistant case with a clear cover that is compatible with outdoor and marine environments. Available in two power options.

### FEATURES

- Tank readings through restrictor or in-line monitoring on compressor
- On / off button
- Temperature compensated sensor
- User replaceable battery options
- Low battery warning indicator
- Electrochemical sensor

### SPECIFICATIONS\*

Flow Rate	0.5 - 5 L/min
Resolution	1 ppm
Repeatability	<+5%
Accuracy	±5%
Sensor Type	Electrochemical
Expected Sensor Life	>24 months in normal use from date of manufacture
Range	0-50 ppm CO
Alarms	Two user-programmable audible and visual alarms
Response Time	<50 seconds over complete temperature range
Operating Temperature	14° to 122°F (-10° to 50°C) continuous -4° to 122°F (-22° to 50°C) intermittent
Operating Humidity	Non-condensing: 15-90% continuous, 0-99% intermittent
Storage Temperature	14° to 140°F (-10° to 60°C)
Power	Rechargeable lithium battery or 110/220 V wall plug-in
Dimensions	6 x 6 x 5 in (15 x 15 x 13 cm)
Warranty	12 months from date of purchase

### ADVANTAGES

- Two programmable audible & visual threshold alarms
- Alarm at set point or 10 ppm CO
- Fast response
- Made to test breathing gases\*\*
- Easy to operate, reliable and accurate
- Optional relays for external alarm or compressor control

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

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\*\*Calibration must be confirmed with calibration CO test gas.

The Pro CO Analyzer with Low Pressure Alarm is made for the surface supply working diver that is required to have a carbon monoxide analyzer and low pressure alarm. The carbon monoxide analyzer measures carbon monoxide (CO) levels in gases in the range of 0 to 50 parts per million (ppm). It can be used to measure the CO content in gas mixes that may be contaminated due to the introduction of CO from internal combustion engines or other devices where CO is a byproduct. The low pressure alarm is connected to the volume tank and supplies a loud alarm if the air pressure drops below the set pressure. The water-resistant case includes a digital display and controls that are environmentally sealed. Pressurized gases must be regulated to avoid damage to the analyzer.



### FEATURES

- Compressor mounted instrument
- LCD display
- On/off switch
- Rugged weather proof housing
- Requires very little maintenance
- Low power consumption
- Long life electrochemical sensor
- Battery test function
- Easy-to-operate, reliable and accurate
- Audible and visual alarms
- Pressure switch factory set @ 90 psi (other settings available)
- Made to test breathing gases\*\*

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

### SPECIFICATIONS\*

SKU: 9621-LB

Flow Rate	0.5 - 5 L/min
Resolution	1 ppm
Repeatability	<+5%
Accuracy	±5%
Sensor Type	Electrochemical
Expected Sensor Life	>24 months in normal use from date of manufacture
Range	0-50 ppm CO
Alarms	Two user-programmable audible and visual alarms
Response Time	<50 seconds over complete temperature range
Operating Temperature	14° to 122°F (-10° to 50°C) continuous -4° to 122°F (-22° to 50°C) intermittent
Operating Humidity	Non-condensing: 15-90% continuous, 0-99% intermittent
Storage Temperature	14° to 140°F (-10° to 60°C)
Power	Rechargeable lithium battery
Dimensions (L x W x H)	6 x 6 x 5 in (15 x 15 x 13 cm)
Warranty	12 months from date of purchase

\*All specifications are at ambient / sea level, 77°F (25°C) and are subject to change without notice.

\*\*Calibration must be confirmed with calibration CO test gas.

The Pro CO<sub>2</sub> Alarm Analyzer measures carbon dioxide levels of breathing gas mixtures and air. We offer three models that can be connected in-line on your high or low pressure compressor for continuous monitoring of any CO<sub>2</sub> contamination in your gas. The CO<sub>2</sub> sensor is auto calibrating and provides a temperature compensated, linear CO<sub>2</sub> measurement over sensing range.

## FEATURES

- On / off switch
- Low battery warning indicator
- Two custom audible and visible alarms for low and high set points
- Optional relays for external alarm or compressor control
- Single charge battery life is 20 hours

## ADVANTAGES

- Fast response
- Made to test breathing gases
- Easy to operate, reliable and accurate
- Non-dispersive infrared technology
- Modulated infrared light source = no moving parts



## SPECIFICATIONS\*

SKU 9617 panel mount | SKU 9616 handheld | SKU 9615-LB waterproof box

Flow Rate	0.5-1 L/min
Resolution	1 ppm
Repeatability	±2% of full scale @ 68°F (20°C)
Linearity	At ambient temp and constant pressure: ± 2% FSD or ± 10% of the reading, whichever is greater
Sensor Type	NDIR non-dispersive infrared
Expected Sensor Life	5 years
Range	0-2000 ppm
Alarms	(2) User-programmable audible and visual alarms
Response Time	< 30 seconds @ 68°F (20°C) ambient
Warm-up Time	1 minute @ 68°F (20°C) ambient to final zero ± 0.2% of range; 10 minutes for maximum accuracy
Operating Temperature	-4° to 122°F (-20° to 50°C)
Operating Humidity	0 to 95% rh, non-condensing
Storage Temperature	-4° to 122°F (-20° to 50°C)
Power	Rechargeable lithium battery, 110/230 V wall plug-in or DIN rail (9617 only)
Dimensions (L x W x H)	4 x 2 x 5.5 in (10.2 x 5 x 14 cm) panel mount 2.5 x 1.75 x 4.25 in (6.3 x 4.5 x 10.8 cm) handheld 3.9 x 8.7 x 7.5 in (9.9 x 22.1 x 19.1 cm) waterproof box
Weight	9 oz (0.3 kg) panel mount   7.8 oz (0.22 kg) handheld 2 lb 8 oz (1270 g) waterproof box
Warranty	12 months

\* All specifications are at ambient / sea level, 77°F (25°C) and are subject to change without notice.

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

The Pro H<sub>2</sub>O Alarm Analyzer measures moisture (H<sub>2</sub>O) levels in gases in the range of 0 to 500 parts per million (ppm). It can be used to measure the moisture content in gas mixes that will increase with humidity and moisture saturation of filters. The analyzer is designed to verify H<sub>2</sub>O concentration in stored gas cylinders as well as to monitor continuous gas flow from a compressor.



## FEATURES

- Audible and visual alarms for high moisture content
- Universal power options
- Working pressures of 100–6000 psi
- No limit on flow rates
- Programmable alarm thresholds
- Audible alarm capable
- Fast response
- Easy to operate, reliable and accurate

## OPTIONS

- Optional relays for external alarm or compressor shutdown before filter elements saturate
- 110/210 V wall plug-in or DIN rail power option

## PART NUMBERS

Panel wall mount: SKU 9607-E  
Panel with DIN rail: SKU 9607-DP

## SPECIFICATIONS

Range	0–500 ppm
Display Accuracy	5 ppm + 9% from measured value
Sensor Type	Capacitive
Expected Sensor Life	3 years
Power	110/ 220 V wall plug-in or DIN rail
Response Time	<5 min -4° to -76°F (-20° to -60°C) <15 sec -76° to -4°F (-60° to -20°C)
Operating Temperature/Humidity	-40° to 158°F (-40° to 70°C) 0 to 100% RH
Storage Temperature	-40° to 140°F (-40° to 60°C)
Pressure	0 to 80 bar
Warranty	12 months
Panel Mount Dimensions (L x W x H)	4 2 x 5.5 in (10.2 x 5 x 14 cm)

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.



The Pro H<sub>2</sub>O Moisture Analyzer measures moisture (H<sub>2</sub>O) levels in gases in the range of 0 to 500 parts per million (ppm). It can be used to measure the moisture content in gas mixes that will increase with humidity and moisture saturation of filters. The analyzer is designed to verify H<sub>2</sub>O concentration in stored gas cylinders as well as to monitor continuous gas flow from a compressor.



### FEATURES

- Audible and visual alarms for high moisture content
- Universal power options
- Working pressures of 100-6000 psi
- No limit on flow rates
- Programmable alarm thresholds
- Audible alarm capable
- Fast response
- Easy to operate, reliable and accurate

### OPTIONS

- Made to be installed in multiple systems
- Optional relays for external alarm or compressor shutdown before filter elements saturate

### SPECIFICATIONS

	SKU 9607-LB
Range	0-500 ppm
Display Accuracy	5 ppm + 9% from measured value
Sensor Type	Capacitive
Expected Sensor Life	3 years
Power	Lithium battery
Response Time	<5 min -4° to -76°F (-20° to -60°C) <15 sec -76° to -4°F (-60° to -20°C)
Operating Temperature/Humidity	-40° to 158°F (-40° to 70°C) 0 to 100% RH
Storage Temperature	-40° to 140°F (-40° to 60°C)
Pressure	0 to 80 bar
Warranty	12 months
Box Dimensions (L x W x H)	8.7 x 3.9 x 7.5 in (22.1 x 9.9 x 19.1 cm)
Weight	2.6 lb (box only)

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

The Pro He Alarm Analyzer is designed for simple measurement of helium (He) in a mixed gas. The alarms featured in this model include audible and visual alarms for a set point that can shut down your compressor automatically\* if out of range. Compatible with Heliox and Trimix. No daily calibration needed. It can be used as a continuous reading analyzer while mixing gas.

\*Capable of shutting down compressor at set point alarm with optional relay box.

## FEATURES

- On / off switch
- Display range of 0.0–100%
- Low battery warning indicator
- (2) custom audible & visual alarms
- 4-20 mA analog output for external devices
- Single charge battery life is 30 hours

## ADVANTAGES

- Fast response
- Made to test breathing gases
- Easy to operate, reliable and accurate
- Thermal conductivity sensor
- Easy calibration

## SPECIFICATIONS\*\*

Pro He	
Flow Rate	0.5 to 1 L/min
Resolution	0.1%
Linearity	±2% over full scale
Accuracy	±2% over full scale
Sensor Type	Thermal conductivity
Expected Sensor Life	>24 months under normal operating conditions
Range	0.0-100.0% helium in air or nitrogen or oxygen
Alarms	Two user-programmable audible and visual alarms
Response Time	<10 seconds for 90% response at 73°F (23°C)
Operating Temperature	41° to 104°F (5° to 40°C)
Operating Humidity	0-90% rh, non-condensing
Storage Temperature	5° to 122° F (-15° to 50° C)
Power	Rechargeable lithium battery or 10/230 V wall plug-in
Dimensions (L x W x H)	4 x 2 x 5.5 in (10.2 x 5 x 14 cm) panel mount SKU 9628
	2.5 x 1.75 x 4.25 in (6.3 x 4.5 x 10.8 cm) handheld SKU 9627
	3.9 x 8.7 x 7.5 in (9.9 x 22.1 x 19.1 cm) waterproof box SKU 9608
Weight	9 oz (0.3 kg) panel mount   7.8 oz (0.22 kg) handheld
	2 lb 8 oz (1.27 kg) waterproof box
Warranty	1 year

\*\*All specifications are at ambient / sea level, 77°F (25°C) and are subject to change without notice.



PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.

The Pro N<sub>2</sub> Alarm Analyzer measures the lack of oxygen (O<sub>2</sub>) in gases with the range of 0.0 to 100% to determine the concentration of nitrogen in gases. This analyzer is designed to verify N<sub>2</sub> concentration in stored gas cylinders, enclosed spaces and to analyze gas flow from compressors. When used in breathing gas applications, redundant analyzers must be used for verification.

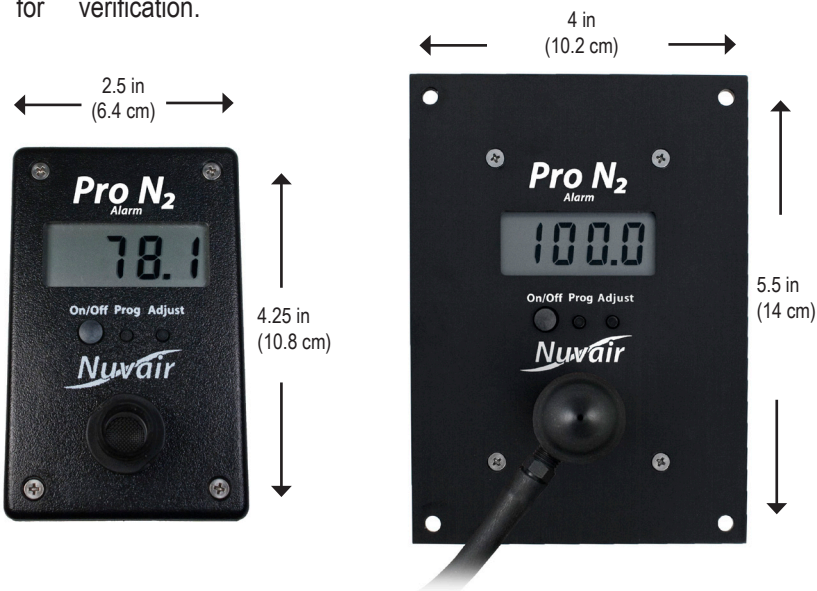
## FEATURES

- On / off switch
- 4-20 mA analog output for external devices
- Display range of 0.0–100%
- Millivolt sensor output reading
- Low battery warning indicator
- Gases like CO, CO<sub>2</sub>, NO<sub>x</sub>, N<sub>2</sub>, H<sub>2</sub>, Ar or He do not affect the sensor but are added to the nitrogen level as they are not O<sub>2</sub>.
- Simple battery and sensor replacement
- Maintenance free, sealed, electrochemical cell sensor is specific to oxygen mixtures
- Replacement sensor is: SKU 9507M

## ADVANTAGES

- Two programmable audible & visual threshold alarms
- Fast response
- Compact water resistant container
- Easy-to-operate, reliable and accurate
- Optional relays for external alarm or compressor control
- Available with a 9 V battery, rechargeable lithium battery or a 110/220 V wall plug-in

PLEASE NOTE: Never expose gas sensors to pressure or you may cause damage and/or false readings. Damaged sensors will not provide accurate gas analysis. Inaccurate gas analysis can lead to serious personal injury or death. Most gas analyzers can be used to analyze a regulated gas sample flow, the contents of a gas cylinder or the flow from a regulator. To produce this flow, a flow restrictor and regulator may be required.



## SPECIFICATIONS\*

SKU 9614: Panel Mount | SKU 9613: Handheld

Flow Rate	0.5–2 L/min
Resolution	±0.1% of volume
Repeatability	±1% over full scale
Sensor Type	Electrochemical
Expected Sensor Life	48 months under normal operating conditions in air
Range	0–100% oxygen
Alarms	User-adjustable minimum and maximum audible and visual alarms
Response Time	<15 Seconds for 90% response; <25 seconds for 97% response
Operating Temperature	41° to 104°F (5° to 40°C)
Operating Humidity	0 to 95% rh, non-condensing
Storage Temperature	5° to 122° F (-15° to 50° C)
Power	9 V battery, rechargeable lithium battery or 110/230 V wall plug-in
Dimensions (L x W x H)	4 x 2 x 5.5 in (10.2 x 5 x 14 cm) panel mount 2.5 x 1.75 x 4.25 in (6.3 x 4.5 x 10.8 cm) handheld
Weight	9 oz (.3 kg) panel mount   7.8 oz (.22 kg) handheld
Warranty	1 year

\*All specifications are at ambient / sea level, 77°F (25°C) and are subject to change without notice.



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Rev. 11.2021