Measurement solutions for the life science industry

eBook
www.vaisala.com

VAISALA

Why Vaisala

Vaisala solutions help you safeguard sensitive products in warehouses, processing/ manufacturing facilities, laboratories, and cleanrooms — wherever pharmaceutical, biological, and medical device products must be protected from out-of-tolerance conditions.

In this guide, we provide links to recorded webinars, application notes, and customer cases showing our how solutions work and how they can work for you.

Learn more

CONTENTS

Continuous monitoring for regulated environments

The Vaisala viewLinc Continuous Monitoring System, designed for GxP-regulated environments, combines the viewLinc Enterprise Server software with Vaisala data loggers, smart probes, transmitters, and third-party Modbus-enabled devices. Easy to validate, viewLinc can monitor, alarm and report on almost any parameter. With Vaisala's OPC UA or viewLinc's API, data from viewLinc can integrate with third-party control and data historian systems.

Learn more

A future-proof monitoring system: ensuring your system can adapt

There is a need for more flexibility in environmental monitoring, especially in the life science industries. In this webinar we discuss three ways to ensure your monitoring system can adapt to changing business needs and new technologies:

- Integration of multiple device inputs to maximize potential applications
- Interoperability between systems that can guarantee secure information exchange
- Flexibility of process and system architectures to match the business and network landscape

Watch now

Continuous monitoring for regulated environments

Challenges in multisite environmental monitoring: costs, risks, and fit

There are five key considerations in setting up an enterprise-wide monitoring system: security, administration, geographic variation, operations, and IT infrastructure. In this webinar we show how each of these areas present different challenges in three types of multi-site environments: National Warehouses, Regional Hospitals, and Global Manufacturers.

Watch now

Validation/mapping system

Designed for the most demanding validation applications, the Vaisala mapping kit comprises vLog software and Vaisala's data loggers for downloading, displaying, analyzing, and reporting. Fully encrypted and validatable, vLog produces tabular and graphical reports that are easy to customize.

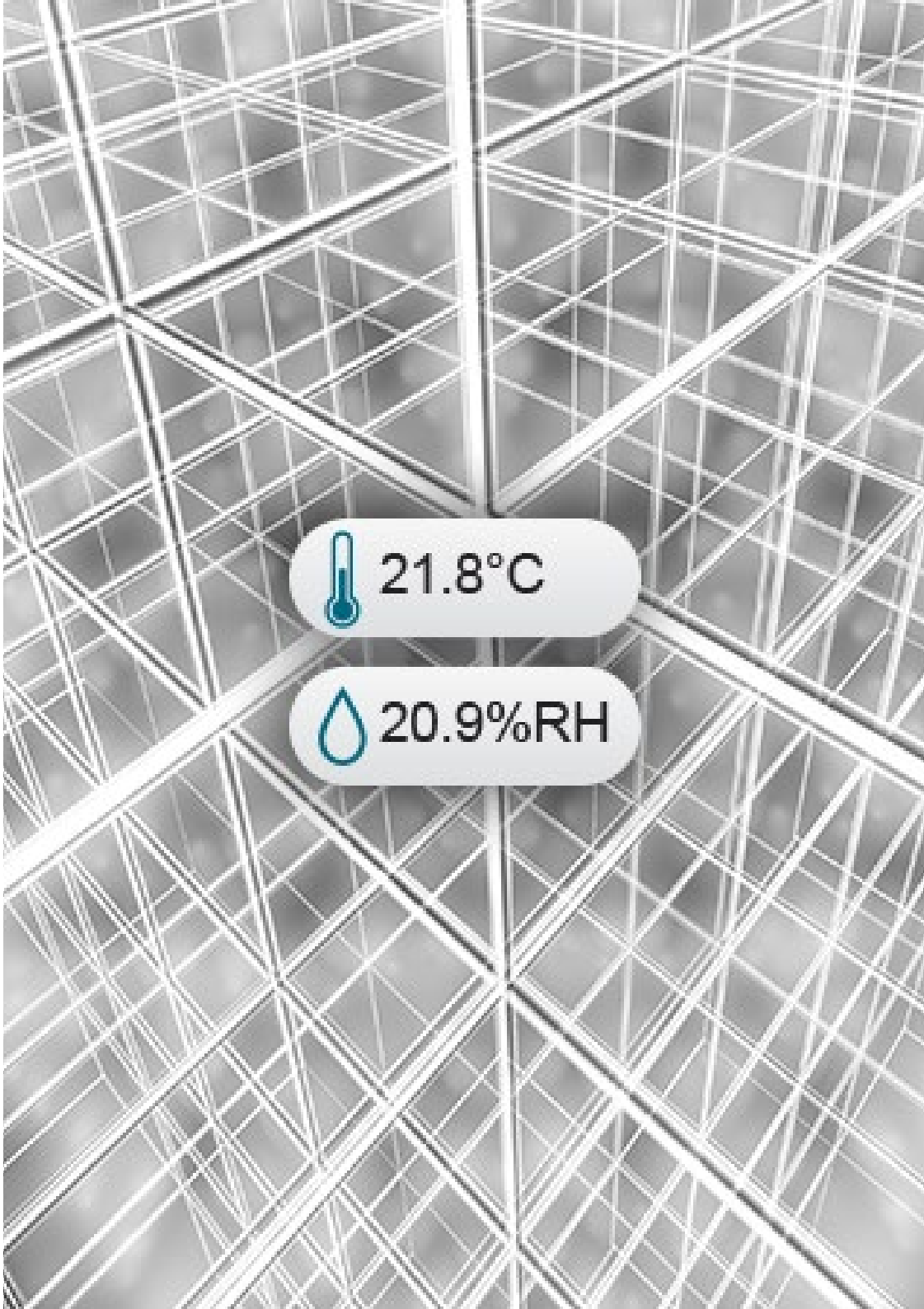
Learn more

Validation/mapping system

Mapping made easy: where to place sensors & why

This webinar provides five simple rules for mapping studies. We review the regulations and industry guidance on mapping and describe a sensor placement method to ensure study defensibility under audit.

Watch now



Validation/mapping system

Troubleshooting tips and best practices for mapping studies

This guide contains six articles on validation/mapping and covers topics including: sensor placement, sensor response time, system validation according to GAMP principles, and more...

Read more

Indigo series transmitters for laboratories, cleanrooms, GxP environments

Measure a wide range of parameters in pharmaceutical manufacturing and biotechnology processes with Vaisala's proven sensing technologies, including: humidity, temperature, hydrogen peroxide, carbon dioxide, compressed air, barometric and differential pressure, and more. Vaisala transmitters provide reliable measurements with intelligent, interchangeable, high-performance probe technology.

Learn more

Indigo series transmitters for laboratories, cleanrooms, GxP environments

WEBINAR

How to maintain world-class measurement performance

Regulated environments require measurement quality, so it is important to understand the factors that contribute to instrument lifecycle costs. We discuss the newest technological advances in transmitters from Vaisala, as well as how to manage calibration costs.

Watch now

Indigo series transmitters for laboratories, cleanrooms, GxP environments

Smart humidity measurements for smart industries

This webinar is for anyone interested in accurate humidity measurements. You will also learn how long-term measurement investments can have a significant impact on creating sustainable processes and practices.

Watch now

Carbon dioxide

Incubators and other controlled environments require precise control of temperature, relative humidity, and carbon dioxide. The patented Vaisala CARBOCAP® carbon dioxide sensor has become a standard for use in incubators. With excellent long-term stability, Vaisala CO_2 devices (probes and handheld meters) are ideal for in-line monitoring and reference measurements.

Learn more

Carbon dioxide

CO_2 measurement in incubators

To ensure incubators maintain desired CO_2 concentrations, CO_2 must be measured and controlled with precision. In this webinar we describe single-beam and dual-wavelength NDIR (Non-dispersive infrared) sensors, Vaisala's CARBOCAP® technology, and options for field services.

Watch now

FAQ: Carbon dioxide measurement

Learn how NDIR (non-dispersive infrared), single-beam, dual wavelength sensors measure carbon dioxide. We answer common questions on CO_2 measurement in incubators, including:

- How do temperature and pressure affect CO_2 measurement?
- How can temperature and pressure error be corrected?
- How can condensation be avoided when sampling from incubators?
- Why is the CO_2 concentration reading higher than expected when using the pump sampling method with drying tubing?

Read more

Drying, dew point & compressed air

Ideal for applications like tablet coating, fluid bed dryers, and dry rooms, the Vaisala HUMICAP® and DRYCAP® sensor technologies offer many solutions to reliably measure humidity, temperature and/or dew point. With our newest Indigo family of products, probes can be used independently or combined with a transmitter for additional capabilities.

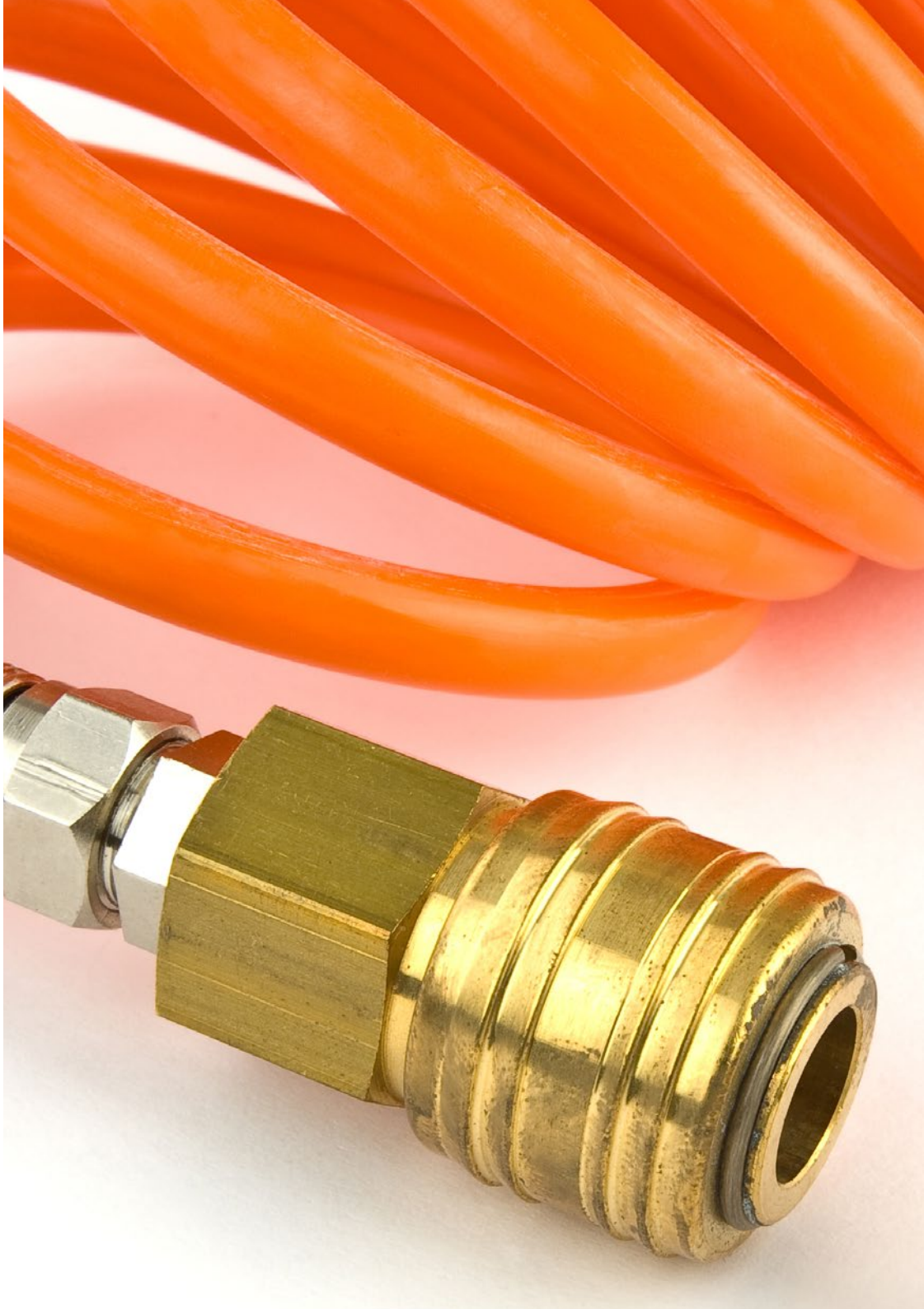
The DRYCAP® products provide stable measurement in extremely dry conditions such as in compressed air, glove boxes, and dry rooms.

Learn more

Everything you need to know about dew point in compressed air

In this webinar we discuss applications where measuring dew point in compressed air can result in better process outcomes. We'll review dryer types in compressed air systems, the impact of dew point on system pressure, and what to consider when choosing a dew point sensor.

Watch now



FAQ: Dew point in compressed air

This application note addresses common questions, including:

- What is the difference between dew point and pressure dew point?
- What is the typical range of dew point temperatures in compressed air?
- What are the quality standards for compressed air?
- How is dew point in compressed air measured?
- What are the telltale signs of a malfunctioning dew point sensor?
- How often should a dew point sensor be checked or calibrated?

Read more

Vaporized hydrogen peroxide bio-decontamination

The HPP270 series probes use PEROXCAP® technology to provide repeatable, stable, and accurate measurements in isolator, transfer hatch, and room bio-decontaminations. The probes can be used as stand-alone devices, integrated with control systems, or used with the Indigo series transmitters to provide superior long-term stability and repeatability of measurement.

Learn more

Vaporized hydrogen peroxide bio-decontamination

Achieving effective H_2O_2 bio-decontamination in facilities and containment systems

In this webinar we discuss the measurement parameters that ensure the efficacy of vaporized hydrogen peroxide bio-decontamination processes including: ppm (H_2O_2), relative humidity, relative saturation, and temperature. You'll also learn best practices for cycle development in typical bio-decontamination processes.

Watch now

Vaporized hydrogen peroxide bio-decontamination

WEBINAR

From monitoring to controlling with vaporized hydrogen peroxide sensors

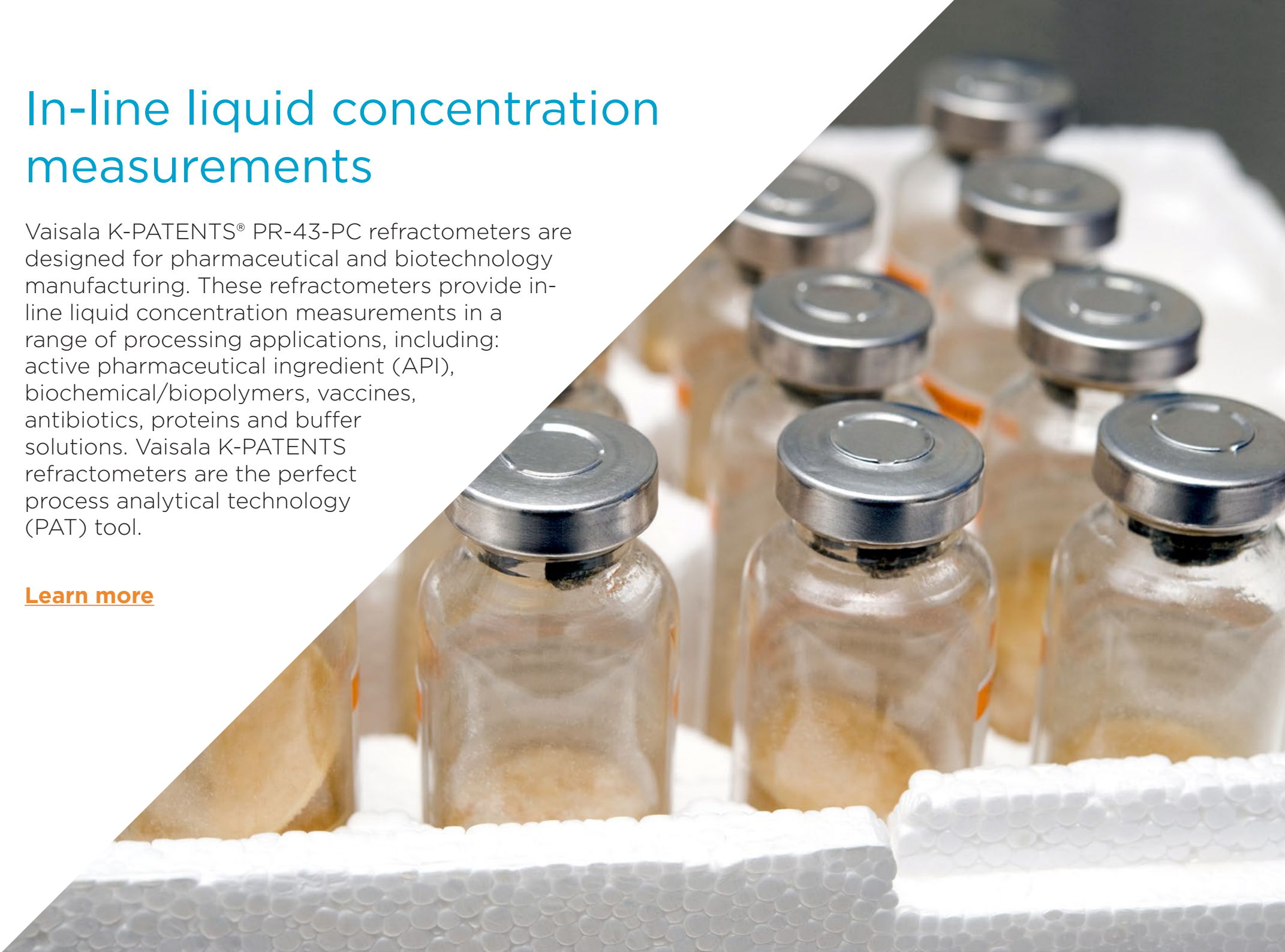
In this webinar, Vaisala's sensor technology experts welcome a manufacturer of H_2O_2 vapor generators to demonstrate how to integrate Vaisala's sensors and transmitters into vaporized hydrogen peroxide bio-decontamination applications.

Watch now

In-line liquid concentration measurements

Vaisala K-PATENTS® PR-43-PC refractometers are designed for pharmaceutical and biotechnology manufacturing. These refractometers provide in-line liquid concentration measurements in a range of processing applications, including: active pharmaceutical ingredient (API), biochemical/biopolymers, vaccines, antibiotics, proteins and buffer solutions. Vaisala K-PATENTS refractometers are the perfect process analytical technology (PAT) tool.

Learn more



WEBINAR

The benefits of refractive index in API development and production

In this webinar we present customer cases showing how in-line process refractometers can be used as a PAT tool for standardizing and up-scaling API production. Learn how refractive index liquid measurement technology is commonly applied in pharmaceutical reactions, separation, and purification, solvent swap, and crystallization operations — in laboratory and pilot scales and finally in full-scale commercialized production.

Watch now

Liquid concentration measurements

Fast and efficient viral vaccine purification by sucrose density gradient

In this webinar we explain the benefits of refractive index technology during purification processes in viral vaccine manufacturing. Sucrose gradient ultracentrifugation is a commonly applied technology for purification. Vaisala K-PATENTS® Pharma Refractometer PR-43-PC provides proven methods for separating and collecting the virus-rich fraction at the outlet of the centrifuge.

Watch now

Customer stories

Customer feedback is very important to us and we appreciate the time and effort customers take when giving their view on our solutions. Analyzing how we have succeeded compared to the high standards of our customers allows us to continuously improve our products.

We align our internal measures with what customers expect from Vaisala.
When we focus on the areas that matter most to our customers, we can continue to deliver the quality measurement solutions that life science applications require.

See all customer stories

Customer stories

Boston IVF ensures ideal CO_2 for embryos in assisted reproduction

Learn how Boston IVF's Waltham Fertility Center uses Vaisala carbon dioxide meters to ensure ideal pH environments in their incubators.

Full story

Customer stories

Lifesharing safeguards donated tissues and organs

Lifesharing is a non-profit organ procurement organization (OPO) partnered with UC San Diego Medical Center. Vaisala's viewLinc system monitors and alarms storage chambers and processing areas for donated tissue and research organs, as well as storage for chemical agents used for perfusion and sterilization media for cell preservation.

Full story

Customer stories

Australia's leading pharmacy service provider safeguards products

HPS and its network of HPS Approved Pharmacies is one of Australia's leading providers of pharmacy services to health facilities, including private hospitals, cancer centers, and correctional facilities. Founded in 1975, HPS serves hundreds of pharmacies regulated under state and federal laws, delivering a range of pharmacy products. They replaced their monitoring systems with the viewLinc continuous monitoring system to ensure regulatory compliance, and send alarms to remote personnel.

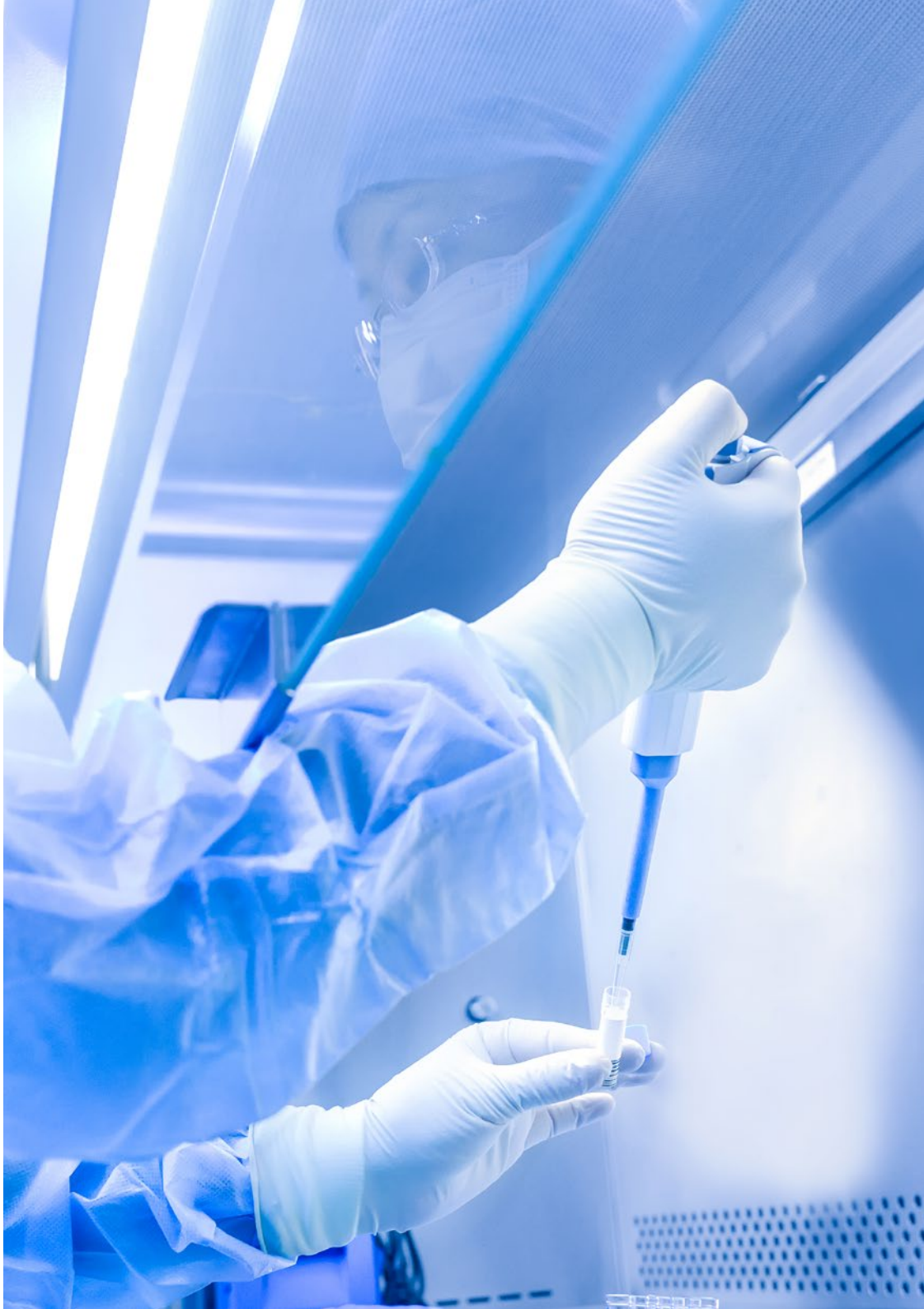
Full story

Customer stories

Combating COVID-19 with vaporized hydrogen peroxide bio-decontamination

Finnish H_2O_2 vapor generator manufacturer and service provider Cleamix Oy performed bio-decontaminations at Korea's Centers for Disease Control early in the 2020 coronavirus outbreak. The Cleamix bio-decontamination units are portable, highly efficient hydrogen peroxide vapor generators that use Vaisala's HPP270 series probes to control vapor output during bio-decontamination and provide stable, accurate monitoring of process conditions in real-time.

Full story



See our brochure on these and other Vaisala solutions for life science:

www.vaisala.com