



New humidity and temperature probe from Vaisala

The Vaisala HUMICAP® Humidity and Temperature Probe HMP155 is designed to measure humidity and temperature, especially in meteorological applications. It is also suitable for a wide range of instrumentation, for example, recorders, data loggers, and laboratory equipment and monitoring.

The HMP155 has a new-generation Vaisala HUMICAP®180R sensor, which provides long-term stability and withstands harsh environments well. The probe structure is solid and the sensor is protected with a sintered Teflon filter, giving maximum protection against liquid water, dust, and dirt. An additional temperature probe is also available enabling fast

measurement response in environments with rapidly varying temperatures.

The HMP155 incorporates a patented warmed probe option that is designed for reliable measuring in environments where humidity is near saturation. As the sensor head is warmed continuously, the humidity level inside it stays below the ambient level, which reduces the risk of condensation forming on the probe. ■

Further information:

www.vaisala.com/hmp155

Upgraded ultrasonic wind sensor from Vaisala

The Vaisala WINDCAP® Ultrasonic Wind Sensor WMT52 developed for measuring horizontal wind speed and direction is an upgrade of the WMT50. The sensor has no moving parts, no field calibration is required, and it is virtually maintenance-free.

The WMT52 housing with the mounting kit is classified as IP66. The transmitter's new interface card fulfills the EMC/ESD requirements in the Marine IEC60945 standard. The WMT52 complies with the EMC standard EN61326-1; Industrial Environment. The transmitter is ROHS compliant.

Optional features for the WMT52 include heating and a bird spike kit.

The WMT52 is designed especially for marine applications but also for meteorology, wind energy, transport, pollution control, and agriculture. ■

Further information:

www.vaisala.com/wmt52

Emphasis on comprehensive weather measurement networks

The financial impact of severe weather phenomena, such as floods and storms, has been considerable all over the world. For example, in the USA alone, the total cost of the most serious weather disasters over the years 1980-2007 exceeded EUR 385 billion (Source: U.S. National Climatic Data Center, Billion Dollar U.S. Weather Disasters).

Weather service providers are focusing on providing increasingly accurate weather data and on improving the quality of forecasts. Vaisala's global customer group is looking to Vaisala to provide them with increasingly comprehensive and diverse weather measurement networks.

Vaisala to deliver a weather measurement solution to Spain

The authorities in the Galicia region, situated in the north-western corner of Spain, placed an order with Vaisala for

precisely this kind of diverse weather measurement network. The region's western and northern coastline borders the Atlantic Ocean. Severe storms and lightning are very common and they cause many injuries and a great deal of property damage every year.

Vaisala will provide the Galicia region with a weather measurement solution comprising a weather radar that detects rain, a lightning detection network that detects thunder storms and an upper air sounding system. This solution makes it possible for the data collected from various sources to be combined, and this will noticeably improve the accuracy of the area's long-range and short-range weather forecasting. The solution also includes a five-year maintenance contract. ■



Upgraded weather transmitter from Vaisala

The Vaisala Weather Transmitter WXT520 is an upgraded version of the WXT510. The WXT520 measures wind speed and direction, liquid precipitation, barometric pressure, temperature and relative humidity - all in one instrument.

The precipitation measurement in the WXT520 is unique as it measures accumulated rainfall, rain intensity and duration, all in real time. It is based on the maintenance-free Vaisala RAINCAP® sensor.

The WXT520 housing with the mounting kit is classified as IP66. The transmitter's new interface card fulfills the EMC/ESD requirements in the Marine IEC60945 standard. The WXT520 complies with the EMC standard EN61326-1; Industrial Environment. The transmitter is ROHS compliant.

A number of optional features are offered for the WXT520, such as, heating, a bird spike kit, a USB connection, and a new surge protector.

The power consumption of the WXT520 is very low; it can use solar panels as an energy source.

The WXT520 is suitable for weather stations, dense networks, buildings, golf courses, marinas, harbors, and hotels - almost anywhere where real-time weather data is needed. ■

Further information:

www.vaisala.com/wxt520

Vaisala awarded phase II contract for the National Weather Service Next Generation NOAA Profiler Network

Vaisala was recently awarded a second phase development contract for the National Oceanic and Atmospheric Administration (NOAA) Next Generation Profiler Network (NGNPN). The National Weather Service (NWS) is utilizing a multi-step, multi-year process for the design, development, manufacturing, and installation of high capability upper air wind profiler observation sites for the United States.

The current NOAA wind profiler network was first deployed in 1990 – 1992 and has operated continuously ever since. The NGNPN upgrade will enhance the mission critical data which is distributed in real-time to government and university atmospheric researchers, private meteorologists, the National Centers for Environmental Prediction, the Storm Prediction Center, all NWS Forecast Offices, and foreign agencies responsible for weather prediction.

With over 165 installations worldwide, Vaisala is a world leader in remote sensing of the atmosphere. Vaisala's new wind profiler is a Doppler radar which provides vertical profiles of horizontal wind speed and direction, and vertical wind velocity to an altitude of 16 km above ground level. The system will operate unattended and provides continuous, near real-time atmospheric wind and temperature data with excellent spatial resolution.

Vaisala was also awarded phase one of the upgrade project in March 2008. The next phase of engineering design effort for the government is scheduled for completion in March 2009. ■

Further information:

www.vaisala.com/weather/products/windprofilers

(W)LAN and display alarm

Vaisala HUMICAP® Humidity and Temperature Transmitter Series HMT330 has been upgraded with a (W)LAN option and a display alarm.

The (W)LAN feature makes it easy to add a new humidity transmitter to an existing Ethernet network. Also, applications that do not allow the digging of new holes, or the installation of new cables, benefit from this solution.

A new display alarm function is now a standard feature in Vaisala humidity transmitters equipped with a built-in display. With this function the user can set alarm trigger limits for two distinct measured quantities. When the trigger limits are exceeded, a real-time alarm appears on the display. New (W)LAN option is also available for dewpoint, moisture in oil and barometric pressure ■



Further information:

www.vaisala.com/hmt330



Dr. Dmitri Moisseev training conference participants on radar software.

Vaisala at ERAD 2008

The fifth European Conference on Radar in Meteorology and Hydrology (ERAD) was held this year in Helsinki, Finland. A record number of participants - 340 - attended the event. Vaisala participated with its own exhibition stand and also

hosted several special events, such as a visit to EMHI's (Estonian Meteorological and Hydrological Institute) radar site in Sürgaveere, Estonia, and a reception at the Vaisala headquarters. ■

Vaisala selected to elite Cleantech Index (CTIUS)

Vaisala has been selected by the Cleantech Group(TM), LLC to join its prestigious Cleantech Index (CTIUS). CTIUS is a stock market index intended to reflect the surging global demand for Cleantech products and services. The Cleantech Index is comprised of stocks of publicly traded companies worldwide that are leaders in Cleantech innovation and commercial deployment across a broad range of industry sectors: from alternative energy and energy efficiency to advanced materials, clean air & water, ecofriendly agriculture/nutrition, clean manufacturing, and more.

Cleantech products are defined as knowledge-based products and services that add economic value by reducing cost, raising productivity and/or product performance while

reducing resource consumption and their negative impact on the environment and public health.

Only 76 companies globally have qualified for the Index so far, and approximately half of these are non-US based. Vaisala now joins this elite group that must meet 18 screening criteria just to be shortlisted for selection - including profitability, growth, environmental impact, industry leadership, intellectual property, strategy, management quality, liquidity, and more.

There are several investment funds that track the Cleantech Index, such the PowerShares Cleantech ETF (PZD) and the KSM Cleantech ETF in Israel (KSMCTIUS). ■

Vaisala takes part in Formula 1

Vaisala's office in Paris has signed a contract with Météo France for the assembly of four Vaisala Weather Transmitters WXT510 and two Vaisala Remote Road Surface Temperature Sensors DST111 to be used at Formula 1 circuits all over the world, in a re-installable mode. Météo France has an exclusive contract with the FIA (Fédération Internationale de l'Automobile) for the supply of weather forecasts on race weekends. The Vaisala equipment will be interfaced directly to Météo France's computers and software, providing the F1 meteorologists with real-time weather data.

The first set of equipment was used at Albert Park for the Australian GP 2008. ■



Vaisala to supply radiosondes to Australia

Vaisala and the Australian Bureau of Meteorology have signed an agreement to supply radiosondes for the upper air observation network of the Bureau. The duration of the agreement is three years, with an option for one additional year.

Vaisala's upper air products are used to provide crucial data for weather forecasting.

The Australian Bureau of Meteorology operates one of the world's largest meteorological observation networks and is an existing customer for Vaisala upper air observation equipment. ■





Dr. E Philip Krider congratulated by Dr. Eric Betterton, Head Dept of Atmospheric Sciences, University of Arizona.

Professor Philip Krider honored at the ILDC

Over 150 atmospheric scientists and lightning experts from around the world paid special tribute to University of Arizona atmospheric sciences professor and renowned lightning expert Philip Krider at the 20th International Lightning Detection Conference, held in Tucson Arizona on April 21 – 23. Vaisala is the organizer of the bi-annual event.

Professor Krider was instrumental in developing the U.S. National Lightning Detection Network, the system that monitors the nearly 25 million cloud-to-ground lightning strikes across the United States every year. The network is owned and operated by Vaisala. ■

New transmitter for moisture in oil measurement

Vaisala has extended its moisture in oil product range with the Vaisala HUMICAP[®]Moisture and Temperature Transmitter for Oil MMT162. This new transmitter offers a compact and economical solution for reliable continuous measurement of moisture in oil.

Typical applications for the MMT162 are lubrication systems, hydraulic systems, and transformers. Its measurements can be used for on-line moisture monitoring and as a control function, allowing dryers and oil purifiers to be started only when necessary. ■

VAISALA

Features of Vaisala SPECTRACAP®

- Easy to maintain
- No sensitive materials are exposed to the measured gas
- Resilient to chemical exposure

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OMT355 Oxygen Transmitter

- Analyzer grade performance in a field instrument
- Direct probe installation, no costly sampling systems required
- Resistant to chemical exposure
- Full specifications and documentation

Related applications

Learn how oxygen measurement can be used in the following measurement applications:

- Silencers
- Breweries and fermentation
- Inert gas systems

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Online movie on industrial oxygen measurement

Watch an online movie on industrial oxygen measurement and learn about Vaisala's SPECTRACAP® technology.

www.vaisala.com/oxygen

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Thank you for your interest.