The CarboProbe DS is a laboratory oxygen probe, suitable for measurement of oxygen concentration over the range from pure oxygen down to 10^{-24} atmospheres at temperatures from 600°C to 1700°C. It consists of a ZRO_2 oxygen sensor with an internal thermocouple. All wiring and electrodes are platinum, for the best possible corrosion resistance.
The CarboProbe DS is supplied with a gas-tight seal often required at the insertion point in scientific laboratory.

Key feature

- **Supplied with a vacuum sealed, stainless steel extension tube over the first 50 mm of the sensor. This extension tube can easily be fitted into an O-ring seal**
- **Accurate enough for research laboratory use, but low in cost**
- **Read the probes measurement with a hand-held digital meter, for a quick and simple reading.**
- **Student laboratory experiments - demonstration of the Nernst equation**
- **Combustion and pyrolysis research**
- **Measurement of fuel/air ratios in combustion**
- **Oxygen fugacity measurements in geological specimens**
- Every probe is 100% tested with certification, certificates are enclosed with each probe
- High performance, low cost sensor
- Response time < 1.0 second
- Probes include a 4-pin Cannon type cord plug, ready for connection to any suitable 4-conductor cable

Specifications

Output	0 to 1100 mV DC over operating range
Readout impedance	This probe should be used with controlling, recording and indicating instruments having input impedance of 8megohms or higher.
Accuracy	±2 mV in normal operating range
Response time	Less than 1.0 second
Thermocouple	Type R
Operating Temperatures	600°C to 1700°C
Mechanical shock	Resists mild mechanical shock. Handle carefully
Reference air	Uncontaminated dry air at maximum rate of 0.5 - 1 l/h
Immersion depth	5 cm minimum