

# OxyGuard Handy Atmosphere

*Hand held Oxygen Meter for Measuring Oxygen in Gas Form*



The Handy Atmosphere is a hand-held meter designed to measure oxygen in gas. It can be used to measure the low oxygen content of packaging gas, the oxygen content of the air and the purity of oxygen gas from oxygen generators and the like. A separate brochure is found for a version designed to measure the oxygen content of the modified atmosphere inside food packages.

Signal processing is performed using a microprocessor, which gives a number of advantages. Just as with other Handy instruments you can simply switch on and measure, but the use of microprocessor technology enables measurements to be supported by a range of advanced functions designed to make things even easier for you:

- Automatic Calibration
- Choice of Language
- Oxygen, temperature, barometric pressure.
- Automatic self-check
- Automatic Probe Check
- Barometric Pressure Compensation
- Extremely long battery life

# Technical Information

## Technical Advantages

### Meter

- Automatic calibration with stability check.
- Automatic self-check of instrument.
- Automatic check of cable and probe.
- Compensates for changes in atmospheric pressure
- User selectable language.
- User selectable main display parameter.
- "On-screen" instructions.
- Waterproof.
- 1400 hours use from one 9V alkaline battery.
- Illuminated display with variable intensity.
- Automatic shutdown for power saving.

### Probe

- Galvanic type.
- Self-polarizing.
- No warm up time.
- Fully temperature compensated.
- Remarkably short response time.
- Stores dry.
- Excellent long-term stability.
- Tough membrane.
- No need for regular service or renovation.
- Probe renovation easy and fast when needed.
- Spares available at very low price.

## Specifications

Probe Type:	Galvanic cell, self polarizing, self temperature compensating.
Cable Length:	Standard 3 m. Any length available on request.
Operating Conditions:	Probe: -5 to +45°C, meter -20 to +60°C.
Encapsulation (meter):	Short-term immersion proof to max. 5m depth.
Measuring Range:	0-100% oxygen by volume. Temperature -5 to +45°C.
Accuracy:	Depends on calibration accuracy. Typically better than +/- 1% of measured value +/- 1 digit within the standard measuring range.
Repeatability:	Typically better than +/- 0.5% of measured value.
Response Time:	90% of end value in less than 20 seconds at unchanged temperature. For maximum accuracy the probe and gas being measured must have the same temperature. Temperature response time of probe in gas approx. 1 hr.
Accuracy, Temperature:	+/- 0.2°C.
Display:	Large, easy to read graphical LCD display. Variable backlight.
Dimensions:	98 mm diameter x 36 mm + belt clip (if used).
Self-check of:	Probe function, meter function, cable, battery.
Useful battery life:	Typically 500 hours normal use, max. 2 years.
Standard Accessories:	Membrane cap, membranes, electrolyte, cathode cleaning pad, storage pouch.

## Ordering Information

H02A2:	Handy Atmosphere with type 2 probe and standard accessories. Range 0-100% volume.
H02CHA:	Flow-through measurement chamber for the Handy Atmosphere.
H02XAC1:	Atmosphere accessory kit: membrane cap, 5 membranes & O-rings, 50 ml electrolyte and tool.
H02XM:	Atmosphere membrane kit: set of membranes & O-rings.
H02XCAP:	Atmosphere membrane cap with membrane.
D10E2500:	500 ml electrolyte - type 2.

H02AP Handy Atmosphere brochure gb 1110  
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