



Representative photograph, actual product appearance may vary.

Due to regional agency approval requirements, some products may not be available in your area. Please contact your regional Honeywell office regarding your product of choice.

HIH-3602-C

HIH Series Monolithic Integrated circuit humidity sensor with integral RTD in TO-5 can

Features

- Linear voltage output vs %RH
- Laser trimmed interchangeability
- High accuracy, fast response
- Chemically resistant
- Stable, low drift performance
- Built-in static protection
- Ideal for dew point and absolute moisture measurements
- TO-39 housing

Typical Applications

- Refrigeration
- Drying
- Meteorology
- Battery-powered systems
- OEM assemblies

Description

HIH-3602-A and HIH-3602-C Relative Humidity (RH) sensors combine both relative humidity and temperature sensing in a TO-5 housing with a hydrophobic sintered stainless steel filter.

The laser trimmed thermoset polymer capacitive sensing elements have on-chip integrated signal conditioning. The temperature sensor is thermally connected with the RH sensor making the HIH-3602-A/C ideal for measuring dew point and other absolute moisture terms. Factory calibration data supplied with each sensor allows individually matched downstream electronics and $\pm 2\%$ RH total accuracy.

RH SENSOR CONSTRUCTION

Sensor construction consists of a planar capacitor with a second polymer layer to protect against dirt, dust, oils and other hazards.



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Product Specifications	
Package Style	TO-5 can
Termination Details	0,46 mm [0.018 in]
Series Name	HIH Series
Temperature Sensor	1000 ohm \pm 0.2% @ 0 °C, platinum RTD
Temperature Accuracy	\pm 0.5 °C @ 25 °C
NIST Certification	NIST Calibration sensor-specific printout
RH Accuracy	\pm 2% RH, 0-100 % RH non-condensing, 25 °C, 5 VDC supply
RH Linearity	\pm 0.5% RH Typical
RH Hysteresis	\pm 1.2% of RH Span Maximum
RH Repeatability	\pm 0.5% RH
RH response time, 1/e	50 s in slowly moving air @ 25 °C
RH Stability	\pm 1% RH Typical at 50% RH in 5 Years
Supply Voltage	4.0 Vdc to 5.8 Vdc
Supply Current	200 μ A Typical
Operating Humidity Range	0 to 100% RH, non-condensing
Operating Temperature Range	-40 °C to 85 °C (-40 °F to 185 °F)
Temperature Compensation	True RH = Sensor RH/(1.0546-0.00216T) T in °C (True RH = Sensor RH/(1.093-0.0012T) T in °F)
Filter	Hydrophobic sintered stainless steel
Availability	Global
Comment	Resists condensation, ideal for dew point and absolute moisture measurements.
UNSPSC Code	411121
UNSPSC Commodity	411121 Transducers



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WARNING

PERSONAL INJURY

DO NOT USE these products as safety or emergency stop devices, or in any other application where failure of the product could result in personal injury.

Failure to comply with these instructions could result in death or serious injury.

WARNING

MISUSE OF DOCUMENTATION

- The information presented in this product sheet (or catalog) is for reference only. DO NOT USE this document as product installation information.
- Complete installation, operation and maintenance information is provided in the instructions supplied with each product.

Failure to comply with these instructions could result in death or serious injury.

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