

# Vaisala viewLinc Monitoring System

/ TEMPERATURE, RELATIVE HUMIDITY, DOOR SWITCHES,  
CO<sub>2</sub>, DIFFERENTIAL PRESSURE, AND OTHER VARIABLES



SIMPLE & RELIABLE ENVIRONMENTAL MONITORING

**VAISALA**

# Flexible 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<sub>2</sub>, differential pressure, door switches, and more.

The system scales easily—from one or two measurement points to over 1000 monitored locations. With eight language versions the software is ideal for multi-site and global connectivity. The viewLinc Enterprise Server makes it easy to network data loggers via any combination of connectivity options, including: Ethernet, PoE, WiFi, and Vaisala's proprietary wireless technology: VaiNet.



## Reliable Monitoring Simplified

### The Vaisala viewLinc Monitoring System provides:

- › Real-time monitoring and alarming, with customizable reporting
- › Real gap-free monitoring even during power and network outages
- › Easy connectivity to existing networks via multiple connectivity options
- › Wide selection of wireless, WiFi and wired devices
- › Simple installation and validation, intuitive interface
- › Optional on-site installation and validation services for easy start-up
- › Onscreen tours for first-time users; each function has pop-up assistance to direct the user
- › Embedded help ensures ease-of-use for occasional users
- › Redundant recording that runs parallel to control systems
- › Mobile optimized interface – easy to use on smart phones
- › Automated localized reporting for multi-language applications

# 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 Manger, AstraZeneca*

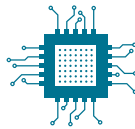
## viewLinc Measures, Monitors and Maps Here...



*Fridges /  
Freezers*



*Pharma/Biotech  
/HCT/Ps*



*Semiconductor*



*Museums &  
Archives*



*Calibration Labs*



*Aerospace*



*Data Centers  
/ IT*



*Food &  
Beverage*



*Warehouses*



*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.

Learn more about system options at [viewlinc.vaisala.com](http://viewlinc.vaisala.com).

*"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*

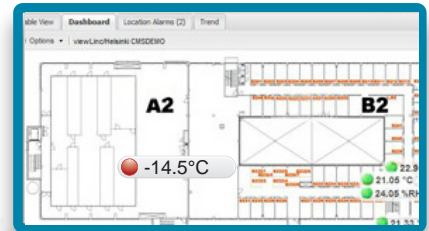
### Options for Regulated Applications:

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

# viewLinc Enterprise Server: Simple & Intuitive



Live data showing the conditions overlaid on actual environment photo



Live data showing the conditions overlaid on floor schematic

*The system nearly deploys itself... Simply open the box, download viewLinc and place the data loggers. The software will identify each device and walk you through a simple configuration.*



On-Screen Guidance



Simple User Guides



eLearning On-Demand



Technical Support

## Features and Benefits:

- Onboarding directions for first-time users make viewLinc easy to learn.
- Onscreen tips and tours of functions save you from having to relearn the system each time if you don't go into viewLinc often.
- Support for Internet Explorer 11, Microsoft Edge and Chrome.
- Every user and administrator has 24/7 access to multiple support options (with support plan).



# VaiNet: Wireless that Stops at Nothing



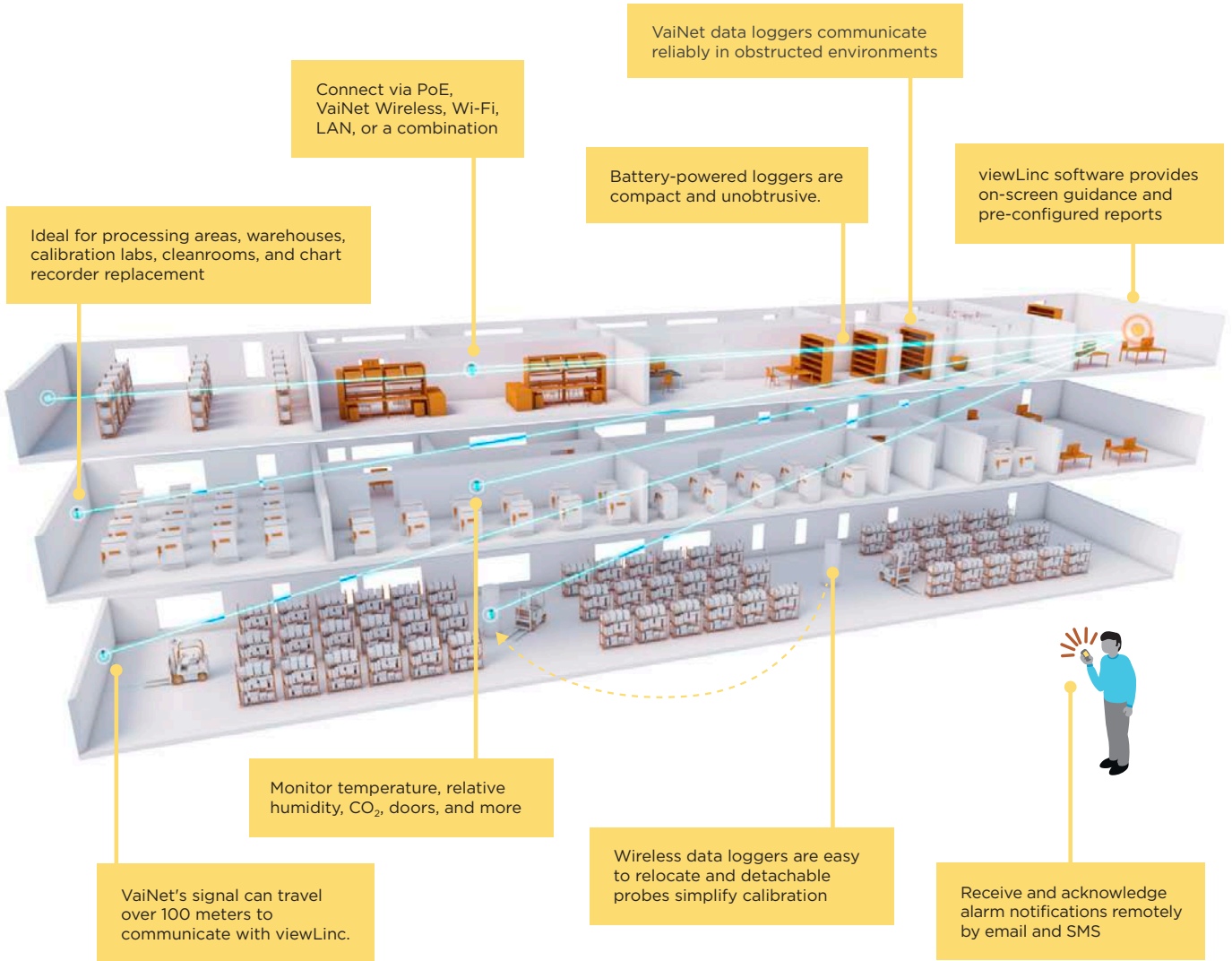
## VaiNet provides:

- Long-range indoor, interference resistant connectivity, superior signal strength  $\geq 100$  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 compared to other technologies used in wireless monitoring systems. No repeaters or signal amplifiers needed.
- Coexists securely with other wireless equipment and systems.
- Dedicated wireless frequencies (868MHz or 915MHz region dependent) leave other existing networks uncluttered by monitoring devices.
- VaiNet uses RFL series data loggers that are recognized by the software as soon as they are turned on.
- Each RFL series data logger has templates for fast, easy configuration.
- Setting up a VaiNet network requires no network administration experience.

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

*\*VaiNet devices will be available in Spring 2017 in Americas, Europe, China, Australia and New Zealand. Some regions require different devices to support wireless monitoring in the viewLinc system. Please contact your local Vaisala representative to learn more.*

# 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 real time from a Web browser and generate reports in minutes.”*

*- Mark Kashef, Teledyne Technologies Inc.*

# Device Options: Unmatched Flexibility, Superior Reliability



The system can integrate analog hardware to monitor almost any parameter with devices that output 4...20mA, 0...5V, 0...10V, thermocouple (mV) or dry contact (Boolean). This range of sensing hardware results in an unmatched variety of options in industrial monitoring. We offer prefabricated panels\* that incorporate Vaisala instruments with other hardware for customized solutions.



## Devices:

- Wall, duct and remote probe mounting capabilities with wired or wireless connectivity.
- Temperature measurements from -196 °C ... + 1000 °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<sub>2</sub> measurement from 0 to 20% for demand controlled ventilation and safety applications.
- Intrinsically safe options for hazardous/explosive areas. Compliant with VTT (CENELEC, Europe), FM (USA), CSA (Canada), TIIS (Japan), and PCEC (China), VTT (IECEx).

*Deployable right out of the box, monitoring devices self-identify within the viewLinc software and come with easy-to-use configuration templates.*

*\* For information about panels, please contact your local Vaisala representative.*



# 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 DL-series logger. Automatic data backfill to the server and client PCs ensure gap-free data during network or power outages.

## Flexible Alarming

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

The system can span time zones and still report in the time of the local facility. All data is collected and keyed to one time zone, but reportable to all.

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

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



*“You just need to ask yourself:  
how valuable are your assets?  
Ours are priceless.”*

*- QA/RA Manager*

*“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*



# Services and Calibration



## Comprehensive Support:

- Onsite or full service calibration and functional testing in our accredited laboratories. Learn more at [www.vaisala.com/calibration](http://www.vaisala.com/calibration)
- Full system installation, configuration and training by our certified technicians ensures the system is set up to meet your needs quickly and with minimal effort.
- Extensive support plans that provide prioritized technical support by phone, email and Web, instructor-led administrator and user training, access to eLearning content and software upgrades.

*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 calibration services — onsite and in our ISO17025 accredited calibration laboratories — to warranties, data logger rentals, and a comprehensive support plan. Vaisala support options are designed to help you get the most 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 to meet your specific needs: standard calibration, custom points, and 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, which allows the probe to be easily replaced with a calibrated alternate, leaving the 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 GAMP implementations to demonstrate that your system is operating in a state of control.

# Data Loggers, Instruments, Transmitters\*



## RFL100

The Vaisala VaiNet Wireless Humidity and Temperature Data Logger RFL100 utilizes Vaisala's proprietary VaiNet wireless technology to monitor conditions in controlled environments. The RFL100 achieves wired equivalency with a Chirp Spread Spectrum signal filter and features superior signal strength to 100 m (328ft.); further in unobstructed environments. The RFL100 is powered with two standard AA sized batteries, 1.5V (LR6 or FR6) for easy battery replacement, and provides 18 months of operation at 20 °C. The housing is classified IP54 to protect the device from dust and cleaning, and the detachable probe is easily switched out to maintain accuracy.



## AP10

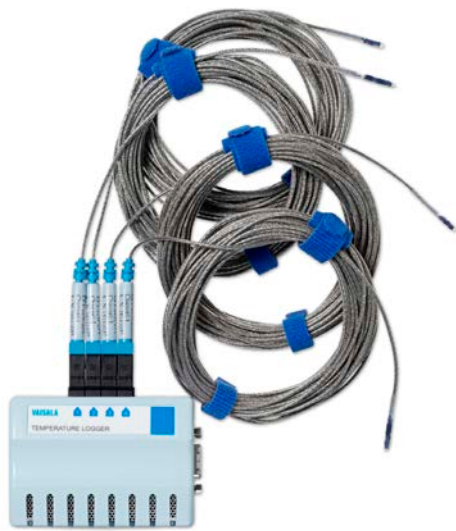
The Vaisala VaiNet RFL wireless data loggers require a connection to a VaiNet access point: the AP10. Each AP10 can connect up to 32 loggers to the viewLinc Enterprise Server. In a typical system, the AP10 is installed within 100 meters of an RFL100 data logger. In unobstructed environments the range will be significantly higher. Installation is easy with each 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.



## HMT140

The Vaisala HUMICAP® Humidity and Temperature Wi-Fi data logger HMT140 measures relative humidity and temperature using probe and analog signals – RTD, voltage, current loop and Boolean contacts. The battery-powered HMT140 connects easily to an existing Wi-Fi network. Options include 9-30VDC power supply, 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).

\* The products listed are a small sample of the options available. Vaisala VaiNet devices RFL100 and AP10 are not available in some regions. Contact your local Vaisala representative for more information.



### DL1016/1416

These multi-application temperature data loggers can monitor temperatures in up to four applications across a wide range of temperatures — from ultra-low temperature freezers, freezer/refrigerators, test chambers and incubators. The DL1016 or 1416 loggers eliminate the need to purchase and install additional hardware; no extra loggers or added network access points are required to simultaneously monitor multiple environments.



### 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.



### DL4000

The DL4000 data loggers are a simple solution for monitoring pressure, flow, level, pH, electrical properties and gas concentrations. Ideal for standalone or networked applications, this Universal Input logger connects to a PC via USB or installs to your existing network via Ethernet, vNet PoE or Wi-Fi. Each logger contains a 10-year battery and onboard memory for recording a wide range of variables at the point of measurement.



### DL2000

Vaisala DL2000 precision temperature and humidity data loggers are compact, powerful and easy-to-use devices for monitoring critical and humidity-sensitive products and processes in labs, cleanrooms, and stability chambers. The DL2000 also features an optional external channel with current or voltage inputs to record parameters such as differential pressure, CO<sub>2</sub>, level, particles, or conductivity. An optional Boolean channel connects to door switches or alarm contacts.



