



*Vaisala's HMP243 dewpoint transmitter has specially designed for reliable and fast dewpoint measurement.*

## U.S. National Weather Service Awards Dewpoint Contract to Vaisala

**T**he U.S. Department of Commerce/NOAA, National Weather Service (NWS) has awarded a contract to Vaisala to develop and manufacture a state-of-the-art meteorological dewpoint sensor. This sensor will replace several hundred aging and high maintenance units originally installed in Automated Surface Observing Systems (ASOS) at major airports throughout the United States.

NWS selected Vaisala after more than three years of extensive testing of standard off-the-shelf dewpoint instruments manufactured by Vaisala and its competitors. Vaisala's HMP243 dewpoint transmitter was the unit tested by NWS, and the core technology of this transmitter will be incorporated into the sensors to be delivered to NWS.

Vaisala's HMP243 humidity/dewpoint transmitter provides fast and reliable dewpoint measurement even under extreme conditions where a combination of high humidity and rapidly changing temperature might present unwanted dew formation on the sensor head. Because the temperature of the HMP243's sensor head is constantly higher than ambient, the possibility of dew formation is eliminated. The result is uninterrupted, accurate and stable dewpoint measurement that is unmatched by other technologies. ■



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Many industrial environments set specific requirements for humidity instrumentation. The latest addition to the Vaisala range of industrial humidity transmitters is a small stainless steel sensorhead. It offers many new advantageous features for applications where a robust sensorhead is required. The new transmitter models HMP237 and HMP247, incorporating the new sensorhead structure, are already available.

### Focus on reliable readings

Measuring humidity in demanding environments is not an easy task.

First, the measurement technology used must be applicable for the particular environmental conditions in a specific application. One technology may offer certain features for good measurement, but maintenance needs can be very high. Not all the instruments offering the same technology have the ability to provide reliable readings in high temperatures, very high levels of humidity approaching condensation, or in certain environments where chemicals are present in the measured gas.

Second, the mechanics of the instrument, and especially those of the sensorhead are extremely important in demanding applications.

### HMP237/247 sensorhead technology

In industrial applications, the transmitter housing must be IP65/NEMA4 protected, to allow for plants to be spray-watered, for example. The housing material can be plastic or,