Oxygen measurement made simple

The Novatech 1234 Oxygen Sensors are ideal for:
- Flue gas analysis
- Inert atmosphere measurements
- Modified Atmosphere Packaging
- Inert and sterile packaging
- General industrial use
- Scientific tasks

One, Two, Three, Four Reasons for using Novatech 1234 sensors

Reasons for using Novatech 1234 sensors

One: Useable for Oxygen measurement in many processes
Two: Adapts to positive and negative pressure process streams
Three: Suitable for many corrosive situations
Four: Low maintenance and high accuracy

The Novatech 1234 Oxygen Sensors
- Easy-to-operate, reliable, no regular calibration needed
- Select ancillaries for your application
- Accurate, rapid response, low drift Zirconia Oxygen sensor: 1 ppm to 100%
- Connect to the Novatech 1632 Oxygen Analyser, analog input card on a PC, PLC, or DCS

Accuracy and reliability
The Novatech 1234 Oxygen sensors provide accurate and virtually drift-free measurement for years.

Adapting the Novatech 1234 to your application
The Novatech 1234 sensors are available for Oxygen measurement in a range of applications by using ancillary equipment including:
- Process sampling probes available to suit your application
- Integral electric pump and filter assembly for aspirating samples
- Filters for dry dust, wet dust or hydrocarbons
- Flow meter

The Novatech 1234 sensors are responsive
Accurate readings can be made with sample response times as short as 5 seconds to changes in gas composition for Oxygen.

Talk to Novatech about your Oxygen measurement application; we’re responsive and knowledgeable!
**Specifications**

**Measuring Range**
- 1 ppm to 100% oxygen

**Sensor Output**
- \( \text{emf} = 2.154 \times 10^{-2} \cdot T \cdot \text{log}(0.209 / \text{oxygen level}) \)

**Response Time**
- 1234C: 5 seconds with a gas flow of 5 litres / min
- 30 seconds with a gas flow of 0.5 litres / min
- 1324P: 5 secs with flows from 0.5 to 25 litres / min

**Accuracy**
- ±1% of actual reading

**Thermocouple**
- Type K

**Warm Up Time**
- Seven to ten minutes

**Heater Power**
- 110 VAC, 50 / 60 Hz, 115Watts

**Flow Rate Range**
- 0.5 to 25 litres / min

**Gas Connection**
- 1/4" NPT female, inlet and outlet

**Sample Aspiration**
- Convection flow from hot furnace or flue, from process pressure, electric pump or air operated ejector (for 1234P model only).

**Environmental**
- Non weather proof cabinet. If mounting outdoors, a weather-hood is required for electrical protection. Do not enclose in sealed cabinet or overheating will occur. Your cabinet should be vented.
- Ambient temperature 0 - 100°C

**Mounting**
- Vertical surface mount, brackets supplied

**Ordering Information**
- **Model** Application
  - 1234C: if sample is delivered from process or pump
  - 1234P: if sample is drawn from the outlet by suction, specify mains voltage on 1234P, 240V or 110V

**Accessories**
- Integral electric pump and filter assembly (fitted on top of your 1234 sensor)
- Air operated ejector (for 1234P model only)
- Sampling probe filter and bush, tube by others
- Filters for dry dust, wet dust or hydrocarbons
- Flow meter

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**Data Sheet 1234**