VAISALA

Vaisala viewLinc Monitoring System

TEMPERATURE, RELATIVE HUMIDITY, DOOR SWITCHES, DIFFERENTIAL PRESSURE, CO_2, AND OTHER VARIABLES

Reliable Monitoring for Multiple Parameters and Applications

The Vaisala viewLinc Monitoring System features the viewLinc Enterprise Server software* and monitoring devices that provide alarming, real-time trends, and customizable reporting. Ideal for both light and heavy industrial environments, as well as GxP-regulated applications, the system integrates a wide selection of Vaisala data loggers, transmitters and connectivity options to monitor temperature, relative humidity, dew point temperature, CO_2, differential pressure, door switches, and more.

The system scales easily—from one or two measurement points to thousands of monitored areas. With nine language versions the software is ideal for multi-site use and global monitoring. The viewLinc Enterprise Server makes it easy to network data loggers via any combination of connectivity options, including: Ethernet, PoE, Wi-Fi, and Vaisala's proprietary wireless technology: VaiNet.

The Vaisala viewLinc Monitoring System provides:

- Real-time monitoring and alarming, with customizable reporting
- Gap-free monitoring even during power and network outages
- Easy network connectivity via Ethernet, Wi-Fi, or Vaisala's proprietary wireless technology: VaiNet
- Simple installation and validation, with optional IQOQ protocols
- Optional on-site installation/validation services for easy and compliant implementation
- User friendly software with on-screen guidance and embedded help
- Alarm notifications by email, SMS, voice call, lights and sirens
- Reports comply with 21 CFR Part 11 and EU GMP Annex 11, delivered automatically by email
- Monitoring data can be shared with other systems via OPC UA & API
- Integrate unlimited parameters with Modbus and analog devices

**The viewLinc Enterprise Server includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. (openssl.org)*

Industries and Applications

"[The] system is easily scalable without extra costs, increases our efficiency with its remote reading abilities and ease of use, and the measurements are very accurate."

Mats Andersson,
Project Manager,
AstraZeneca

Pharma/Biotech Healthcare

Biorepositories/ Blood/Tissue

Semiconductor

Museums & Archives

Calibration Labs

Aerospace

Data Centers / IT

Food & Beverage

Distribution

Chart Recorder Replacement

Although viewLinc was designed for use in pharmaceutical and other regulated environments, the system can be used to monitor conditions in a variety of applications. Vaisala offers an unmatched selection of devices, probes, calibration, and services.

"It was important to us that the system could be deployed internationally and Vaisala was the only company we found that could support us throughout our other regions..."

Gary Swanson,
Senior Vice President of Quality for Herbalife International

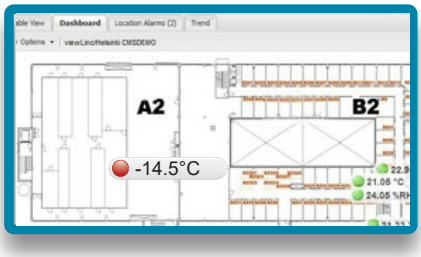
Ideal for Regulated Applications:

- Validatable software
- Environmental mapping qualification software
- Encrypted data and audit trail
- IQOQ protocols & GxP documentation
- ICH-compliant calibration options

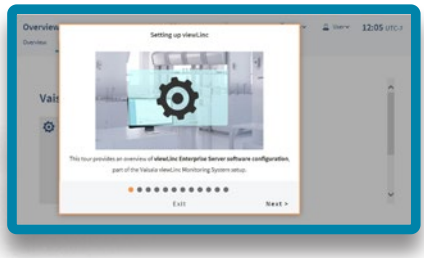
viewLinc Enterprise Server: Simple & Intuitive

Comparative analysis graph of current and historical conditions.

Live data showing the conditions overlaid on actual environment photo



Live data showing the conditions overlaid on floor schematic



Tours show how to use the software: Set up viewLinc, Create a Zone, Create a Location, Add a User, and more

For nearly two decades viewLinc has been continuously developed based on user feedback. viewLinc is designed to meet the needs of GxP-regulated and other demanding applications, with easy to use software and reliable, accurate devices.

On-Screen Guidance

User Guides & Online Help

eLearning On-Demand

Technical Support

Features and Benefits:

- Tours introduce common tasks, making viewLinc easy to learn.
- Onscreen guidance and tooltips provide immediate user assistance.
- Users and administrators have 24/7 access to multiple support options (with support plan).
- Supported Web browsers include Google Chrome™ and Microsoft Edge.™

System Features

REAL-TIME DATA TRENDING

Users can view a real-time trend and a graphical overview of controlled areas to monitor all measured points in one interface. Drill down into monitored points on the dashboard to view trend data for any time period.

COMPLETE DATA PROTECTION

Months of data can be retained in the memory of each data logger. Automatic data backfill to the server and client PCs ensures gap-free data during network or power outages.

FLEXIBLE ALARMING

Remote and local alerts of out-of-tolerance conditions are sent via email, SMS, voice call, lights and buzzers. Alarms can be acknowledged on mobile phones via voice call, SMS, and email.

AUTOMATED REPORTING

Create custom reports on demand. Frequently run reports can be automatically generated and delivered by email on a pre-set schedule.

BROWSER-BASED ACCESS

No software needs to be installed on client PCs.

GLOBAL ENVIRONMENTAL MANAGEMENT

Global installations can be run from a single server and managed from anywhere. Users see their local time in viewLinc and can operate the software in their own language.

DATA INTEGRITY ASSURED

viewLinc has several features that ensure data integrity. These include: unmodifiable data, audit trail, system access controls, authority levels that fulfil regulatory requirements for segregation of duties, device checks that verify the origin of data, and validation alarms to guarantee the data validity.

"Of all the monitoring systems we looked at, the viewLinc monitoring system provided the best value... hands down!"

Dorraine Reynolds,
Pharmacy Director of US-based National Research Hospital

"When you need to show compliance to multiple governmental and regulatory agencies for 2,273 temperature or humidity channels, quick reporting is a necessity."

Joe Cwiertniewicz,
McKesson Facilities Manager

"After years of working with the system, generating the kind of reports that make auditors happy, we've found Vaisala's viewLinc Monitoring System to be bullet-proof."

Timothy Phelps, Facilities Engineering Manager
McKesson Specialty Distribution

VaiNet: Long-range Wireless

VaiNet* wireless technology is the proprietary wireless option of the viewLinc Monitoring System.

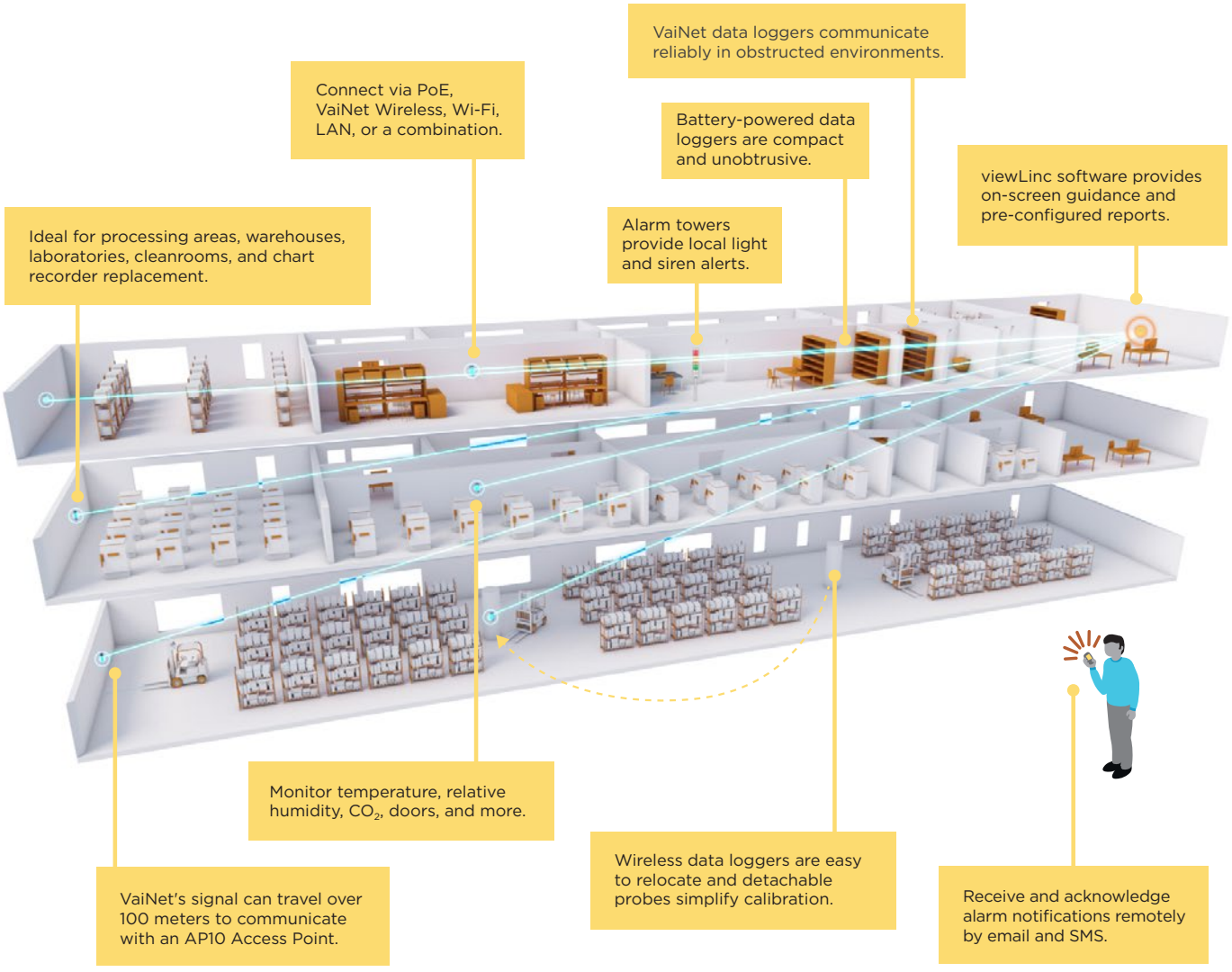
VaiNet operates autonomously from other wireless devices and networks, eliminating the need for dedicated Ethernet connectivity for each monitored location. Each VaiNet AP10 access point can support 32 wireless RFL-series data loggers. Data loggers are ideal for high-traffic and hard-to-reach areas and can easily be moved as monitoring needs change. Once powered on, VaiNet data loggers automatically establish communication with viewLinc software, simplifying installation and making the system easy to deploy with no previous experience setting up networked monitoring systems. The RFL-series data loggers are available in temperature and humidity, temperature-only models with up to two channels for ambient or fridge/freezer monitoring, or CO_2 models for incubators.

Features and Benefits:

- Long-range indoor, interference resistant connectivity, superior signal strength ≥100 meters.
- A proprietary network that maintains integrity around other wireless devices and networks.
- Self-healing device-to-software connection with automatic recovery and data backfill.
- Superior signal strength and penetration — no repeaters or signal amplifiers needed.
- Secure autonomous operation parallel to other wireless equipment and systems.
- Industrial, Scientific, and Medical (ISM) wireless frequencies (868MHz, 915MHz, or 920MHz depending on region) that remove the signal load of monitoring devices from other existing networks.
- RFL-series data loggers are available in temperature and humidity, temperature-only, and CO_2 models.
- Easy setup with fast data logger configuration. No network administration expertise required.

**VaiNet devices are available in selected regions globally. Other regions will require alternate Vaisala solutions to support wireless monitoring with the viewLinc system. Please contact your local Vaisala representative to learn what wireless data loggers are available in your region.*

Quickly Installed, Easily Networked, Ready-to-Use Devices



"Before installing viewLinc, we spent eight to ten hours per week checking chart recorders. Now we check all locations in realtime from a Web browser and generate reports in minutes."

Mark Kashef
Teledyne Technologies Inc.

Device Options: Unmatched Flexibility, Superior Reliability

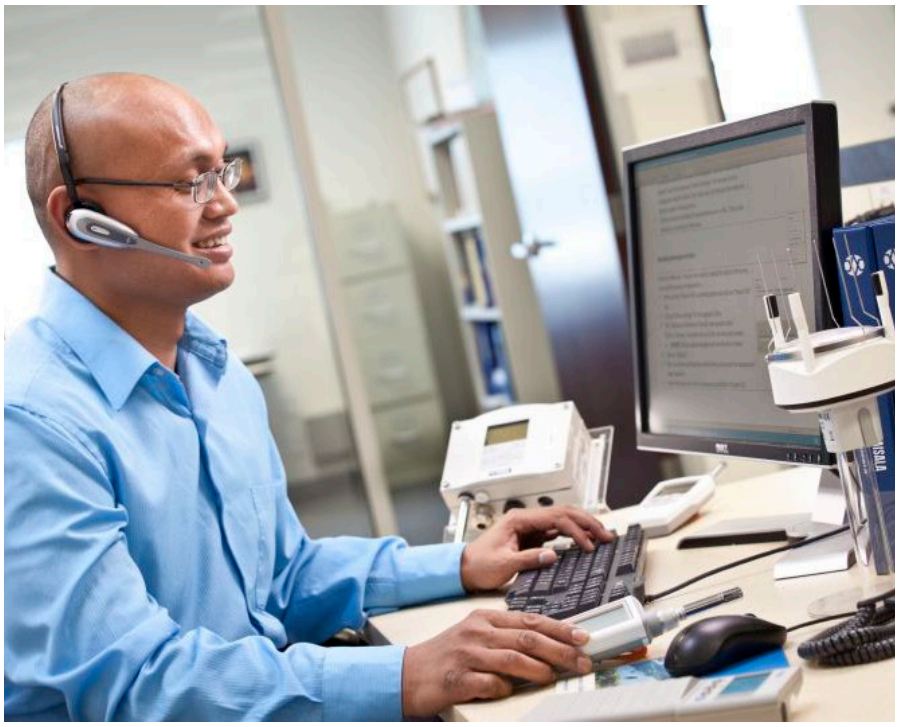
The system can monitor almost any parameter by integrating devices that communicate over Modbus or analog outputs (4...20mA, 0...5V, 0...10V). Other options include thermocouples or dry contacts. This range of sensing hardware results in an unmatched variety of options in industrial monitoring. We offer prefabricated cabinets (CAB100) that incorporate Vaisala instruments with other hardware for customized solutions.

Features and Benefits:

- Choose from a wide selection of Vaisala transmitters, data loggers, and probes.
- Wall, duct and remote probe mounting capabilities with wired or wireless connectivity.
- Temperature measurements from -240 °C to 1760 °C and humidity measurements to 100%RH.
- Dew point measurements from vacuum to 100 bars; ambient to -80°C dew point.
- Differential pressure sensors for single-point monitoring and multiple zone applications using customized panels.
- CO_2 measurement for incubators can include temperature, or temperature and humidity.
- Intrinsically safe options for hazardous/explosive areas. Compliant with VTT (CENELEC, Europe), FM (USA), CSA (Canada), TIIS (Japan), and PCEC (China), VTT (IECEx).

Easy to install, monitoring devices self-identify within the viewLinc software and come with simple configuration templates.

Services and Calibration



Comprehensive Support:

- Full service calibration and functional testing in our accredited laboratories, or convenient on-site calibration. Learn more at vaisala.com/calibration
- Full system installation, configuration and training by our skilled technicians ensure the system is set up to meet your needs quickly and with minimal effort.
- The viewLinc Life Cycle Maintenance Agreement provides software maintenance, prioritized technical support by phone, email and remote connection, administrator and user training, access to viewLinc eLearning materials.

Vaisala's team of engineers, metrologists and technical support experts are committed to ensuring your system functions flawlessly for many years.

The Vaisala viewLinc Monitoring System comes with a full suite of service options. From project deployment services to comprehensive life cycle support, including installation, validation, and calibration, either on-site or in our accredited calibration laboratories. We offer an extensive Life Cycle Maintenance Agreement to ensure you get the best value out of your system.

Calibration Options

Vaisala's calibration laboratories were established in 1958 and are equipped with continually updated equipment and technology. Our global service centers provide a wide range of calibration services traceable to SI-units to meet your specific needs: standard calibration, custom points, and ISO/IEC 17025 accredited calibration services audited by the world's leading accreditation authorities. We also offer on-site calibration in some areas.

Detachable probes on the VaiNet RFL series loggers contain the measurement electronics that allow the probe to be easily replaced with a newly calibrated probe, leaving the data logger in place for continuous monitoring. We also offer probe replacement services.

Validation

For quality systems that require rigorous change control, we offer optional validation protocols and service, as well as documentation to support GAMP5 implementations to demonstrate that your system is operating in a state of control.

Data Loggers, Instruments, Transmitters

RFL100

The RFL100 data logger signal travels over 100 m indoors without amplifiers or repeaters. The RFL data loggers combine with viewLinc Enterprise Server software, version 5.0 and later. Most models are battery-powered with two standard AA batteries and have approximately 30 days of on-board memory. RFL100 measurement options include: temperature only (up to two channels), temperature and relative humidity, or CO_2, with or without temperature and humidity. Other RFL100 options include integrated or cabled probes, mounting accessories, and heat resistant cables.

HMT140

The Vaisala HUMICAP® Humidity and Temperature Wi-Fi data logger HMT140 measures relative humidity and temperature, or other parameters via, voltage or current loop. An optional Boolean channel connects to door switches or alarm contacts. The battery-powered HMT140 connects easily to an existing Wi-Fi network. Options include LCD display, multiple signal measurements, and fixed probe directly attached to the transmitter housing, or a remote probe with different cable lengths (3/5/10 m).

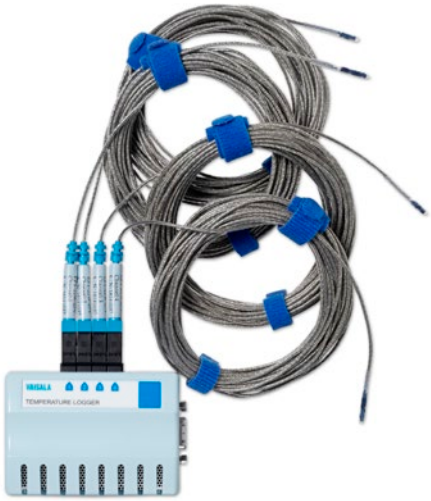
HMT330

The Vaisala HUMICAP® Humidity and Temperature Transmitter Series HMT330 is designed for demanding applications where stable measurement and customization is important. Featuring warmed probe technology for superior performance in condensing environments and an IP65 corrosion-resistant housing, the HMT330 has an option for integrated data logging, with over four years of measurement history.

AP10

The Vaisala VaiNet AP10 access point is required to connect RFL100 wireless data loggers to the viewLinc Enterprise Server. In a typical system, the AP10 is installed within 100 meters of an RFL100 data logger. In large systems with over eight AP10s, access points that share channels must be placed ≥50 m apart. Installation is easy with each data logger automatically identified by an AP10 when turned on. Access points, along with the viewLinc Enterprise Server, verify all data and store it in a secure database where it is protected from tampering and loss.

Data Loggers, Instruments, Transmitters*



DL2000

Vaisala DL2000 precision temperature and humidity data loggers are compact, easy-to-use devices for monitoring critical and humidity-sensitive products and processes. With internal temperature and humidity sensors, the DL2000 features an optional external channel with current or voltage inputs to record other parameters. An optional Boolean channel connects to door switches or alarm contacts. Each data logger has an internal battery and onboard memory to ensure no data is ever lost to power outage or network downtime.

DL1016/1416

These temperature data loggers can monitor up to four applications across a wide range of temperatures — from ultra-low temperature freezers, freezer/refrigerators, and test chambers to incubators. The DL1016 and DL1416 loggers eliminate the need to install additional hardware; no extra loggers or added network access points are required to simultaneously monitor up to four environments.

DL4000

The DL4000 universal input data loggers are a simple solution for monitoring pressure, flow, level, pH, electrical properties and gas concentrations. Ideal for standalone or networked monitoring applications, this data logger connects to a PC via USB or installs to your existing network via Ethernet, vNet PoE, or Wi-Fi. Each DL4000 data logger contains onboard memory for recording a wide range of variables at the point of measurement.

Indigo Series Transmitters

Vaisala Indigo Series host devices are part of Vaisala Indigo product family and intended for Vaisala's intelligent, stand-alone humidity probes, CO_2 probes, and vaporized hydrogen peroxide probes.

** The products listed are a small sample of the options available. Contact your local Vaisala representative for more information.*

www.vaisala.com