MADE IN GERMANY

# Advanced Oxygen Analyzers

## for TIG and Orbital Welding

# Pro2VisionH2 Series

**Optical oxygen sensor for precise ppm-level measurements with an ultra-fast response time. Instantly ready for use with no warm-up required. Optimized for hydrogen, insensitive to moisture, and featuring automatic pressure, temperature, and humidity compensation.**
**Low-maintenance and energy-efficient.**

## Accurate Purge Gas Monitoring

In TIG and orbital TIG welding, oxygen contamination inside the tube or pipe can significantly affect weld quality. Even small amounts of residual oxygen can cause discoloration, oxidation, reduced corrosion resistance, and weld defects.

Proper purge gas monitoring is therefore essential to ensure repeatable, high-quality welds and to optimize purge times and gas consumption. The Pro2VisionH2 Series has been specifically developed to provide accurate residual oxygen measurement during purging and welding operations, helping operators achieve the required oxygen levels before welding begins.

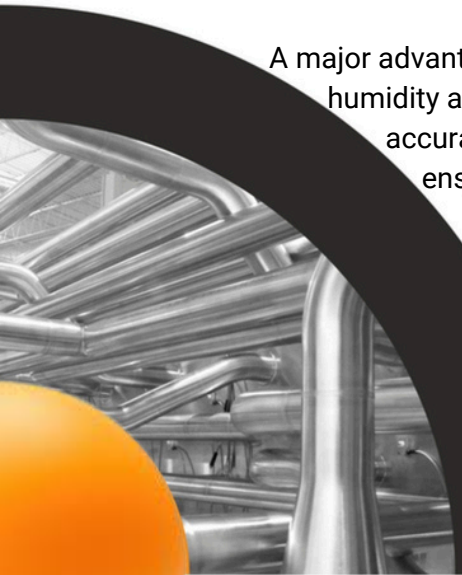
## Proprietary Optical Quench Sensor Technology

At the heart of every Pro2VisionH2 analyzer is Orbitalservice's proprietary optical quench oxygen sensor, entirely developed in-house.

Unlike traditional zirconium oxide sensors, which require high operating temperatures and are subject to wear, the Pro2VisionH2 sensor operates at ambient temperature and offers an expected service life exceeding 10 years without degradation.

Compared with conventional optical oxygen sensors, the Pro2VisionH2 sensor incorporates advanced signal processing and compensation algorithms, providing superior long-term stability, improved accuracy at low ppm levels, and exceptional resistance to environmental influences.

A major advantage of the Orbitalservice optical quench technology is its immunity to humidity and condensation damage. While moisture may affect the ability to accurately measure certain gas mixtures, it will not damage the sensor, ensuring long-term reliability in demanding industrial environments.



ORBITALSERVICE®
THE FUTURE OF ORBITAL WELDING, TODAY AND TOMORROW

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| Feature | Pro2Vision | Pro2VisionH2 |
|---|---|---|
| Part number | **PRO2Vision100** | **PRO2VisionH2100** |
| Measuring Range | 1000 - 1 ppm $O_2$ | 1000 - 1 ppm $O_2$ |
| Resolution | 1 ppm | 1 ppm |
| Gases Measurement | Arg (Optional Upgrade for humid gases) | Ar, N2, He, Ar-H2, N2-H2 (as well as residual moisture) |
| Display Dew Point, Sensor Temperature, Gas Humidity * | Optional Upgrade | ✓ |
| Bluetooth Connectivity | Optional Upgrade | ✓ |
| PC & Mobile Visualization | Optional Upgrade | ✓ |
| 5 VDC USB-C Charging (charger and charging cable optional) | ✓ | ✓ |
| Battery | 3.7 VDC, Lithium Ion, Model 18650 | 3.7 VDC, Lithium Ion, Model 18650 |
| Battery life | Approx. 11 hours | Approx. 11 hours |
| Voltage indicator in the display | Battery calibrated, display from 100% to 5% | Battery calibrated, display from 100% to 5% |
| Filter | Version Luer Lok, 45 µm | Version Luer Lok, 45 µm |
| Suction hose | Acrylic, 3 mm (≈ 1/8")<br>1 meter long (3 ft 3⅜") | Acrylic, 3 mm (≈ 1/8")<br>1 meter long (3 ft 3⅜") |
| Acoustic and Visual Alarms | ✓ | ✓ |
| Sensor Technology | Orbitalservice Optical Quench Sensor | Orbitalservice Optical Quench Sensor |
| Sensor Lifetime | >10 years | >10 years |
| Housing material | TPU with 40% glass content | TPU with 40% glass content |
| Dimensions: analyzer<br>case | 160 mm x 75 mm x 50 mm (6.30" x 2.95" x 1.97")<br>300 mm x 200 mm x 135 mm (11.81" x 7.87" x 5.31") | 160 mm x 75 mm x 50 mm (6.30" x 2.95" x 1.97")<br>300 mm x 200 mm x 135 mm (11.81" x 7.87" x 5.31") |
| Weight: without case / with case | 0.32 kg (11.3 oz) / 1.2 kg (2.65 lb) | 0.32 kg (11.3 oz) / 1.2 kg (2.65 lb) |

*Values displayed during the calibration on our calibration software

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