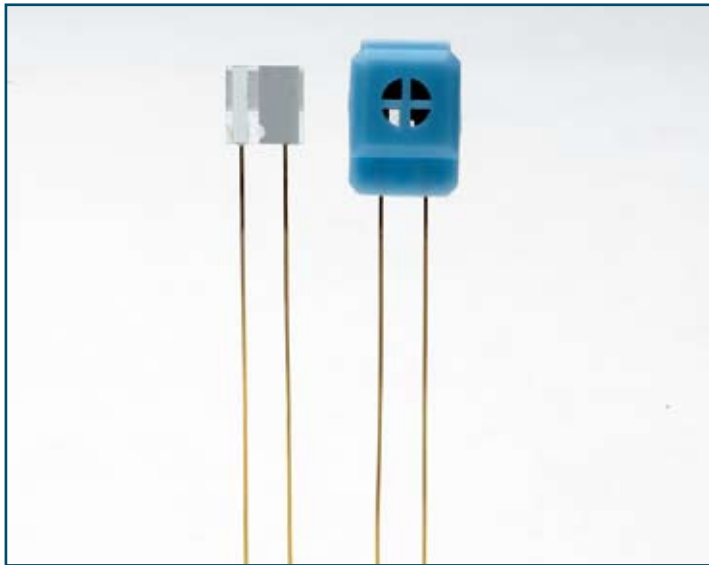


# H6000 & 6100

## Capacitive Relative Humidity Sensor

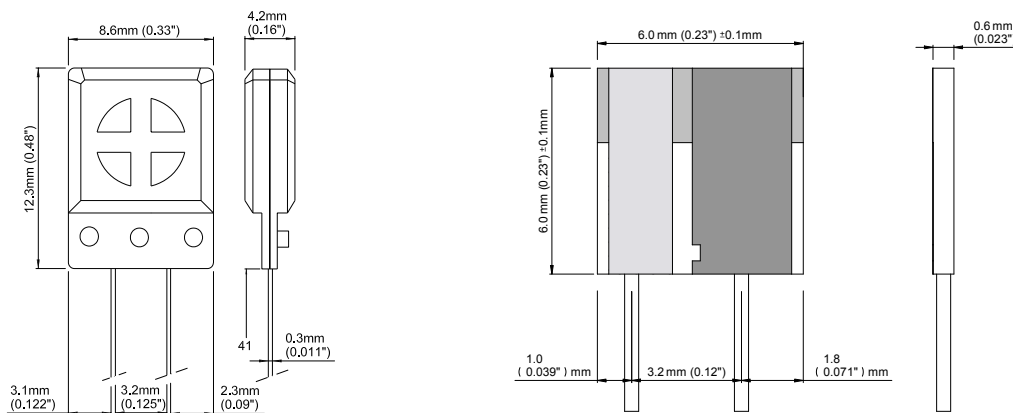


The operating principle of capacitive relative humidity sensors are based on the hygroscopic properties of their polymer, which is used like a dielectric in a capacitor. The polymer gets in equilibrium with its humid environment quickly, and reversibly, and changes its capacity value depending on the humidity level.

### Highlights

- Suitable for corrosive atmosphere
- Teflon coated
- Capacitive thin film sensor
- Measuring range: 0–100% RH, Temp: -30 to +200°C / -22 to +365°F
- Mixing ratio: 250g water/Kg of dry air
- Low hysteresis
- Response time: 20 seconds

### Dimensions



### Technical Specifications

	H6000	H6100
<b>Response time</b> 90% of scale for a step change from 11 to 75% RH	20 sec	20 sec
<b>Operating range</b>		
Humidity	0–100% RH	0–100% RH
Temperature	-30 to +200°C / -22 to +392°F	-30 to +100°C / -22 to +212°F
Pressure	0.04–30 bar / 0.6–400 psi	0.04–30 bar / 0.6–400 psi
<b>Mixing ratio</b>	250g/8.82oz water / Kg dry air	
<b>Nominal capacity</b> 75% RH @ 23°C / 73°F	500 pF ± 10%	
<b>Sensitivity</b> 11–75% RH @ 23°C / 73°F	0.86 pF/% RH	
<b>Linearity</b> 11–90% RH) @ 23°C / 73°F	± 2.5% RH	
<b>Long term stability</b> (12 months) control @ 11% RH	< 1% at 23 °C / 73°F	
<b>Max. air speed</b> (without protection)	< 20m/sec	
<b>Hysteresis</b>	Typical value = 0.5% RH	
<b>D Factor</b> loss tangent @10 KHz 75% RH @ 23°C / 73°F	Typical value = 0.007	
<b>Supply voltage</b>	2.5 VAC	
Peak-to-peak	DC component < 0.2 V	
<b>Operating frequency range</b>	5/300 KHz	
<b>Protection cap</b>	No	Yes
<b>Weight</b>	0.1g/0.0004oz	1g/0.035oz

### Order Codes

H6000	<b>Minimum order 50 pieces</b>
H6100 (with protective cap)	<b>Minimum order 50 pieces</b>

Please note: Michell Instruments adopts a continuous development program which sometimes necessitates specification changes without notice. Please contact us for latest version. Ref: H6000\_97198\_V1\_UK\_1009