

4NH3-100 Electrochemical NH3 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	0-100ppm
Maximum Overload	200ppm
Sensitivity	0.1 ±0.03 (uA/ppm)
Response Time (T90)	<40seconds
Baseline Offset (20°C)	-2~5ppm
Zero Drift (-20°C-40°C)	<12ppm
Repeatability	3% of signal
Output Signal	Linear
Long Term Output Drift	<1% signal/month

ELECTRICAL

Recommended Load Resistor	10 Ω
Bias Potential	not required

ENVIRONMENTAL

Working Temperature Range	-20°C~50°C
Working Pressure Range	90 ~ 110 kPa
Working Humidity Range	10%—90% (not condensing)
Storage Temperature Range	0~20°C

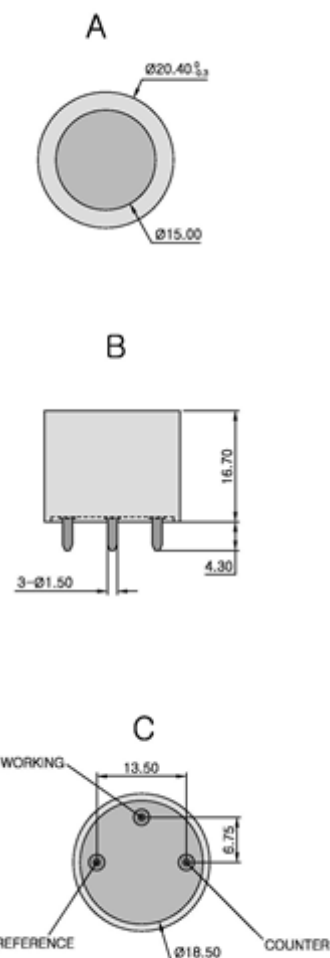
LIFETIME

Storage Life	6months
Expected Operating Life	2 years in air
Warranty	12months

PHYSICAL CHARACTERISTICS

Weight	11g
Orientation Sensitivity	None

Product Dimension



Notes: 1 All dimensions in mm
2 All tolerances $\pm 0.15\text{mm}$ unless otherwise stated.

4NH3-100 Electrochemical NH3 Sensor**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

Gas	Concentration Used (ppm)	4NH3-100 (ppm NH3)
CO	500	0
H2	100	0
SO2	20	-6
NO	50	0
H2S	25	30
NO2	5	-7.5

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