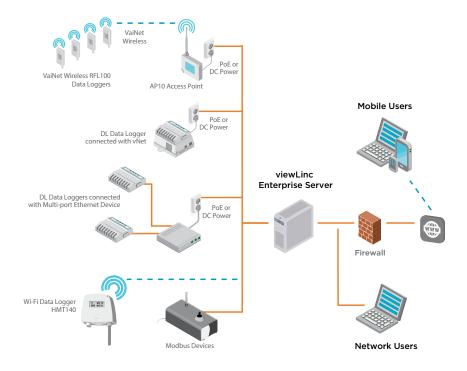
# VAISALA

# Vaisala viewLinc Enterprise Server version 5.1



#### **Features**

- Software for continuous monitoring of temperature, humidity and other parameters
- Eight language versions for enterprise-wide, multi-site use
- Preconfigured and custom reports
- Configurable alarm notifications: email, SMS, voice calls, signal towers, browser alerts
- Scheduled threshold alarming and alarm notification delivery times to accommodate maintenance periods or work shifts
- Interactive tours built-in guidance for novice users
- Licensed features: Voice/SMS web service, third-party Modbus devices, Vaisala OPC UA Server, REST API

Vaisala viewLinc Enterprise Server software allows you to network several types of Vaisala data loggers or Modbus devices, using a combination of wired and wireless connections. It supports small installations of one or two measurement points, or large systems that monitor thousands of locations. Designed for regulated and critical environmental monitoring, viewLinc ensures data integrity with a secure audit trail, access controls, encryption, and authorization levels that fulfill regulatory requirements.

### **Continuous reliability**

viewLinc runs as a Microsoft® Windows® service. If you are required to reboot your server, the viewLinc service restarts automatically. Users log in to viewLinc on any network computer or mobile device with a supported browser and can display viewLinc in several languages: English, German, French, Portuguese, Spanish, Swedish, Finnish, Chinese, and Japanese. viewLinc supports UTF-8 compliant multi-byte character sets.

### Licensing

A license key is required for each viewLinc Enterprise Server or Device Host installation (the number of devices permitted is defined by the license key). Obtain additional licenses to enable

voice or SMS web notifications, to integrate with Vaisala OPC UA Server or the viewLinc REST API, or to add third-party Modbus devices.

## **Upgrading**

Previous versions of viewLinc, 3.6.1 and higher, can upgrade to 5.1 directly. Depending on the server/database size, upgrade may take a few minutes or several hours (4 to 6).

### **System requirements**

- A dedicated server continuously available 24/7 to run viewLinc Enterprise Server software.
- One or more Vaisala data loggers, Vaisala wireless data loggers, or Vaisala HMT300 series transmitters.

 Vaisala cables, for connecting data loggers and setting up wireless transmitters.

### **Optional requirements**

- Vaisala or third-party Modbus-enabled devices
- A dedicated or shared server to manage devices at multiple sites (running viewLinc Device Host software).
- Remote display terminals to monitor sites without user PCs.
- vNet, single or multi-port devices, to connect data loggers, transmitters or probes through Ethernet.
- Voice/SMS web service provider account (Twilio). Voice call delivery requires an Internet-accessible port (service limited in some regions).

# Technical data

# Requirements based on system size

System size in data points	1 20	21 400	400+
Dedicated or shared server	Either	Either	Dedicated
CPU	1.6 GHz dual core	1.6 GHz dual core	3.2 GHz quad core
RAM	8 GB	12 GB	16 GB
Disk space increase/year	1.5 GB/year for 20 data points	15 GB/year for 200 data points	75 GB/year for 1000 data points
Continuous free disk space for reports <sup>1)</sup>	2 GB	4 GB	10 GB

<sup>1) 1</sup> month duration with 1 minute scan/sample

# **Server requirements**

Availability	Dedicated server available 24 hours a day, 7 days a week
Server management	Connected to an uninterruptible power supply (UPS)
	Backup solution with support for open file backup
	Synchronizes time with a Network Time Protocol (NTP) server
Operating system	Windows Server® 2019 Windows Server® 2019 Datacenter Edition Windows Server® 2016 Windows Server® 2016 Datacenter Edition Windows Server® 2012 R2 (64-bit) Windows® 10 Enterprise (64-bit)
Virtual server support	VMWare
Application disk space	350 MB
Database disk space 1)	200 KB/data point <sup>2)</sup> /day
Network traffic <sup>3)</sup>	Approx. 100 KB/minute/device
Web interface protocol <sup>4)</sup>	TLS 1.3
Security certificate for web interface	Authorized TLS certificate and key <sup>5)</sup>
Email encoding	RFC 2047
Secure email protocol	TLS 1.2

- Not applicable to Device Host installation.

  Data points are device channels monitoring and recording data.

  Depends on number of devices, system configuration and type of communication devices used. 
  viewLinc 5.1 includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit. 
  http://www.openssl.org/
  viewLinc-signed certificate and key can be generated during installation.

### **Client requirements**

Internet browser	Google Chrome™ Microsoft® Edge™
Computer clients	Any network computer with a supported Internet browser, a minimum 2.4 GHz CPU, and 4 GB of RAM.
Display and tablet clients	Touchscreen or mouse-operated panel with a supported Internet browser. Must be connected to the same network as viewLinc Enterprise Server.

# Wireless device connectivity

RFL100 series <sup>1)</sup>	Connects using Vaisala VaiNet protocol. Requires installation of an AP10 access point.
HMT140 series	Connects using Wi-Fi protocol. Requires configuration with an HMT140 configuration cable.
300-series transmitter	Connects using WLAN or LAN interface.
VaiNet devices not available in all regions	

# Wired device connectivity

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DL series using vNet device	vNet Power-over-Ethernet devices are 802.3af compliant and work with both end-point and mid-span systems. viewLinc Aware automatically detects and configures vNet devices. <sup>1)</sup> Requires vNet device drivers (provided).
DL series using single or multi-port Ethernet device	Ethernet connectivity devices must be configured with static or reserved IP addresses. If the devices are being installed on different subnets, they need to be configured before being installed. Ethernet device drivers must be installed on each server used to connect Vaisala devices.
DL series using USB cable	Connect devices directly to viewLinc Device Hosts using a USB-to-logger cable. Requires USB ports.
Modbus devices (RTU or TCP)	Connect devices directly to viewLinc Device Hosts using a USB-to-device cable (TCP) or Ethernet-to-serial device drivers and serial connector cables. RTU devices require serial COM ports. TCP devices require a static IP address.
Signal tower (light and/or buzzer)	Connect devices according to manufacturer directions. Preconfigured device settings are selectable in viewLinc. Note that you must assign a static or reserved IP address for signal towers.

vNet devices maintain a low power rating by operating at a network speed of 10 Mbps. To ensure your network devices can operate at different speeds, set the network speed for the connected vNet port (see vNet User Guide).

## **Network ports**

Default	Туре	Used by
23	TCP	300-series transmitters
80	TCP	Signal towers
443	TCP	viewLinc web interface
502	TCP	Modbus TCP-enabled devices
771	TCP	vNet and multi-port Ethernet devices
950	TCP	Moxa serial-to-Wi-Fi devices
6767	UDP	HMT140
12500	TCP	Twilio web services
12600	TCP/UDP	VaiNet access points, viewLinc Enterprise Server connection with vNet or Device Host
55000	TCP	Vaisala OPC UA Server

