TE CONNECTIVITY SENSORS



HUMIDITY AND TEMPERATURE COMBINATION SENSORS FOR ENERGY EFFICIENT INDUSTRIES

Today's energy efficient industrial, appliance and consumer applications require optimal system performance to meet environmental and end user expectations. TE Connectivity's (TE) 20+ years of engineering experience provides humidity and temperature combination sensors with leading response time, precision in measurement and sustained performance even when exposed to extreme changes and conditions. TE's HTU2x senses the true relative humidity and temperature to provide best in class performance and superior value to competitive solutions for OEMs such as:

- HVAC
- REFRIGERATORS / FREEZERS
- PRINTERS
- DRYERS / DISHWASHERS
- SMART HOMES





DESIGN QUESTIONS?

- What is the use of humidity and temperature readings in the application?
- What is the humidity accuracy needed?
- What is the output needed (I²C, analog)?
- What are your environmental conditions, operating temperature and humidity range?
- Are there some environmental constraints such as chemicals, pollution, water immersion; repeated condensation events?

CHOOSE SENSORS ACCORDING TO YOUR APPLICATION



	HTU21D	HTU21DF	HTU21P	HTU20D	HTU20DF	HTU20P
Output	Digital I ² C	Digital I ² C	Analog PWM	Digital I ² C	Digital I ² C	Analog PWM
Filter	No	Yes	No	No	Yes	No
RH Accuracy 20%RH to 80%RH	±2%RH Typ / ±3%RH Max Fully calibrated			±3%RH Typ / ±5%RH Max Fully calibrated		
DFN Package Size (mm)	3.0x3.0x0.9					
Power Supply (V)	1.5 - 3.6					
Operating Range	Relative Humidity: 0 -100%RH Temperature: -40°C / 125°C Maximum Humidity of 250g/Kg					
T° Accuracy 5°C - 60°C	±0.3°C Typ / ±0.4°C Max Fully calibrated					

PRECISE ENGINEERING

- Strict linear response curve through humidity (0-100%) and temperature (-40 to 125°C) respectively
- Specific polymer combined with calibration slope and offset skills

FAST RESPONSE TIME

- Industry leading response time (t63% in 2 sec)
- Even after condensation the response time is t63% in 5 sec, enabling best in class overall system performance
- An optional filter membrane is specially designed to support harsh environments

LOWEST HYSTERESIS

- Specific die structure and IP67 rated sealing with filter options
- Even after high humidity exposure or condensation events

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