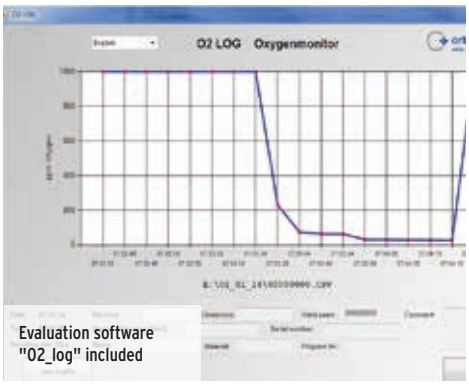
ORBmax

residual oxygen meter

The ORBmax residual oxygen meter sets a milestone for fast, exact detection of residual oxygen, and with it for complete documentation of this parameter. At the same time, the new measuring method results in greater efficiency and higher quality.

The ORBmax does not require any heating-up time. It recognizes the oxygen percentage reliably, rapidly and precisely during the entire welding process.



Evaluation software "O2_log" included

Wide range of accessories, including robust transport case

The "Optical oxygen measurement via fluorescence extinction" method for welding technology is far superior to the conventional methods using zirconium sensors: It requires no warm-up time whatsoever; reliably, quickly and precisely detects the oxygen share in the gas; unchecked alleged increasing of the measured value due to the formation of ozone is eliminated; the measurement is possible in all gas mixtures without manual switch-over (even with forming gas with a variable percentage of hydrogen).

The exact, fast detection of the oxygen content reduces the otherwise long flooding time of the forming gas. The operator can start the safe welding process considerably earlier: As a result, precious working time is saved and the gas consumption reduced. In addition, ORBmax requires no maintenance of any kind: Calibration once a year in accordance with the standard ISO 9001 is totally sufficient. Comprehensive quality assurance is required for welding tubes in plant and apparatus engineering for the food processing, beverage, cosmetics and pharmaceuticals industries, medical and bio-technology as well as fine chemicals, and a welding procedure qualification is often specified for the welded seams: As quality certification, not only the values from the power source, but also the residual oxygen values can be documented with the ORBmax.

When used as a stand-alone solution, ORBmax records a digital log with a time stamp. In conjunction with the ORBIMAT welding current source, the welding process can be monitored in real-time and automatically switched off when an increased oxygen content occurs.

- No heating period required
- Rapid reaction times
- High measuring precision
- Measuring of the residual oxygen value during the welding process
- No uncontrolled increase in measurement values during the welding process
- Measuring of forming gas with variable hydrogen content without switching over
- Measuring of the residual oxygen value in all gas mixtures
- SD-card storage of the measured value
- User-friendly touch screen
- Moisture-resistant sensor
- Alarm mode with signal (beeper) as well as change in display color (green/red)
- Degree of protection IP32
- Configurable alarm or limit value and storage interval
- Multi-range voltage supply
- Software for data evaluation
- Connection possibility to ORBIMAT orbital welding power sources
- Maintenance-free sensor
- Appealing and compact design

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Characteristics, see page 90.

TECHNICAL SPECIFICATIONS	ORBMAX
Dimensions (LxDxH)	203 x 204 x 82 mm
	7.99 x 8.03 x 3.23 in
Weight, approx.	1.65 kg
	3.64 lbs
Protection class device	IP32
Protection class transport case	IP67
Power connection	100 - 240 V AC, 50 - 60 Hz
Measuring range	1 - 999 ppm
SCOPE OF DELIVERY	• 1 ORBmax residual oxygen meter • 1 transport case • 1 power unit supply set 100 - 240 VAC/12 VDC • 1 measuring hose (with test tip and filter) • 1 SD card incl. PC evaluation software "02_log" • 1 interface cable ORBmax/ORBIMAT CA • 1 interface cable ORBmax/ORBIMAT SW • 2 reserve filter inserts • 1 operating instructions

ORBmax

including practical mounting eye

ITEM	VERSION	CODE	MACHINE WEIGHT KG	SHIPPING WEIGHT KG
ORBmax	100 - 240 V, 50/60 Hz	**882 000 010**	1.65	4.665

Interface cable ORBmax/ORBIMAT SW

For retrofitting older ORBmax devices.
Allows the connection to ORBIMAT SW power sources.
At newer ORBmax devices this interface cable is already included in the scope of delivery.

ITEM	CODE	KG
Interface cable ORBmax - ORBIMAT SW	**850 040 031**	0.065

Consumables for ORBmax

All individual parts are already included in the scope of delivery of the ORBmax.

ITEM	CODE	KG
Measuring hose set, including: • 1 hose* • 1 filter housing including filter insert (1 unit) • 1 test tip • 1 hose connector	**882 050 006**	0.081
Hose*	**882 012 010**	0.050
Filter housing including filter insert (1 unit)	**882 020 003**	0.021
Filter inserts (5 piece per packing unit)	**882 030 002**	0.003
Test tip	**882 012 011**	0.004
Plastic connector test tip – hose	**882 012 012**	0.001

* Please specify the hose length in meters when ordering.

Measuring hose (individual parts)

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