

# Nano-Capacitive Humidity Sensor

## Works in All Seasons

### In 5 Seconds

#### SENSITIVE

- Highly sensitive sensor with a wide humidity range from 0 to 100%
- Accurate response within 5 seconds

#### VERSATILE

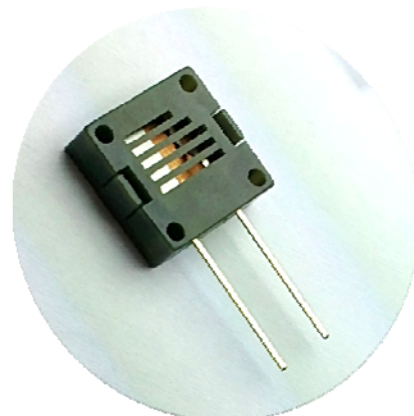
- Small size designed for a variety of OEM applications like consumer electronics, home appliances, laboratory and scientific instruments

#### VALUE FOR MONEY

- Combining top-notch and uncompromising quality within an affordable price

Growing energy consciousness is driving the market of intelligent heating, ventilation, and air-conditioning (HVAC) controls in all residential, non-residential and automotive segments. Nano and Advanced Materials Institute Limited (NAMI) introduced new NM522-H Nano-Capacitive Sensors to provide the industry a reliable, affordable, and high performing solution. Using a novel material based on the nanostructures of porous oxide templates, the sensors are versatile to be designed for a variety of OEM applications, including consumer electronics, home appliances, automotive HVAC, laboratory and scientific instruments. Versatile and highly sensitive, this innovative NH522-H Nano-Capacitive Sensor operates in a wide humidity range with high accuracy and short response time yet distributed at a fraction of the price of current similar products.

- Housing: 12mm (L) x 12mm (H) x 4mm (W)
- Pin: 12mm (L) x 0.5mm (H) x 0.2mm (W)
- Distance between two pins: 5mm



### HOME APPLIANCES

HVAC, Dryers, Fridges,  
Dishwashers

### CONSUMER ELECTRONICS

Weather stations, Clocks,  
Watches, Printers,  
Mobile phones

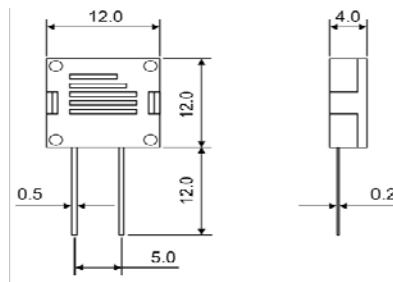
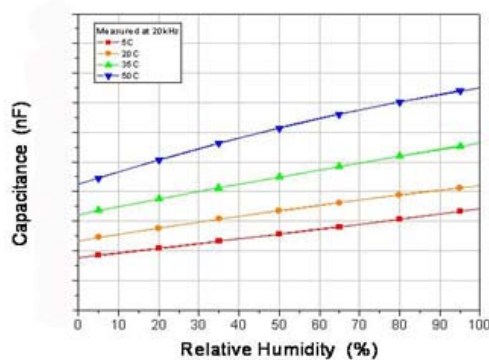
### INDUSTRIAL

Measurement instruments,  
Data loggers, Greenhouses,  
Telecom cabinets

### AUTOMOBILE

Fogging prevention, HVAC

## Specifications



Operating Humidity Range	0-100% RH
Operating Temperature Range	5 - 50°C
Accuracy (5-95% RH)	±5% RH
Linearity (20-90% RH)	±5% RH
Hysteresis	< 3% RH
Supply Voltage	1 - 5 Vrms
Operating Frequency	20 kHz
Response Time	< 6 sec (rise time) < 30 sec (fall time)
Storage Temperature	< 90% RH and <50°C
Long Term Stability (1000 hr @ 90% RH and 50°C)	Capacitance variation <1%

## About NAMI

- Incorporated by the Innovation and Technology Commission of HKSAR Government, Nano and Advanced Materials Institute Ltd. (NAMI) is a not-for-profit company to undertake and fund industry-oriented research in nanotechnology and advanced materials.
- With a focus on market-driven applications, NAMI draws on the leading researchers from the academia (both locally and internationally) to serve the needs of a variety of markets ranging from consumer lifestyle products, new materials for the construction industry to technologies for solid state lighting and sustainable energy.
- Contact us to learn more about NAMI's dynamic process of academic-industry collaboration. Please visit [www.nami.org.hk](http://www.nami.org.hk) or write in to [bizdev@nami.org.hk](mailto:bizdev@nami.org.hk).

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