



**Model**  
**1732** Oxygen  
**Transmitter**



## Optimum combustion reduces your fuel bill

Optimum combustion reduces your fuel bill and helps the whole world and future generations by reducing harmful greenhouse gas emissions. The current high cost of fuel has helped to reduce the payback period for the cost of installing oxygen monitoring and air / fuel ratio control. It makes sense to consider the benefits of installing an oxygen system on your combustion process.

The 1732 oxygen transmitter is suitable for gaseous oxygen measurements in a variety of processes. These are some of those processes that the 1732 is designed for:

- |                         |                                                                                                                          |                             |                                                                                                                                        |
|-------------------------|--------------------------------------------------------------------------------------------------------------------------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| <b>Boilers</b>          | <ul style="list-style-type: none"> <li>• Power Generation</li> <li>• Package</li> <li>• Black Liquor Recovery</li> </ul> | <b>Kilns &amp; Furnaces</b> | <ul style="list-style-type: none"> <li>• Rotary Lime</li> <li>• Cement</li> <li>• Glass</li> <li>• Ceramic</li> <li>• Brick</li> </ul> |
| <b>Iron &amp; Steel</b> | <ul style="list-style-type: none"> <li>• Heating Furnaces</li> <li>• Coke Ovens</li> <li>• Soaking Pits</li> </ul>       | <b>Nitrogen Purity</b>      | <ul style="list-style-type: none"> <li>• Generator</li> </ul>                                                                          |
| <b>Aluminium</b>        | <ul style="list-style-type: none"> <li>• Potlines</li> <li>• Holding Furnaces</li> </ul>                                 | <b>O2 Enrichment</b>        | <ul style="list-style-type: none"> <li>• Generator</li> </ul>                                                                          |
| <b>Incinerators</b>     | <ul style="list-style-type: none"> <li>• PVC</li> <li>• Medical Waste</li> <li>• Toxic Waste</li> </ul>                  | <b>Food Packaging</b>       | <ul style="list-style-type: none"> <li>• Continuous Monitoring</li> </ul>                                                              |

If your particular process is not listed above then we would love to hear from you. There is a good chance that Novatech Controls has an appropriate product for your process.

This is the sixth generation of zirconia oxygen transmitters designed and manufactured by Novatech Controls since 1980. This oxygen measurement is based on the world's strongest zirconia sensor that was developed by the CSIRO's Department of Materials Science. Novatech Controls holds the exclusive rights to manufacture this unique sensor.

This sensor, combined with the state-of-the-art 1732 transmitter, provides the perfect solution for your gaseous oxygen measurement.

Call your nearest Novatech distributor, or Novatech, to obtain expert advice for your particular application. We have been dedicated to designing and manufacturing the most reliable zirconia oxygen measuring instruments for more than 25 years.

# Specifications

## Inputs

- One or two zirconia oxygen probes or sensors
- One zirconia sensor & auxiliary thermocouple type J, K, R or S
- Burner "On" signal (dry contact)
- Purge air flow switch

## Outputs

- Four programmable alarm relays
- Two isolated 4-20mA or 0-20mA
- SSR outputs to purge & calibration check gas solenoid valves

## Range of Outputs

- Linear oxygen sensor 1
- Linear oxygen sensor 2
- Average oxygen
- Very low oxygen
- Logarithmic oxygen
- Reducing oxygen
- Oxygen deficiency
- Carbon dioxide
- Probe EMF
- Auxiliary temperature
- Combustibles
- Burner Efficiency
- No Output

## Alarms

- Common alarm relay with 20 user selectable instrument alarm functions.
- Three programmable process alarm relays for very low oxygen, low oxygen, high oxygen, oxygen deviation, probe temperature low, cal check in progress, purge in progress, plus any alarms that were not selected for the common alarm. Multiple selections can be made for all relays.

## Alarm Contacts

- Normally open failsafe (open for alarm state)
- 2A / 240VAC, 2A / 30VDC

## Range of Local Indication

- 1.0 x 10<sup>-30%</sup> to 100% O<sub>2</sub>
- 0.01ppm to 10,000ppm – automatically defaults to exponential format below 0.01ppm and percent format above 10,000ppm (1%)

## Serial / Network Interface

- RS232
- RS485 MODBUS™

## Secondary Parameter Display

Any or all of the following can be selected for display on the lower line:

- Probe #1 temperature
- Probe #2 temperature
- Probe #1 EMF
- Probe #2 EMF
- Probe #1 impedance
- Probe #2 impedance
- Oxygen % probe #2
- Average oxygen %
- Auxiliary temperature
- Ambient temperature
- Ambient RH %
- Carbon dioxide
- Combustibles
- Oxygen deficiency
- Burner efficiency

## Accuracy

- ± 1% of the actual oxygen reading with a repeatability of 0.5%. For example, at 2% oxygen the accuracy would be ±0.02% oxygen.

## Operating Temperature

- -25°C to 55°C
- 5% to 95% RH (non-condensing)

## Power Requirements

- 85VAC to 265VAC 50 / 60 Hz
- 5W

## Degree of Protection

- IP65
- IP54 with internal reference air pump

## Dimensions

- 260mm W x 160mm H x 90mm D

## Weight

- 3kg

## Distributed by:

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