



# Relative Humidity Sensor

Hokuriku HIS and HSU series are the relative humidity sensors with our original macromolecule humidity sensitive element. HIS-05 and HIS-06 have a better resistance to a drop of water or dew compared to our conventional type and excellent reliabilities. HSU series are the product, which combines our relative humidity sensor element (HIS series) with the electric circuit, and has a thermistor for the temperature detection on the circuit board.

## ■ Features

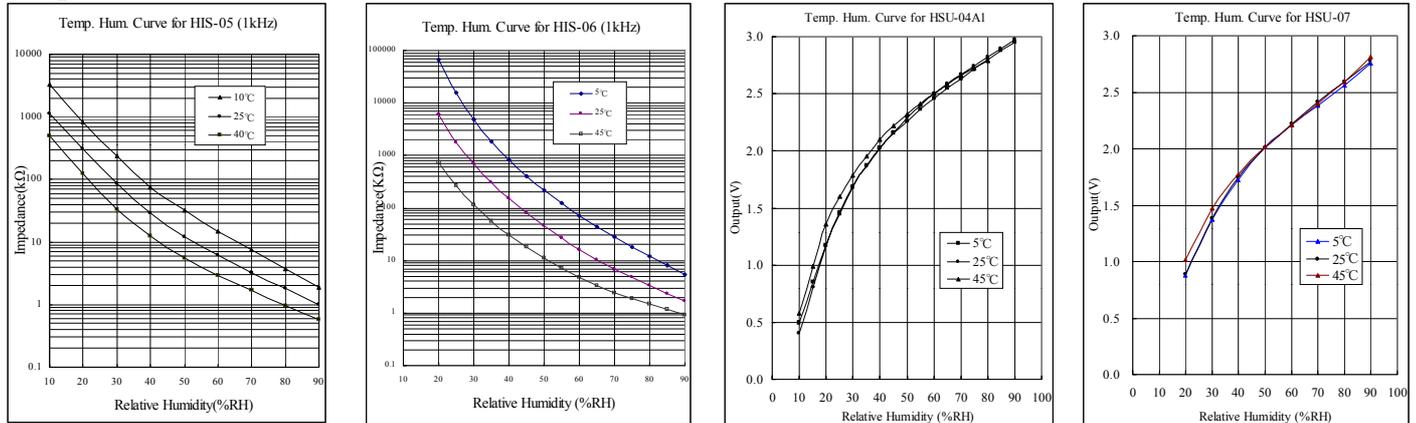
- 1) Humidity detection performances are improved.  
The range of humidity detection is expanded to the lower humidity range. The temperature characteristics have been improved by a temperature compensated circuit.
- 2) Higher Resistance to a water drop.  
Not affected by a drop of water (dew).
- 3) Miniaturization  
HIS series: Over 50% miniaturization compared to our conventional type has been achieved.  
HSU series: 38% miniaturization compared to the conventional type has been achieved.  
One of the world smallest size macromolecule humidity sensor units, even though the circuit has a thermistor for temperature detection.
- 4) Excellent cost performance  
Lower cost has been achieved having higher Performances and Reliabilities
- 5) Easy application!!  
A DC input/ DC output type and the type, which do not have a thermistor can be selected among Hokuriku HSU series.

## ■ Application

Air-conditioner, dehumidifier, humidifier, Dryer, Printer, Copier and Automobile etc.



## ■ Typical Characteristics



## ■ Specifications

	Humidity Sensor		Humidity Sensor Unit	
	HIS-05/06	HSU-04A1	HSU-07A1/A2	HSU-07B1/B2
Rated Voltage	AC 5.0V Max.		DC 5.0V(4.75V ~ 5.25V)	
Operating Temperature Range	-20°C ~ +60°C			
Operating Humidity Range	10 ~ 90%RH		20 ~ 90%RH	
Storage Temperature Range	-25°C ~ +70°C			
Storage Humidity Range	0 ~ 95%RH		0 ~ 90%RH	
Dimensions (mm)	7.0(W) × 10.5(L) × 4.0(T)	18.0(W) × 30.5(L) × 12.0 Max.(T)		18.0(W) × 21.0(L) × 12.0 Max.(T)
Response	3.5minutes(STD) 30% ⇔ 90%RH, 90% Response 1.2cm/s			
Current Consumption	-		1.3mA	
Impedance Accuracy	25°C, 50%RH (±5%RH)		-	
Output Accuracy	-		25°C, 40%RH・60%RH (±5%RH)	
Hysteresis	±1%RH (30 ~ 90%RH)			
Thermistor Characteristics	-		R25=50kΩ ±5%, B25/50=4000K±200K	

\*"Type" indicates the product No., which is not the trademark.