

# **Product Date Sheet**

# $DH7-C_2H_2-100$

Acetylene Sensor 0-100ppm

## **Key Features&Benefits**



- **●Low Power Consumption**
- High Precision
- High Sensitivity
- •Wide Linear Range
- Excellent Repeatability and Stability

## **Applications**

Industrial Safety, Mining, Residential Safety, Emissions, Environmental Monitoring

### **Technical Specifications**

#### MEASUREMENT

Operating Principle | 3-electrodes electrochemical

**Detection Range** 0 to 100ppm **Maximum Overload** 200ppm

**Sensitivity**  $0.4 \pm 0.1 (uA/ppm)$ 

Baseline Offset (20°C) -1 to +3ppm equivalent

**Baseline Drift(-20~40℃)** <3ppm equivalent

**Response Time (T90)** ≤65 seconds **Repeatability** 1% of signal

Linearity Linear

**Long Term Output Drift** | <2% signal/month

#### **ELECTRICAL**

**Recommended Load Resistor** | 10Ω

Bias Potential | not required

#### **ENVIRONMENTAL**

**Temperature Range** | -20°C to 50°C

**Operating Humidity** 15 to 90%RH non-condensing

Pressure Range | 90 to 110kPa Storage Temperature | 0°C to 20°C

#### LIFETIME

**Storage Life** 6 months in sealed container

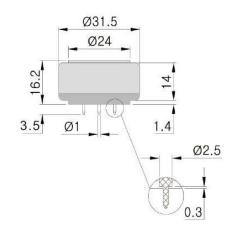
**Expected Operating Life** 3 years in air

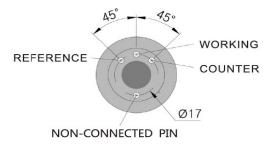
Warranty 18 months from date of despatch

#### PHYSICAL CHARACTERISTICS

Weight | 11g(approx)
Orientation Sensitivity | None

### **Product Dimensions**





**Note1:** All performance specifications are based upon the following environment conditions: 20°C, 50% relative humidity and 1 atm (1013 mBar or ambient pressure). **Note2:** PCB sockets are recommended for the sensor pin connection. Soldering to the sensor should be avoided.





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Acetylene Sensor 0-100ppm

## **Cross-sensitivity Data (20°C)**

Notes:1. Calibration with cross sensitivity gas is not recommended.

- 2.The cross sensitivity may fluctuate between +/- 30% and may differ from batch to batch or from sensor's life time.
- 3. The cross sensitivities are including but not limited to the above gases. It may also respond to other gases.

Gas	Concentration used (ppm)	DH7-C <sub>2</sub> H <sub>2</sub> -100 (ppm C <sub>2</sub> H <sub>2</sub> )
$H_2$	500	2.5
CO	500	10
H <sub>2</sub> S	50	65
$SO_2$	50	12

### **Precautions**

- 1. The sensor should be prevented from organic solvents and 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 concentrations of the analyte permanently.
- 4.Excessive shock or vibration should be prevented to avoid internal damages.
- 5. The pins should not be broken and bent.
- 6. Electrolyte leakage can cause damage, please do not disassemble the sensor.
- 7. The working and reference electrodes should be in short-circuit condition in storage.

### CONTACT US

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