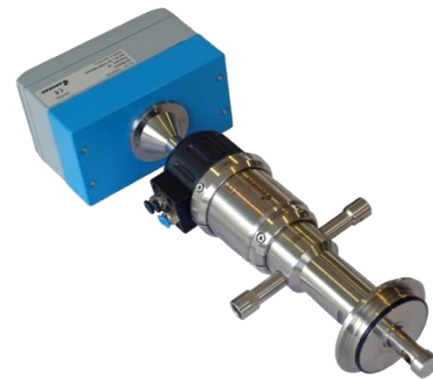


# OXYTRANS

## OXYTRANS INNOVATION

If required OXYTRANS can be supplied with a manual or pneumatic retractable unit made of electro-polished stainless steel. Equipped with an automatic safety lock while the sensor is removed, this is the perfect solution for all manufacturers who cannot stop production for maintaining the sensor. Also, this feature safely protects the optical window during cleaning of the plant – even with the most aggressive cleaning detergents. The retractable unit has two connections for optimum sterilization and a stroke of just 36 mm.



**Innovation. Dedication. Centec.**

**Germany**  
Centec GmbH  
Wilhelm-Röntgen-Strasse 10  
63477 Maintal  
Tel.: +49 6181 18 78 0  
Fax: +49 6181 18 78 50  
info@centec.de

**Czech Republic**  
Centec automatika s.r.o.  
Pekařská 8/601  
155 00 Praha 5  
Tel.: +420 257 084 111  
Fax: +420 235 518 701  
prodej@centec.cz

**USA**  
Centec LLC  
P. O. Box 820  
Germantown, WI 53022-0820  
Tel.: +1 262 251 8209  
Fax: +1 262 251 8376  
info@centec-usa.com

**UK**  
Centec UK  
Stalworths, The Street  
Great Tey, Colchester, Essex, CO6 1JS  
Tel.: +44 1206 21 19 21  
Fax: +44 1206 21 19 16  
info@centec-uk.com

**Serbia**  
Centec Serbia  
Bogdana Žerajića 34/III  
11000 Beograd  
Tel.: +381 11 358 11 24  
Fax: +381 11 358 11 24  
info@centec.rs

**India**  
Centec RRR Systems & Sensors Pvt Ltd  
RRR House, Plot 80, Sector 23  
Turbhe Naka, Navi Mumbai - 400 705  
Tel.: +91 22 2783 3655 & 2783 1348  
Fax: +91 22 2783 4814  
mail@centecrrr.com

**Brazil**  
Centec América Latina Ltda  
Largo de Sao Francisco de Paula nº 26  
Centro Cep. 20051 070 Rio de Janeiro  
Tel.: +55 21 2223 2066  
Fax: +55 21 2223 0324  
centelatina@terra.com.br

## Measurement of Oxygen Content

### Centec Process Sensors



Automated  
process skids  
and high precision  
sensors from a  
single source.  
**Centec.**

# OXYTRANS

## The Principle

OXYTRANS continuously measures the content of oxygen in liquids and gases. Designed for applications that require maximum sensitivity and high accuracy, this device is used in various industries all around the world. Breweries and soft drink manufacturers determine the O<sub>2</sub> content in deaerated water and beverages with OXYTRANS. Oxygen measurement during fermentation is an ideal application. Numerous power plants use the sensor to monitor oxygen levels in their boiler water. The state of the art optical measurement technology is based on the effect of luminescence quenching, i.e. the radiationless redistribution of excitation energy via a molecular interaction. An indicator layer on a small glass component (“optical window”) installed in the measuring head is illuminated with blue-green-light. When the indicator molecules absorb the incident light they are promoted to a higher energy state. After a certain time they convert back to their ground state during which a detectable red light is emitted. If O<sub>2</sub> is present the energy is transferred from the indicator molecules to the oxygen. The detected signal decreases according to the oxygen content. OXYTRANS displays various units, e.g. ppb, ppm and % oxygen. The lightweight portable device is very robust and can easily be connected with hoses.



**OXYTRANS TR**  
Transmitter Version



**OXYTRANS M**  
Portable Version

- Available as Transmitter and Portable Version with Local Display
- Highly Precise and Fast Measurement of O<sub>2</sub> in Liquids and Gases
- Optical Technology without Membrane and Electrolyte
- Short Response Time and Excellent Long-Term Stability
- Hygienic Execution and Full CIP Capability
- Easy Maintainable within a Few Minutes
- Outstanding Price-Performance-Ratio

Technical Data	OXYTRANS TR	OXYTRANS M
<b>Liquid Phase</b>	I) 1 ppb - 2 ppm or II) 30 ppb - 50 ppm	I) 1 ppb - 2 ppm or II) 30 ppb - 50 ppm
<b>Liquid Phase Accuracy</b>	I) ± 1 ppb or II) ± 30 ppb	I) ± 1 ppb or II) ± 30 ppb
<b>Gas Phase</b>	I) 0 - 4,2 % O <sub>2</sub> or II) 0 - 50 % O <sub>2</sub>	I) 0 - 4,2 % O <sub>2</sub> or II) 0 - 50 % O <sub>2</sub>
<b>Gas Phase Accuracy</b>	I) ± 0,002 % O <sub>2</sub> II) ± 0,03 % O <sub>2</sub>	I) ± 0,002 % O <sub>2</sub> II) ± 0,03 % O <sub>2</sub>
Response Time	T90 ≤ 10 s	T90 ≤ 10 s
Inlet Pressure	max. 12 bar	max. 12 bar
Temperature of Operation	- 5 - + 55 °C (option: + 98 °C) resistance: max. + 130 °C	- 5 - + 55 °C (option: + 98 °C) resistance: max. + 130 °C
Temperature Compensation	Pt100	Pt100
Material	1.4404/AISI 304, silicon (FDA), PTFE (FDA)	1.4404/AISI 304, silicon (FDA), PTFE (FDA)
Connections	Varivent© DN65 compatible to inline housings DN40 - 150; DIN; ANSI; others on request	hoses of 6 mm diameter
Interface (OXYTRANS TR)	input: 2 x digital (24 VDC) output:	manual and automatic with selectable intervals (5 - 600 s); approx. 5.000 measured values;
Data Logger (OXYTRANS M)	3 x digital (24 VDC) & 2 x analog (4 - 20 mA)	PC software and USB-interface for data management
Profibus DP	option	-
Enclosure Rating	IP65	IP65
Power Supply	24 VDC	battery, rechargeable