OXYTRANS INNOVATION
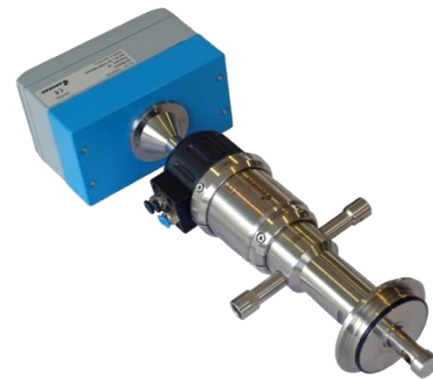
If required OXYTRANS can be supplied with a manual or pneumatic retractable unit made of electro-polished stainless steel. Equipped with an automatic safety lock while the sensor is removed, this is the perfect solution for all manufacturers who cannot stop production for maintaining the sensor. Also, 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 distributor:
Protecnica Solutions Ltd
info@protecnica.co.uk
www.protecnica.co.uk

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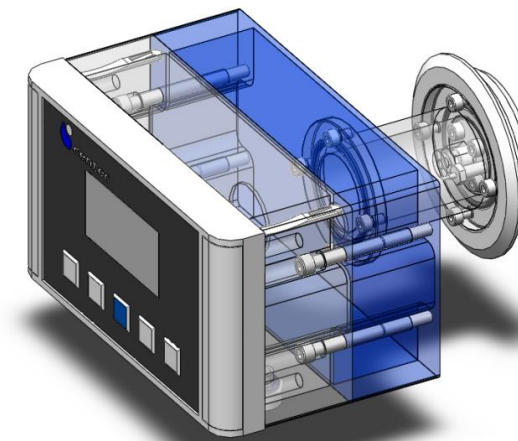Fax: +44 1206 21 19 16
info@centec-uk.com

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
centeclatina@terra.com.br

OXYTRANS

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_2 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_2 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.

- **Available as Transmitter and Portable Version with Local Display**
- **Highly Precise and Fast Measurement of O_2 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**

OXYTRANS TR
Transmitter Version

OXYTRANS M
Portable Version

Technical Data

	OXYTRANS TR	OXYTRANS M
Liquid Phase Measuring Range	I) 1 ppb - 2 ppm or II) 30 ppb - 50 ppm	I) 1 ppb - 2 ppm or II) 30 ppb - 50 ppm
Liquid Phase Accuracy	I) ± 1 ppb or II) ± 30 ppb	I) ± 1 ppb or II) ± 30 ppb
Gas Phase Measuring Range	I) 0 - 4,2 % O_2 or II) 0 - 50 % O_2	I) 0 - 4,2 % O_2 or II) 0 - 50 % O_2
Gas Phase Accuracy	I) ± 0,002 % O_2 II) ± 0,03 % O_2	I) ± 0,002 % O_2 II) ± 0,03 % O_2
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: 3 x digital (24 VDC) & 2 x analog (4 - 20 mA)	manual and automatic with selectable intervals (5 - 600 s); approx. 5.000 measured vales; PC software and USB-interface for data management
Data Logger (OXYTRANS M)		
Profibus DP	option	-
Enclosure Rating	IP65	IP65
Power Supply	24 VDC	battery, rechargeable

The Centec production is certified according to ISO 9001.