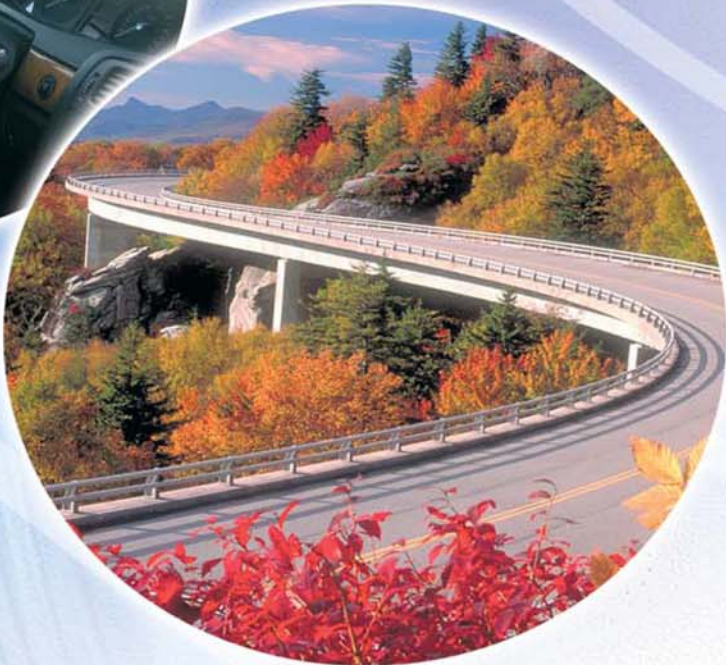
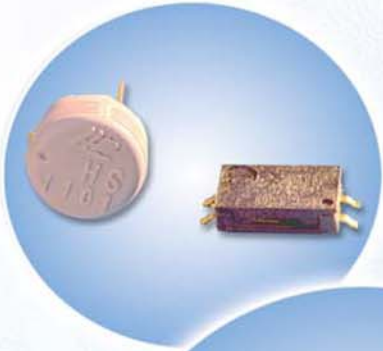


Humidity Sensors



- Improve Performance
- Reduce Energy Consumption
- Increase Safety

Measurement Specialties recently acquired the Humidity Sensor Business of the world leading company HUMIREL in order to expand its portfolio and capabilities with customers in the automotive, appliance and consumer goods industries.

The Humidity Sensor Business Unit of Measurement Specialties is dedicated to the design, manufacturing, and sales of innovative humidity and temperature sensing solutions in a wide variety of markets. Derived from the semiconductor industry, Humirel manufacturing processes are strictly controlled. Tight tolerances and reliable product are guaranteed through rigorous qualification programs, extensive use of statistical process controls and manufacturing automation. The ruggedness of Humirel products makes them ideal for high volume production where full compatibility with automatic board assembly process is required.

Each customer has specific needs. Humirel provides quality technical support and works closely with customers to develop competitively priced solutions, either components, modules or customized sub-systems. Humirel experts will assist you in an efficient way and will help you to reduce your time to market.

Products are designed, qualified and manufactured in Toulouse, France, a center of high tech and scientific excellence and the homeland of Airbus and the European Space Agency.



Humidity and Temperature sensors (components)

HS1101 / HS1101LF

(HPP 801A001) (HPP801A031)

- Capacitive humidity sensors
- Side opening / plastic cap
- Through hole mounting
- Compatible with wave and reflow processes including lead free
- From 0 to 100% RH / -40°C to 120°C (HS1101 grey cap)
- From 0 to 100% RH / -60 to 140° C (HS1101LF black cap)



HTS2030SMD (HPP804B130)

- Combined capacitive Humidity & NTC Temperature sensor
- Compatible with Lead Free soldering processes
- Miniature SMD package (6mm X 10mm)
- Available in tube or reel
- From and 0 to 100% RH / - 60°C to 140°C
- Temperature output: NTC 10K 3%
- Other NTC available upon request



Humidity and Temperature Voltage output system (Analog)

HTM1735 (HPP805D033)

- Nominal voltage supply : 5 Vdc
- Calibrated within +/-2% RH
- Lead free product / Compliant to RoHS
- PCB for board to board connection
- From 0 to 100% RH / -40°C to 100°C
- Size: 35mm X 13mm



HTM2500 (HPP809A001)

- Nominal voltage supply : 5Vdc
- Calibrated within +/-2% RH
- Hermetic housing
- Direct NTC for temperature 10K 3%
- Other NTC available upon request
- From 0 to 100% RH / -30°C to 70°C
- Wiring connection
- Size: 75mm X 11.5 mm



HM1500LF (HPP805A031)

- Nominal voltage supply: 5 Vdc
- Calibrated within +/- 2% @ 55% RH
- Lead Free product / Compliant to RoHS
- Hermetic housing
- 25 cm wiring for easy connection
- From 0 to 100% RH / -30°C to 60°C
- Size: 58mm X Ø 11mm



HM1520LF (HPP805C031)

- Similar characteristics to HM1500LF
- Dedicated to low humidity application
- Enhanced accuracy at low humidity levels (< 20%RH)
- From 0 to 100% RH / -30° C to 60°C
- Size: 58mm X Ø 11mm



Humidity and Temperature Frequency Output system (Digital)

HTF3223LF (HPP808B031)

- Nominal voltage supply: 5 Vdc
- Calibrated within +/- 5% @ 55% RH
- Compliant to RoHS (Lead Free)
- Miniature connector (JST)
- Direct NTC for temperature 10K 3%
- From 0 to 100% RH / -30° C to 85° C
- 2 holes on PCB for easy mouting
- Size: 34mm X 22mm



HTF3226LF (HPP808G031)

- Nominal voltage supply :5 Vdc
- Calibrated within +/-5% @ 55% RH
- Compliant to RoHS (Lead Free)
- Miniature connector (JST)
- Direct NTC 10K 3% (or 10K 1%)
- Very cost effective (CEM1 PCB)
- From 0 to 100% RH / -30°C to 80°C
- 1 hole on PCB for easy mounting
- Size (30 mm X 15 mm)



HTF3227LF (HPP808F033)

- Voltage supply from 3 to 16 Vdc
- Compliant to RoHS (Lead free)
- Calibrated within +/- 3% @ 55% RH
- Optional wiring
- Direct NTC for temperature 10K 3%
- From 0 to 100% RH / -30°C to 85°C
- Size: 28.5 mm X 15mm



HTF3130 (HPP808D033)

- Voltage supply from 3 to 16 Vdc
- Calibrated within +/- 3% @ 55% RH
- Board to board connection
- Direct NTC for temperature 10K 3%
- From 0 to 100 %RH / -40°C to 85°C
- Very small size (18mm X 13mm)



Application Specific Modules (ASM)

HUMIREL 's continous R&D efforts deliver optimized components for high volume markets. From automotive to major appliance , from printers to air conditionning, heating or drying systems, HUMIREL solutions enable energy savings and enhance the performance of your equipment.

Measurement Specialties Humidity sensors are used in a wide variety of markets :

- to display or record ambient humidity content
- to compensate for the influence of humidity in order to improve the performance of equipments
- to reduce energy consumption in all heating, cooling and drying processes
- to minimize health risks and improve safety when facing too high / low humidity contents



Automotive and truck :

- Car fogging prevention
- Passenger comfort improvement
- Engine management



Consumer & printing :

- Reprographics: inkjet plotter and color laser copier
- Weather station, small displays



Home and appliance :

- Clothes dryer
- Dishwashers
- Refrigerators
- Vent hoods
- Exhaust fans
- Humidifiers
- Dehumidifiers
- Heating ventilation
- Air conditionning control



Industrial and Medical :

- Hygrometers
- Hygrostats
- Green houses
- Telecommunication cabinets
- Data loggers
- Food storage
- Respirators

Quality Policy

Measurement Specialties is committed to meeting the needs and expectations of our customers regarding quality, cost and delivery, and to satisfy the business objectives of our organization. This commitment is reflected through the pursuit of:

- ✓ Establishment of trust and respect between ourselves and our customers
- ✓ Teamwork
- ✓ Continuous education and training
- ✓ Continuous improvement
- ✓ Commitment to our employees

We understand that good quality is a contribution to cost reduction, and that the quality of products we sell must conform to our customers' requirements and expectations.



Measurement Specialties measures its progress towards meeting our agreement business objectives and total customer satisfaction by utilizing the following metrics :

- Quality performance
- On-time delivery
- Product and process performance
- Customer complaints and resolutions
- Customer satisfaction surveys
- Internal audit results
- Cost of non quality

Certifications

ISO9001, ISO14001, ISO/TS16949, AS9100

About Measurement Specialties

Measurement Specialties designs and manufactures sensors, transducers and components to measure precise ranges of physical characteristics such as pressure, force, vibration, position, tilt, humidity and photo optics. Measurement Specialties uses multiple technologies – including piezoresistive, electro-optic, electro-magnetic, capacitive, application specific integrated circuits (ASICs), micro-electromechanical systems (MEMS), piezoelectric polymers and strain gauges – to engineer sensors that operate precisely and cost effectively in mild to very harsh environmental conditions.

Measurement Specialties, Inc. is traded on NASDAQ under symbol MEAS.



CERTIFICATE OF APPROVAL

This is to certify that the Quality Management System of:

Measurement Specialties, Inc.
Sensors Division
1000 Lucas Way
Hampton, Virginia 23666, USA

having been audited in accordance with the requirements of Air 5359 Rev B has been approved by Lloyd's Register Quality Assurance to the following Quality Management System Standards:
ISO 9001:2000, ANSI/ISO/ASQ Q9001-2000
AS 9100 Rev B

The Quality Management System is applicable to:
Design, Manufacture, In-House Servicing and Distribution of Sensors, Actuators, and Accessories.

Approval Certificate No: UQA 0107770
Original ISO Approval: July 8, 1995
Original AS Approval: January 4, 2005
Current Certificate: January 4, 2005
Certificate Expires: January 4, 2009



Measurement Specialties, Inc.

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