

DTS-4O₂ Electrochemical Oxygen Gas Sensor

Key Features:

- High-sensitivity
- High-precision
- Linear output
- Unique leak-proof structure

Typical Applications:

- Method for industrial oxygen monitoring
- Environmental protection
- Oxygen monitoring in mine field
- Oxygen detection in storage area

Product Introduction:

DTS-4O₂ oxygen sensor is a primary battery sensor, which uses the reduction reaction of oxygen on the working electrode and the corresponding reduction reaction of the cathode material to produce a current. The current generated is proportional to the oxygen concentration. The oxygen concentration can be determined by testing the current size.



Technical Specifications:

Measuring Gas:	Oxygen (O ₂)
Measuring Range:	0-25%VOL
Maximum Overload:	30%VOL
Sensitivity:	3.8-5.7μA/vol%
Zero Current (Offset):	< 0.2% vol
Resolution Ratio:	0.1%VOL
Response Time (T ₉₀):	<10 Seconds
Output Linearity:	Linearity
ENVIRONMENTAL:	
Operating Temperature:	-40°C to +50°C
Operating Humidity:	15% -95% RH (no condensation)
Operating Pressure Range:	1 ± 0.1 standard atmospheric pressure
LIFETIME:	
Long Term Stability:	<5% Every year
Recommended Storage Temp:	0°C to 20°C in original packaging
Expected Operating Life:	For 24 months in the air
Storage Life:	The original package is 6 months
Standard Warranty	12 Months

Product Dimensions:

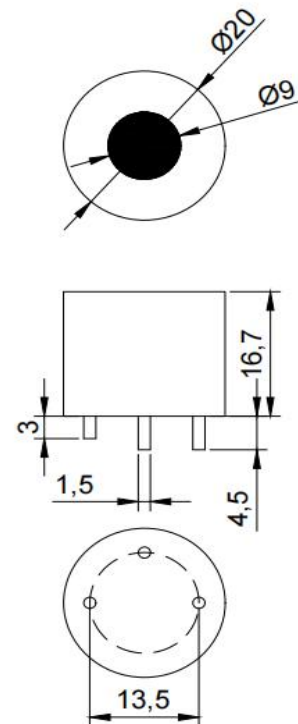


Figure 1: Unit: mm
Unless otherwise specified, all tolerances are ±0.1mm.

Table 1: All performance data is based on conditions at 20°C, 50% RH, 1013mBar.

Temperature Characteristic:

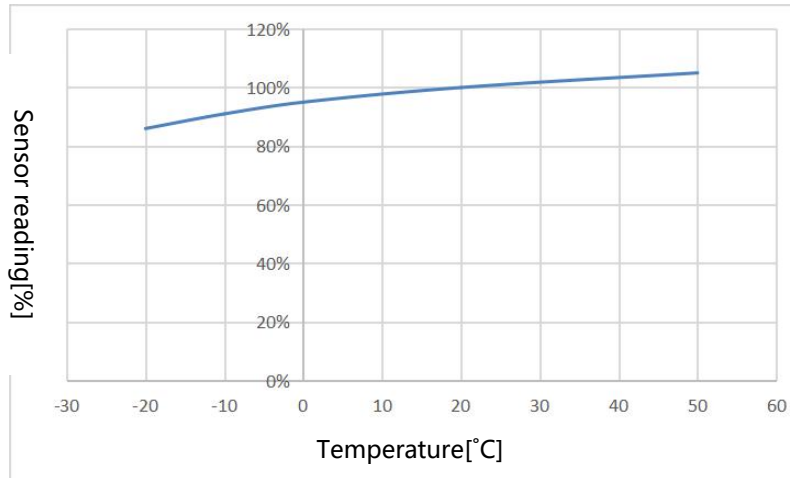


Figure 2: Temperature supplement compensation curve

Long Term Stability:

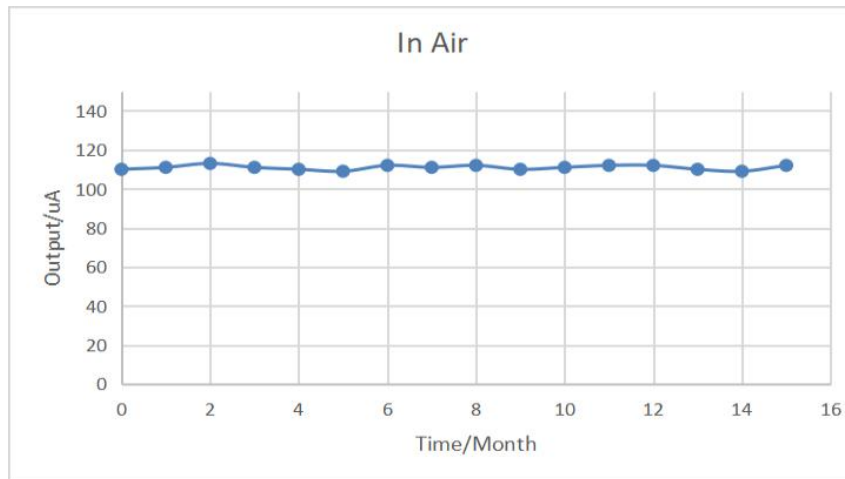


Figure 3: Long-term stability

Note: The above life test data is only the test results in the laboratory, and the actual service life should be determined according to the use of the field environment.

Cross Sensitive Data:

Toxic gases do not have much cross-sensitive effect on DTS oxygen sensors at allowable concentrations. At high concentrations, high oxidation gases (such as percentage grade ozone, chlorine gas) can interfere with the diffusion of oxygen, but most ordinary gases do not.

Important Note :

1. The lead wire can be soldered during installation, and it is forbidden to contact the sensor during soldering.
2. The sensor should not be aged for less than 30min when the sensor is energized.
3. Avoid long-term exposure to organic volatile solvents and high concentration of other solvent vapors.
4. Store or use it in an appropriate environment and avoid the acid and alkali environment.
5. Avoid excessive impact or vibration on the sensor.