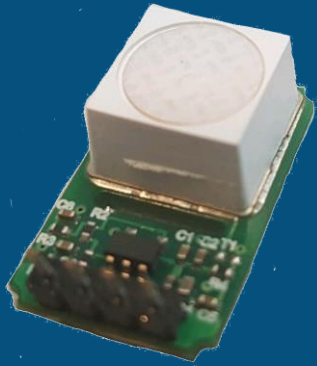


E X S E N
Lifetime Prediction

CO2 GAS SENSOR



RX-9

- CO2 Gas Sensor
- Minimal Size
- Stable Operating
- Very Good Price

EXSEN INC., CERAMICS BASED ELECTRO-CHEMICAL TYPE SENSOR

Gas Sensor Manufacturer

EXSEN

Expected Life-Time of EXSEN CO₂ Sensor

Acceleration test for predicting the lifetime of a solid electrochemical sensor is a method to confirm the degradation point of the sensor output value (EMF) according to the heater temperature. As shown in the figure 6, when the heater temperature increases by about 50 degrees, the time to maintain the sensor stability is shortened by 10 times.

At a heater temperature of 500°C, a stable sensor output value was measured for about 80 days. Based on this, it is used as a basis to judge the life time of about 800 days for a heater temperature of 450°C and about 8,000 days (20 years) for a temperature of 400°C.

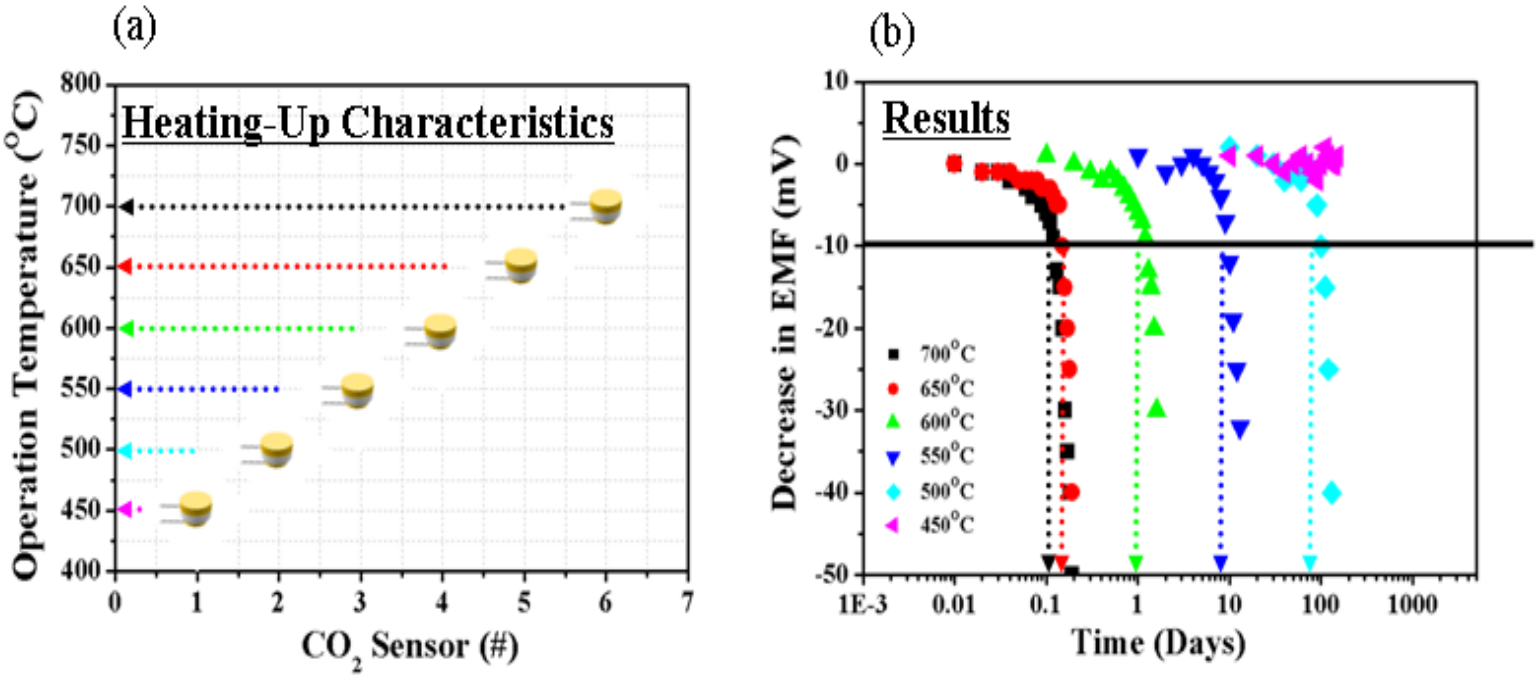


Figure 5. Acceleration test for sensor life prediction