

# 3000RS Series

## Oxygen Analyzers



- Trace or percent oxygen analysis
- Touchscreen color LCD displays reading and key parameters
- Integral MEMS flow sensor
- 316 stainless steel tubing and fittings
- Auto-calibration and remote calibration ready (integral valves optional)
- EMI/RFI shielded

The 3000RS Series represents Teledyne's benchmark online oxygen analyzer platform in its smallest yet most powerful form factor yet. The 3000RS series are available with a micro-fuel cell for trace or percent oxygen analysis.

A front panel dimension of approximately 4.3"W x 5.1"H (10.9 x 12.9) allows for mounting of up to four (4) RS Series analyzers in a single 19-inch 3U chassis. Key parameters are displayed on the 3.5" touchscreen color LCD. All gas connections and I/O are accessible at the rear panel.



### Sensor Types

#### Micro-Fuel Cell

Excellent for ppm or percent detection, micro-fuel cells absorb and react with oxygen to generate a linear electrical signal proportional to O<sub>2</sub> concentration. They are suitable for operation in a variety of backgrounds, are insensitive to changes in flow and are maintenance-free. Teledyne's patented InstaTrace sensors shield the sensing membrane from high ambient oxygen exposure during installation, resulting in a much faster initial recovery time to low ppm levels.



	<b>3000RS-P</b>	<b>3000RS-T</b>
<b>Sensor</b>	Micro-Fuel Cell	Micro-Fuel Cell
<b>Ranges</b>	0-1% to 0-100%	0-10 ppm to 0-9,999 ppm (0-1 ppm with -XL option)
<b>Approvals</b>	CE marked	
<b>Repeatability</b>	1% FS	1% FS
<b>Linearity</b>	1% FS	1% FS
<b>Response Time</b>	<10 seconds	< 10 sec for 0-1,000 ppm range < 60 sec for 0-10 ppm range < 100 sec for 0-1 ppm range (-XL only)
<b>Temperature</b>	32° to 122°F (0° to 50°C)	A-Class Sensor: 32° to 104°F (0° to 40°C)  B-Class Sensor: 32° to 122°F (0° to 50°C)
<b>Inlet Flow</b>	1 - 2 SCFH (0.5 - 1.0 SLPM)	1 - 2 SCFH (0.5 - 1.0 SLPM)
<b>Display</b>	3.5" touchscreen color LCD	
<b>I/O</b>	4-20 mADC (isolated) or 0-1 VDC analog outputs 1 x system fault alarm, Form-C relay contact 2 x concentration alarms, Form-C relay contact 4-20 mADC (isolated) or 0-1 VDC Range ID 4 x Form-A (normally open) Range ID Contacts Profibus-DP and RS232 communications	
<b>Gas Connections</b>	1/8" compression fittings for all connections	
<b>Voltage</b>	24 VDC (optional 100-240 VAC, 50/60 Hz with AC adapter)	
<b>Power</b>	10 W Nominal	10 W Nominal
<b>Dimensions</b>	4.3"W x 5.1"H x 17.8"L (10.9 x 12.9 x 45.2 cm)	

**BERNT**  
**MESSTECHNIK**

40472 Düsseldorf  
Wahlerstraße 12  
Tel: +49 211 6696998-0

81245 München  
Petzetstraße 8  
Tel: +49 89 8110330

info@berntgmbh.de  
www.berntgmbh.de



**TELEDYNE**  
**ANALYTICAL INSTRUMENTS**  
Everywhereyoulook™

16830 Chestnut Street, City of Industry, CA 91748  
Phone: +1.626.934.1500  
Email: Ask\_TAI@Teledyne.com

For more information on Teledyne Analytical Instruments, visit our website at:

[www.teledyne-ai.com](http://www.teledyne-ai.com)

©2024 Teledyne Analytical Instruments  
Printed documents are uncontrolled.  
Revised 03.22.2024

