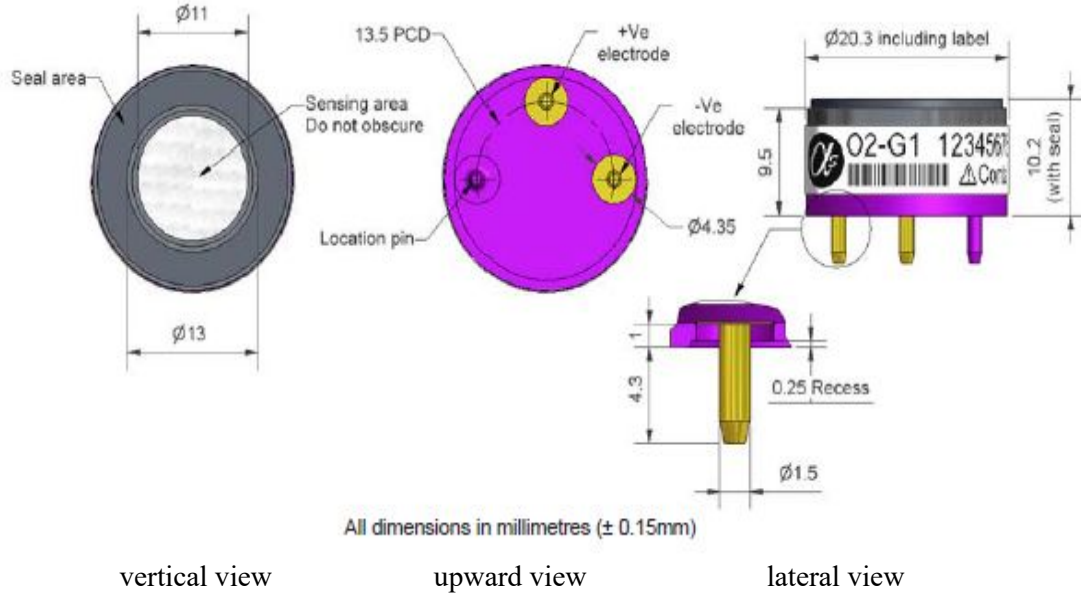


O2-G1 Oxygen Sensor Micro



Figure 1 Schematic Diagram of O2-G1



function		
output	Output(μA) at 22°C times 20.9%O ₂	65~85
Reaction time	From 20.9% to 0%O ₂ t ₉₀ time (s) (47W load	< 18
zero point	resistance) Output(μA) at 22°C in 99.999%N	< 2.5
current		
life span		
Output drift	Change percentage over 3 months	< 2
working life	Output down to 20.9% Number of months _o original output 85%	> 12
envir- onment		
Humidity sensitivity	Oxygen change percentage: 0~95%RH,40°C	< 0.7
CO ₂ sensitivity	Output variation percentage per CO ₂ concentration ₂ at 5% CO	0.1
pressure-sensitivity	20kPa, output change percentage/pressure change percentage	< 0.1
-20°C output	20.9% O ₂ , Output/20°C Percentage of outputs	87~93
50°C output	20.9% O ₂ , Output/20°C Percentage of outputs	103~107
key parameter		
temperature range	°C	-30 ~ 55
pressure limit	kPa	80~120
Humidity range	Continuous relative humidity percentage (0-99% RH in the short term)	5~95
Storage period	Number of months for preservation at 3~20°C (to be preserved in a sealed container)	6
load resistance	Ω (recommend)	47~100
weight	g	< 7

Figure 2. Temperature Characteristics of the Sensor in Air

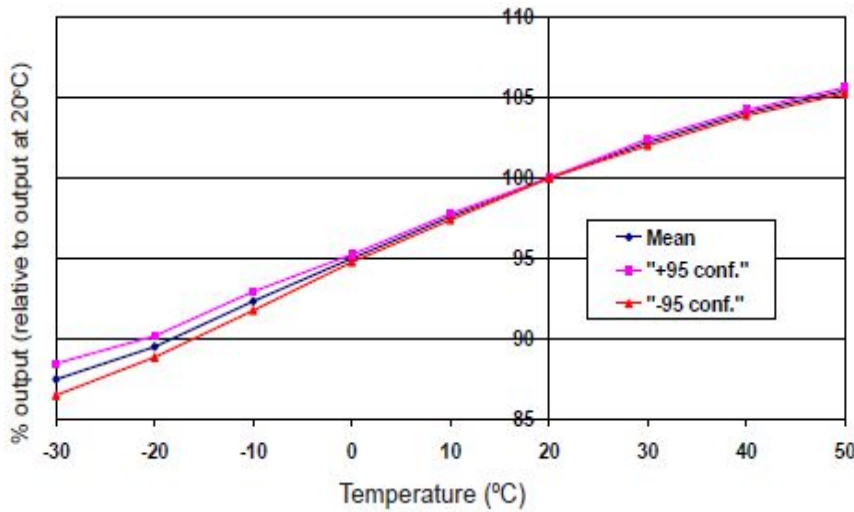


Figure 2 shows the output variation caused by temperature changes in an oxygen environment of 20.9%.

All capillary oxygen sensors show the characteristic of signal change with temperature. Figure 2 shows the 95% confidence interval of O2-G1 sensor output with high repeatability.

Figure 3 Pressure Transient Performance

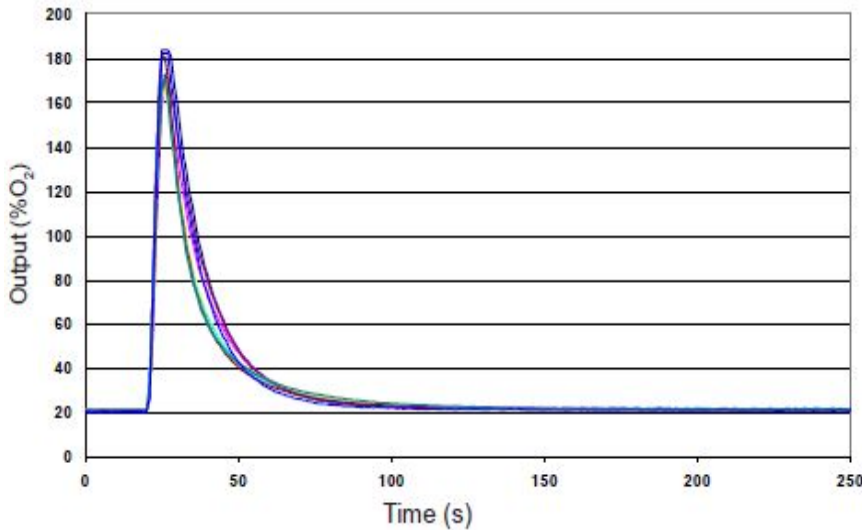


Figure 3 shows the recoverable signal transient process caused by a pressure change of 25kPa. A negative transient is generated by a negative pressure change.

The final output deviation is less than 10% of the pressure change, so a 10kPa pressure change will cause an output deviation of less than 1% (<0.2% oxygen).

Figure 4 Long-Term Stability

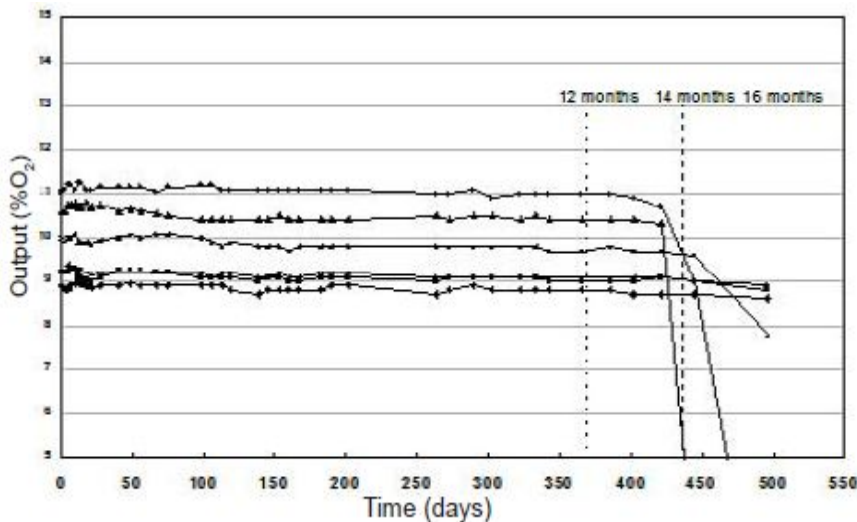


Figure 4 shows the long-term stability performance data of the O2-G1 sensor.

All sensors showed very stable output over a 12-month period.

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