

Quick check

SYMPTOM	CONDITION	ACTION
'bAt L' symbol flashing intermittently on display	Low battery	Change battery
Zero reading on O ₂	O ₂ sensor disconnected	Check connection
	O ₂ sensor expired	Change sensor
	No Oxygen	Check in air and ensure sensor face is free from obstruction
'Err' shown on Helium display	Helium sensor disconnected	Check connection
	Helium sensor fault	Return to supplier
	Calibration knob turned too far left	Turn knob to the right then re-adjust calibration

Spares/accessories part numbers

Oxygen sensor	9100-9212-94
Helium sensor	9100-4535
Flow adaptor	8000-0075A
AA 1.5v battery	2557-1237
1M neoprene tubing	1817-5000
DIN flow restrictor kit	6000-0197K

Specifications

Range:	0.1 to 100% O ₂ 0.1 to 100% He
Accuracy O₂:	± 1% of reading ± 0.2% of O ₂ at STP ± 1% of full scale at STP
Accuracy He:	± 1% of full scale at STP
Resolution:	0.1%
Warm up time:	<15 seconds
Response time:	90% in less than 15 seconds
O₂ Sensor type:	Analox 9100-9212-94 sensor
O₂ Sensor life:	36 month graded warranty
He Sensor Type:	Analox 9100-4535 sensor
He Sensor Life:	12 month warranty
Power (standard):	AA size alkaline battery
Battery life:	50 hours
Operating temp:	0 to 50°C/32 to 122°F
Storage temp:	-5 to 50°C/23 to 122°F
Weight:	0.4kg
Dimensions (mm):	195 (l) x 130 (w) x 62 (d) (7.28 x 5.12 x 2.5")
Certifications:	CE Marked
IP rating:	IP65

Warranties

The ATA pro is supplied with a 1 year helium sensor warranty, a 3 year graded warranty on the O₂ sensor and a 2 year electronics warranty.

Technical manual details

Visit our website for the full technical manual www.analoxsensortechnology.com.net. Search for ATA pro and then click the relevant link. If you have any queries please do not hesitate to contact us.

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ATA pro



IT IS IMPORTANT THAT THESE INSTRUCTIONS ARE READ BEFORE USING THE ATA pro

ANALOX

About the ATA pro

The ATA pro is designed to be a true trimix analyser, measuring the concentrations of oxygen, helium and balance gas in your trimix.

The ATA pro has been designed to offer the highest levels of accuracy without compromising ease of use. Oxygen calibration and helium zero adjust features are provided as standard, and oxygen compensation is provided to ensure you get more accurate helium readings.

Readings are displayed individually on a scroll through backlight display.

Power is provided by 1 AA size battery. The ATA pro will automatically switch off after 10 minutes to ensure battery life is not compromised if the instrument is accidentally turned on.

The current dome adaptor supplied with the ATA pro is a quick, cost effective solution for checking your tank. This dome adaptor is an alternative to the DIN flow restrictor previously supplied with the ATA.

The DIN flow restrictor can still be purchased as an accessory and must be used as per document GEN-801 which is supplied with the kit.

Packaging & contents

On opening your ATA pro, please check you have the following items.

- ATA pro & battery
- Flow adaptor & tubing
- Sample dome
- O₂ compensation card
- User manual

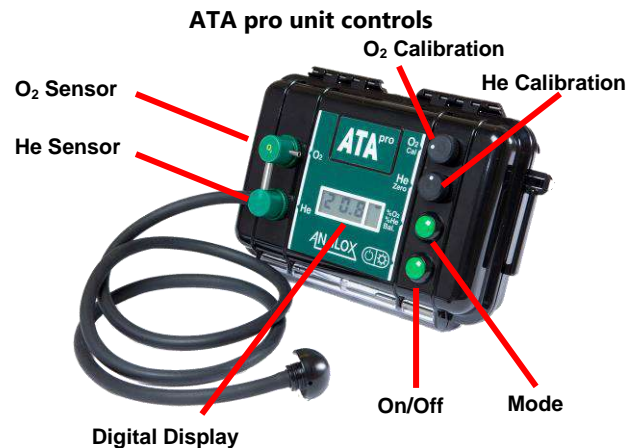
Operation

Open the case and install your battery, ensuring the polarity is correct and that the unit is switched off after the battery is installed.

Oxygen sensor calibration

Oxygen sensor calibration in clean air is essential before every use and is performed as follows:

- Remove the flow adaptor from the sensors
- Expose the analyser to clean air for two minutes and adjust the calibration knob until the display reads the correct value using the oxygen compensation chart
- It is possible that at very high altitude normal calibration is not achievable. In this event you must ascertain the actual pressure in BAR and multiply the atmospheric oxygen percent (20.9%) by this pressure. Please refer to the technical manual for further details



Helium sensor zero adjust

The helium sensor zero adjust enables you to retain the accuracy of the analyser over its expected life as the sensor ages.

- Remove the flow adaptor from the sensors
- Use the mode button to change the display to read helium
- Expose the analyser to clean air for two minutes and adjust the calibration knob until the display reads 0.0
- If the knob is turned down too far 'Err' may be displayed. Simply turn the knob clockwise until a number appears then adjust the knob until the display reads 0.0

Analysing your mix

The ATA pro is provided with a flow adapter and tubing which is needed to be connected to the supplied sample dome.

- Ensure the ATA pro has been calibrated
- Push the flow adaptor into the sensors
- Attach your tubing to the sample dome
- Gently open your tank and push the sample dome against the valve

- Allow the reading to stabilise on the display, and take the O₂ reading
- Use the mode button to change the display to read the helium concentration
- Ensure it is stable and take your reading
- Use the mode button to change the display to show the balance gas, i.e. the inferred nitrogen concentration
- Take your reading and close the tank
- If in doubt repeat the procedure taking care to ensure a gas flow of 0.2 to 1.0 l/m

WARNING

Very high flows may pressurise the sensors and inaccurate readings or sensor damage will result

General care

The O₂ sensor in the ATA pro is an electrochemical device containing a caustic electrolyte. Do not handle the sensor if it is leaking.



According to WEEE regulations this electronic product can not be placed in household waste bins. Please check local regulations for information on the disposal of electronic products in your area.

Oxygen compensation chart for moisture in the atmosphere

ATMOSPHERE OXYGEN PERCENT IN RELATION TO TEMPERATURE AND RELATIVE HUMIDITY		ATMOSPHERIC OXYGEN PERCENT																					
TEMP F	TEMP C	0	4	10	16	21	27	32	38	43	49	10	20	30	40	50	60	70	80	90	100	110	120
10	-12.2	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
20	6.7	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
30	15.6	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
40	24.4	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
50	33.3	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
60	42.2	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
70	51.1	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
80	60.0	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
90	68.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
100	77.8	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.9	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.8	20.7	20.7
H ₂ O at 100% RH		0.6	0.6	1.2	1.6	2.5	3.4	4.7	6.5	8.6	11.5												

If the temperature and RH axis meet in this part of the chart, calibrate to the chart O₂ level or with dry air to maintain 0.5% O₂ accuracy in NITROX.

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