3H2-40000 Electrochemical H2 Sensor

Key Features & Benefits
* Low Power Consumption
* High Precision
* High sensitivity
* Wide Linear Range
* Excellent Repeatability and Stability

Applications
Energy, Electric Power, Petrochemical, Environmental Protection, Mining, Agriculture, Smart Home, etc.

Technical Specification

**MEASUREMENT**
- **Principle**: 3-electrodes electrochemical
- **Range**: 0-40000ppm
- **Maximum Overload**: 50000ppm
- **Sensitivity**: 0.003±0.001 (uA/ppm)
- **Response Time (T90)**: <30 seconds
- **Baseline Offset (20℃)**: -10～30ppm
- **Zero Drift (-20℃-40℃)**: <50ppm
- **Repeatability**: 1% of signal
- **Output Signal**: Linear
- **Long Term Output Drift**: <0.5% signal/month

**ELECTRICAL**
- **Recommended Load Resistor**: 10 Ω
- **Bias Potential**: not required

**ENVIRONMENTAL**
- **Working Temperature Range**: -20℃～50℃
- **Working Pressure Range**: 90 ～ 110 kPa
- **Working Humidity Range**: 10%～90% (not condensing)
- **Storage Temperature Range**: 0～20℃

**LIFETIME**
- **Storage Life**: 6months
- **Expected Operating Life**: 3 years in air
- **Warranty**: 18months

**PHYSICAL CHARACTERISTICS**
- **Weight**: 11g
- **Orientation Sensitivity**: None

Notes:
1. All dimensions in mm
2. All tolerances ±0.15mm unless otherwise stated.
Cross-Sensitivity Data

Notes: 1. All performance data is based on condition at 20°C, 50%RH & 1013mbar. For sensor performance data under other conditions, please contact us.
2. Connection should be made via PCB sockets only. Soldering to the pins will seriously damage the sensor

<table>
<thead>
<tr>
<th>Gas</th>
<th>Concentration Used (ppm)</th>
<th>3H2-40000 (ppm H2)</th>
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</thead>
<tbody>
<tr>
<td>CO</td>
<td>100</td>
<td>60</td>
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Precautions:
1. The sensor should be prevented from organic solvents or corrosive gases
2. The sensor should not be stored in dusty, dirty areas and anaerobic environment
3. The sensor must not be exposed to very high concentration of the analyte permanently
4. Excessive shock or vibration should be prevented to avoid internal damage
5. The pins should not be broken or bent
6. The working and reference electrodes should be in short-circuit condition in storage