



## 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:

- Boilers**
  - Power generation
  - Package
  - Black liquor recovery
- Iron & steel**
  - Heating furnaces
  - Coke ovens
  - Soaking pits
- Aluminium**
  - Potlines
  - Holding furnaces
- Incinerators**
  - PVC
  - Medical waste
  - Toxic waste
- Kilns & furnaces**
  - Rotary lime
  - Cement
  - Glass
  - Ceramic
  - Brick
- Nitrogen purity**
  - Generator
- O<sub>2</sub> enrichment**
  - Generator
- Food packaging**
  - Continuous monitoring

If your particular process is not listed 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 30 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 0 to 100%

Average oxygen 0 to 100%

Very low oxygen 0 to 20,000ppm

Logarithmic oxygen 0.1 to 20% fixed scale

Reducing oxygen  $10^{-30}$  to 100%

Oxygen deficiency -10 to 20%

Combustion efficiency 0 to 100%

Combustibles % 0 to 2%

Maximum theoretical CO<sub>2</sub> 0 to 100%

Probe EMF 0 to 1500mV

Auxiliary TC temperature 0 to 1600°C (2910°F)

## Alarms

Common alarm relay with 20 user selectable instrument alarm functions

Three programmable process alarm relays for:

*Low oxygen*

*Very low oxygen*

*High oxygen*

*Oxygen deviation*

*Probe temperature low*

*Purge in progress*

*Cal check in progress*

*Any alarms condition not selected for the common alarm*

Multiple selections can be made for all relays

## Alarm contacts

Normally open failsafe (open for alarm state)

240VAC / 30VDC, 2A

## Range of local indication

1.0 x 10<sup>-30</sup>% to 100% oxygen

0.01ppm to 10,000ppm – automatically defaults to exponential format below 0.01ppm and percent format above 10,000ppm (1%)

## Network interface

RS-232

RS-485 MODBUS™

## Secondary parameter display

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

*Probe 1/2 temperature*

*Probe 1/2 EMF*

*Probe 1/2 impedance*

*Probe 2 oxygen %*

*Average oxygen %*

*Auxiliary TC temperature*

*Ambient temperature*

*Ambient RH %*

*Oxygen deficiency 1/2*

*Combustibles 1/2*

*Maximum theoretical CO<sub>2</sub> 1/2*

*Burner efficiency*

*4-20mA output 1*

*4-20mA output 2*

Probe 2 & average parameters only available with two probes

## 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

## Environmental rating

Operating temperature -25°C to 55°C (-10°F to 130°F)

Relative humidity 5% to 95% (non-condensing)

Altitude 2000m maximum

## Power requirements

Mains voltage 100 to 240VAC -6/+10%, 50/60Hz

Overvoltage category II (IEC60364-4-443)

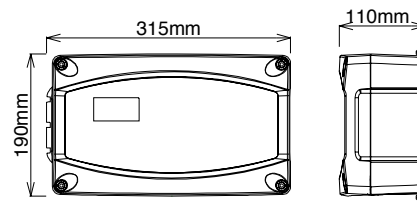
Power 5W plus probe power

## Degree of protection

IP65

IP54 with internal reference air pump

## Dimensions



315mm x 190mm x 110mm (12.4" x 7.5" x 4.3")

## Weight

3.3kg (7.3lb)