



Visionize® Lab Suite Product Guide

You and Your Lab – Connected.

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Monitor Your Laboratory Equipment in Real Time and Receive Notifications Straight to Your Phone when Issues Occur

VisioNize® Lab Suite ensures you access to critical parameters of your connected lab devices to ensure the safety of your samples and the reliability of your research. The user-friendly platform provides easy, quick access to all relevant data so you can react rapidly to avoid severe problems in the lab.



Remote monitoring

- > Monitor connected lab devices and track status, parameters, and performance.



Real-time-notification

- > Get alert and event notifications to address issues quickly.



Easy Device data export

- > Export device parameter, event data, and any user interactions.



Alert Management & Response-Based Escalation

- > Track all alert acknowledgements with time-stamped data logs.
- > Define escalation schemes to individual or multiple recipient groups based on lab presence.



Connectable Devices

Do you already have a new Eppendorf device with a touch screen?:

Then you're ready to start VisioNize Lab Suite. Out-of-the-box connectivity with VisioNize onboard devices:

Eppendorf ULT Freezers

CryoCube® F740i
CryoCube® F740hi
CryoCube® F740iW
CryoCube® F740hiw

Eppendorf CO₂ Incubators

CellXpert® C170i

Eppendorf Shakers

CellXpert® CS220
Innova® S44i*
**only compatible after serial number S44IJH302546*

Eppendorf Cyclers

Mastercycler® X50 series*
Mastercycler® X40

*Mastercycler X50 eco not supported without Mastercycler X50 master device

No VisioNize® onboard devices?

Don't worry, easily connect with our [connect ware](#) VisioNize box 2 or VisioNize sense equipment*:

VisioNize box enabled

The [VisioNize box 2 and VisioNize box 2 cable](#) acts as a hardware hub and works as a translation system enabling data collection of the device data in VisioNize Lab Suite.

VisioNize sense

Connect your non-Eppendorf devices to the VisioNize Lab Suite. With VisioNize sense monitor and sensors you can [monitor](#), e.g., ambient temperature, humidity, pressure & light, and temperature of any device (including ULT freezers) within the range of +60 to -90 °C.

**Note: VisioNize sense equipment and VisioNize box 2 not available worldwide. Please contact us for local availability.*

VisioNize box enabled devices

Eppendorf Centrifuges

Centrifuge 5910 R
Centrifuge 5424 R
Centrifuge 5425
Centrifuge 5425 R
Centrifuge 5427R

Eppendorf CO₂ Incubators

New Brunswick S41i
CellXpert® C170
Galaxy 48R

Eppendorf Shakers

Innova® 40/40R
Innova® 42/42R
Innova® 43/43R
Innova® 44/44R

Eppendorf Thermomixer

Eppendorf ThermoMixer C,
F0.5, F1.5, F2.0, Fp
Eppendorf Thermostat C

Eppendorf Cyclers

Mastercycler® Nexus
Mastercycler® Nexus Gradient
Mastercycler® Nexus flat
Mastercycler® Nexus X2
Mastercycler® nexus GX2
Mastercycler® Nexus SX1
Mastercycler® Nexus GSX1

Eppendorf ULT Freezer

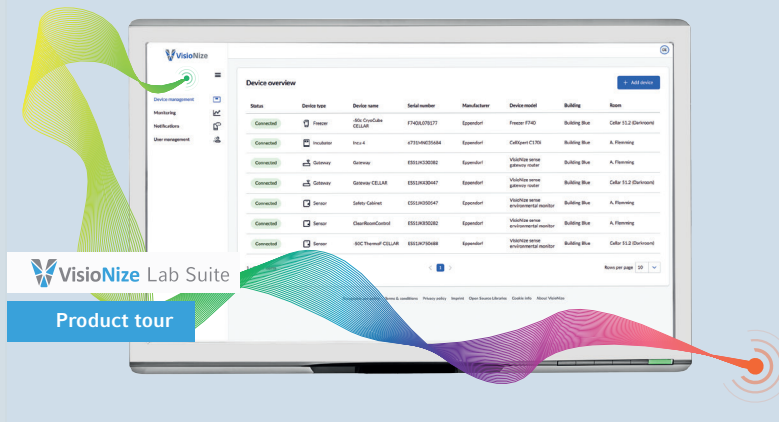
CryoCube® F440n
CryoCube® F440h
CryoCube® F570

Eppendorf ULT Freezer

CryoCube® F570h
CryoCube® F570hw
CryoCube® FC660
CryoCube® FC660h
CryoCube® F740
CryoCube® F740h
Innova® U101
Innova® U535
Innova® U570
Innova® U725
Innova® U725-G
Innova® C760
Innova® C585
Premium U410
Premium U570
HEF U410



Experience the Visionize Lab Suite



Learn more about the benefits of switching to a connected digital lab. Our specialists will give you insights into each service of the Visionize Lab Suite.

Join product tour:



**Eppendorf digital platform –
Demo of the Visionize Lab Suite**



Features of VisioNize Lab Suite



Real-Time Monitoring

Monitor your devices remotely and track device status, parameters (e.g. temperature), and history from anywhere



Alert Management

Track all alert acknowledgements with time-stamped data logs



Easy Data Access

Export device and event data, as well as logged user interactions



Instant Notifications

Receive alert and event notifications and quickly address any issues



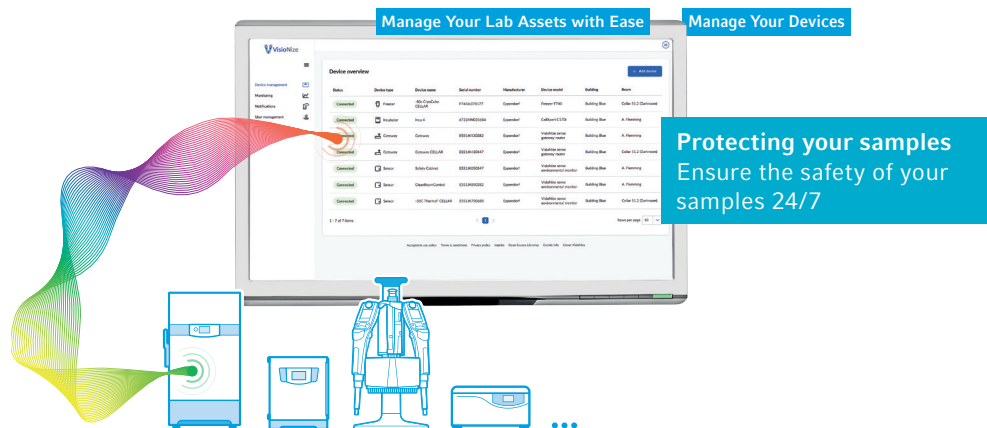
Device Connectivity

Connect and monitor all your temperature-controlled devices including 3rd party with VisioNize sense monitoring kit



Response-Based Alert Escalation

Define escalation schemes to individual or multiple recipient groups based on presence in the lab





Intuitive User Interface Optimized for Diverse Laboratory Needs

The screenshot displays the VisioNize Lab Suite interface. On the left is a collapsible side menu with options: Device management, Monitoring, Notifications, and User management. The main area is titled 'Device overview' and contains a table of connected devices. A callout points to the side menu, another to the top right profile icon, and a third to the table content.

Collapsible side menu for quick access to various application areas

Access to personal profile settings

Device management with overview of connection status, device type and location.

Status	Device type	Device name	Serial number	Manufacturer	Device model	Building	Room
Connected	Freezer	-50c CryoCube CELLAR	F740JL078177	Eppendorf	Freezer F740	Building Blue	Cellar 51.2 (Darkroom)
Connected	Incubator	Incu 4	6731MN035684	Eppendorf	CellXpert C170i	Building Blue	A. Flemming
Connected	Gateway	Gateway	ESS1JK530382	Eppendorf	VisioNize sense gateway router	Building Blue	A. Flemming
Connected	Gateway	Gateway CELLAR	ESS1JK430447	Eppendorf	VisioNize sense gateway router	Building Blue	Cellar 51.2 (Darkroom)
Connected	Sensor	Safety Cabinet	ESS1JK050547	Eppendorf	VisioNize sense environmental monitor	Building Blue	A. Flemming
Connected	Sensor	CleanRoomControl	ESS1JK850282	Eppendorf	VisioNize sense environmental monitor	Building Blue	A. Flemming
Connected	Sensor	-50C ThermoF CELLAR	ESS1JK750688	Eppendorf	VisioNize sense environmental monitor	Building Blue	Cellar 51.2 (Darkroom)

1 - 7 of 7 items

Rows per page 10



Manage your Lab Assets with Ease

VisioNize

Device management

Monitoring

Notifications

User management

Device overview

Status	Device type	Device name	Serial number	Manufa
Connected	Freezer	-50c CryoCube CELLAR	F740JL078177	Eppend
Connected	Incubator	Incu 4	6731MN035684	Eppend
Connected	Gateway	Gateway	ESS1JK530382	Eppend
Connected	Gateway	Gateway CELLAR	ESS1JK430447	Eppend
Connected	Sensor	Safety Cabinet	ESS1JK050547	Eppend
Connected	Sensor	CleanRoomControl	ESS1JK850282	Eppend
Connected	Sensor	-50C ThermoF CELLAR	ESS1JK750688	Eppend

1 - 7 of 7 items

Incu 4

Eppendorf CellXpert C170i

Connected

Details

Notes

General Information

Device typeIncubator

Device nameIncu 4

Serial number6731MN035684

Custom inventory ID

ManufacturerEppendorf

Device modelCellXpert C170i

Software version2.7.4

Location

Site-

BuildingBuilding Blue

RoomA. Flemming

Position-

Address

Use notes for maintenance instructions, contact details or any other infos

Manage your device details for quick and easy identification of your assets



Manage your Lab Assets with Ease

The screenshot displays the VisioNize Lab Suite interface. On the left is a sidebar with navigation options: Device management, Monitoring, Notifications, and User management. The main area is titled 'Device overview' and contains a table of lab assets. A modal window titled 'Add device' is open, prompting the user to 'Connectable device' and 'Enter the serial number'. A callout box points to the serial number input field with the text '...simply by entering the serial number.'.

Device overview

Status	Device type	Device name	Serial number	Manufacturer	Device model	Building	Room
Connected	Freezer	-50C CryoCube CELLAR	F740JL078177	Eppendorf	Freezer F740	Building Blue	Cellar 51.2 (Darkroom)
Connected	Incubator	Incu 4	6731MN035684	Eppendorf	CellXpert C170i	Building Blue	A. Flemming
Connected	Gateway				VisioNize sense gateway router	Building Blue	A. Flemming
Connected	Gateway				VisioNize sense gateway router	Building Blue	Cellar 51.2 (Darkroom)
Connected	Sensor				VisioNize sense environmental monitor	Building Blue	A. Flemming
Connected	Sensor				VisioNize sense environmental monitor	Building Blue	A. Flemming
Connected	Sensor	-50C ThermoF CELLAR	ESS1JK750688	Eppendorf	VisioNize sense environmental monitor	Building Blue	Cellar 51.2 (Darkroom)

1 - 7 of 7 items

Rows per page 10

Add device

Connectable device

Enter the serial number

Close Submit serial number

...simply by entering the serial number.



More Peace of Mind with Real-Time Device Monitoring & Analysis

The screenshot displays the VisioNize Monitoring dashboard. On the left is a sidebar with navigation options: Device management, Monitoring (selected), Notifications, User management, and Audit trail. The main area is titled 'Monitoring' and contains a table of connected devices. A search bar is located at the top right of the table area. Two callout boxes provide additional context: one points to the table header indicating it's a list of all connected devices, and another points to the 'Alert status' and 'Door/Lid' columns indicating a quick situation overview.

List of all connected devices, e.g. freezers and incubators

Quick situation overview with indicators for alert status and door opening

Activity status	Device	Alert status	Door/Lid
Running	CryoCube F740 Eppendorf CryoCube F740	●	-
Running	VisioNize box 1006GM100159 Eppendorf VisioNize box 1	●	-
Unavailable	Sense Gateway Fair Demo Eppendorf VisioNize sense gateway router	-	-
Unavailable	Sense Monitor Fair Demo 1 Eppendorf VisioNize sense environmental monitor	-	-
Running	Sense Monitor Demo 2 Eppendorf VisioNize sense environmental monitor	●	-
Running	Sense Gateway Demo - Backup Eppendorf VisioNize sense gateway router	●	-
Running	My Freezer F740i (Fair device) Eppendorf Freezer F740	⚠	🚪
Running	My CellXpert C170i (Fair device) Eppendorf CellXpert C170i	●	🚪

1 - 8 of 8 items

Rows per page 10



More Peace of Mind with Real-Time Device Monitoring & Analysis

The screenshot displays the VisioNize Lab Suite interface. On the left is a sidebar with navigation options: Device management, Monitoring (selected), Notifications, and User management. The main area is titled 'Monitoring' and shows a list of devices with their activity status. The 'CleanRoomControl' device is highlighted, and a detailed parameter view is shown on the right. This view includes tabs for Parameters, History charts, Events, and Export. The Parameters tab is active, showing real-time data for Ambient Temperature (22°C), Relative Humidity (34%rH), Barometric Pressure (988mBar), and Brightness (1%).

Deep dive into realtime data, history charts and event log

Live parameter view: Instantly assess your selected instrument status

Device selection for deeper device insights

Activity status	Device
Running	-50c CryoCube CELLAR Eppendorf Freezer F740
Running	Incu 4 Eppendorf CellXpert C170i
Running	Gateway Eppendorf VisioNize sense gateway router
Running	Gateway CELLAR Eppendorf VisioNize sense gateway router
Running	Safety Cabinet Eppendorf VisioNize sense environmental monitor
Running	CleanRoomControl Eppendorf VisioNize sense environmental monitor
Running	-50C ThermoF CELLAR Eppendorf VisioNize sense enviro

1 - 7 of 7 items

CleanRoomControl
Eppendorf VisioNize sense environmental monitor

Running 71%

Parameters History charts Events Export

Ambient Temperature **22°C** >

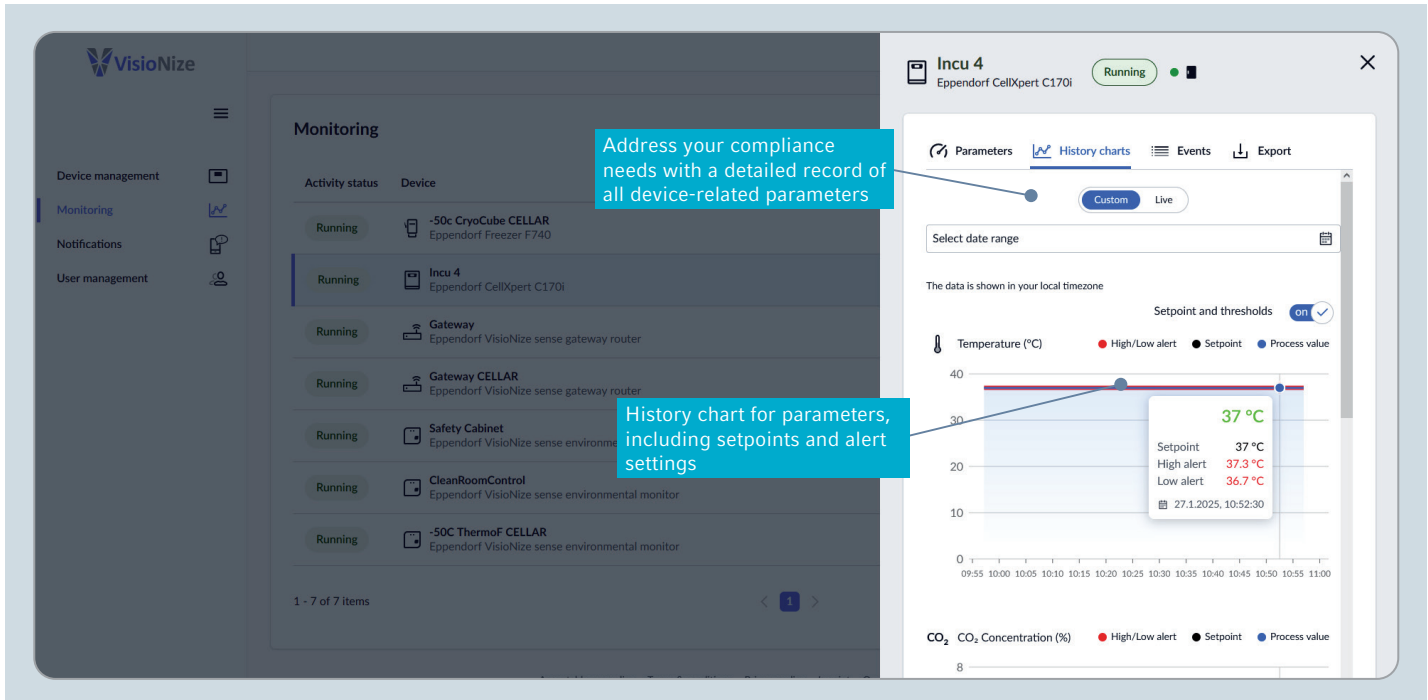
Relative Humidity **34%rH** >

Barometric Pressure **988mBar** >

Brightness **1%** >



More Peace of Mind with Real-Time Device Monitoring & Analysis





More Peace of Mind with Real-Time Device Monitoring & Analysis

The screenshot displays the VisioNize Lab Suite interface. On the left, a sidebar contains navigation icons. The main area is divided into two panels. The left panel, titled 'Monitoring', shows a list of devices with their activity status. The right panel, titled 'My Shaker S44i', shows the status of a specific device and a list of events.

Monitoring Panel:

Activity status	Device
Running	Freezer Eppendorf Freezer F740
Running	Incubator Eppendorf Incubator C170i
Running	My Centrifuge Eppendorf Centrifuge Model
Running	My Shaker S44i Eppendorf Shaker S44i
Running	My Incubator Eppendorf Incubator C170i
Running	Sensor Eppendorf VisioNize sense environmental monitor
Running	Freezer Eppendorf Freezer F740
Running	Incubator Eppendorf Incubator C170i
Running	Sensor Eppendorf VisioNize sense environmental monitor

My Shaker S44i Panel:

My Shaker S44i
Eppendorf Shaker S44i

Running

Parameters History charts Events Export

Select date range

Search for event

The data shown in your local time zone (UTC +1)

Type	Time	Event
Info	30.03.2025 12:31:01	Chamber Light turned on.
Info	30.03.2025 12:31:01	Chamber Light turned off.
Info	30.03.2025 12:31:01	Ack.: Door open longer than 0:30 min.
Info	30.03.2025 12:31:01	Speed function turned on.
Info	30.03.2025 12:31:01	Door closed after 0:53 min.
Warning	30.03.2025 12:31:01	Door open longer than 0:30 min

Use the export for compliance requirements & in-depth analysis

All device and user activities, alerts and errors are logged with time-stamps as a non-editable record



Your Enhanced Safety Net with Incidents & Alerts

Configure notification rules to receive alerts via App, email or SMS

Setup notifications for a singular device or device groups

Select your recipients: Individuals or a group

Granular control over what kind of notifications you want to receive: Error, Alert, Warning and/or Info

VisioNize

Device management

Monitoring

Notifications

User management

Notifications

Notification rules

Manage rules for when notifications are triggered to stay informed of key device events.

Status	Name	Device type	Condition
Active	Freezer Notification rule	Freezer 1	
Active	Incubator Error Notification rule	Incubator 1	
Active	Sense Gateway Status Rule	Gateway 1	
Active	Sensor Escalation Rule	Sensor 1	

1 - 4 of 4 items

Acceptable use policy Terms & conditions Privacy policy Imprint Op

Freezer Notification rule

Active

Devices

My Freezer F740
Eppendorf Freezer F740

Condition

You'll be notified on all events within the device type.

- Error: Technical device problem e.g. power failure
- Alert: Critical situation e.g. door/lid left opened too long, parameter exceeded the alert limits
- Warning: Potentially negative condition e.g. device unavailable or parameter exceeded the warning limits

Recipients

visionize.news@eppendorf.com

Created

by visionize.news@eppendorf.com on 17.01.2025, 13:05

Edit



Your Enhanced Safety Net with Incidents & Alerts

The screenshot displays the VisioNize interface with a sidebar on the left containing navigation options: Device management, Monitoring, Notifications (selected), User management, and Audit trail. The main content area is titled 'Notifications' and includes a sub-header 'Incident history' and a button '+ Add notification rule'. Below this is a descriptive text: 'View rule-triggered incidents and detailed flow of recipients, acknowledgment or resolution.' A table lists several incidents with columns for Status, Created, Type, Event, Device, and Triggered by. Two callouts are present: one pointing to the 'Expired' status in the first row and another pointing to the 'Expired' status in the last row. A third callout points to the 'Triggered by' column of the first row.

Keep track of situations in the lab that require attention

Status	Created	Type	Event	Device	Triggered by
Expired	19.06.2025 16:40:05	⚠️	Temperature (Probe) above alert limit -65°C	Sense Monitor Demo 2 Eppendorf VisioNize sense environmental monitor	Sensoren Cambridge
Acknowledged	19.06.2025 16:33:10	⚠️	Door open longer than 0:30 min.	My Freezer F740i (Fair device) Eppendorf Freezer F740	Notification rule - 19/6/2025
Acknowledged	19.06.2025 16:27:31	⚠️	CO ₂ pressure below error limit 0.2 bar. Check gas supply.	My CellXpert C170i (Fair device) Eppendorf CellXpert C170i	Incubator Cambridge
Acknowledged	19.06.2025 16:27:26	❌	CO ₂ Concentration function error.	My CellXpert C170i (Fair device) Eppendorf CellXpert C170i	Incubator Cambridge
Acknowledged	19.06.2025 16:26:58	⚠️	CO ₂ pressure below error limit 0.2 bar. Check gas supply.	My CellXpert C170i (Fair device) Eppendorf CellXpert C170i	Incubator Cambridge
Expired	19.06.2025 16:26:47	❌	CO ₂ Concentration function error.	My CellXpert C170i (Fair device) Eppendorf CellXpert C170i	Incubator Cambridge

All relevant information at one place: affected device, status, escalation stage



Benefits of Connecting Your Freezers to VisioNize Lab Suite

- > **Monitor your entire freezer fleet** and **document** all related **device parameters** like temperature and ambient temperature as well as all device interactions, e.g., set-point changes
- > Export parameter and event data
- > Receive **real-time notifications** via email and SMS:
 - "Temperature above alert limit -60 °C"
 - "Door open longer than 2:00 min."
 - "Main power failure. Check power supply to the device."





Benefits of Connecting Your Incubators to VisioNize Lab Suite

- > **Monitor your incubators** and **track all related device parameters** such as **temperature, O₂ and CO₂** as well as all device interactions, e.g., set-point changes
- > Export parameter and event data
- > Receive **real-time notifications** via email and SMS:
 - "Temperature below alert limit 30 °C"
 - "CO₂ pressure below warning level 0.4 bar. Check gas supply."
 - "Long door opening: Close the door."





Benefits of Connecting Your Shakers to VisioNize Lab Suite

- > **Monitor your shaker runs** and **track all related device parameters** such as temperature, **agitation**, and **remaining runtime** as well as all device interactions like set-point changes
- > Export parameter and event data
- > Receive **real-time notifications** via email and SMS:
 - "Program 'pre-culture' has finished."
 - "Temperature below alarm limit 30°C"
 - "Door open longer than 5:00 min."





Benefits of Connecting Your Cyclers, Mixers and Centrifuges to VisionNize Lab Suite

- > **Monitor** all **device-related parameters** like temperature and agitation as well as all device interactions like set-point changes
- > Check the current status of your experiment
- > Export parameter and event data
- > Receive **real-time notifications** via email and SMS:
 - "Execution of program ended"
 - "Imbalance: imbalance during run"





Enabling Connectivity with VisioNize box 2

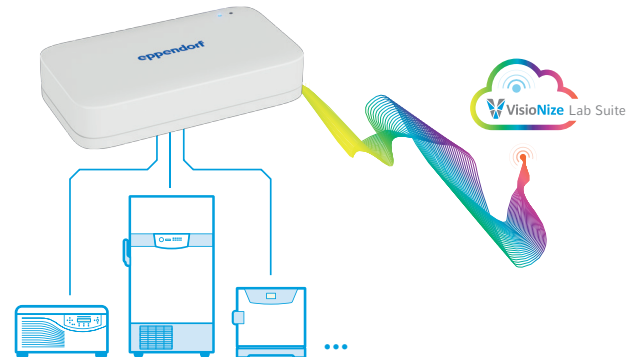
The easy-to-install hardware hub connects your VisioNize box enabled devices to the VisioNize Lab Suite.

The hub works as a translation system, **enabling data collection** of the device data in the platform. The box offers connections for **up to four devices** depending on the lab infrastructure/device location.

- > Connect **VisioNize box enabled (Eppendorf) devices** like freezers, incubators, shakers, centrifuges and thermomixers
- > **Monitor** all device-related parameters and run statuses
- > Have all parameter **data ready for export**

- > **Receive notifications** for connected devices covering:
 - > Significant parameter changes
 - > Errors
 - > Device status changes

Order VisioNize box 2 or VisioNize box 2 cable via the Eppendorf e-shop or contact your local Eppendorf sales representative.





Enabling Connectivity with VisioNize sense equipment

VisioNize sense equipment can capture, record and transfer even the smallest changes in your environmental conditions to VisioNize Lab Suite. Use VisioNize sense to monitor your lab rooms, CO₂ incubators, fridges or freezers from any supplier.

- > Sensors can be used for any kind of **temperature-controlled device monitoring** (from -90°C to +60°C)
- > Configure **temperature limits** in VisioNize Lab Suite and receive notifications via SMS or email.
- > All temperature data will be documented for audits
- > Use VisioNize sense as an independent (redundant) temperature probe for a fridge or freezer
- > The environmental sensor tracks additional parameters, e.g., **ambient temperature** (-10°C to +59°C), **humidity** (0 % to 95 %, non-condensing), pressure (700 mbar to 1.200 mbar) and **brightness** (0 % to 100 %).

Order VisioNize sense equipment and VisioNize box 2 as connectivity hub via the Eppendorf e-shop or contact your local Eppendorf sales representative.



VisioNize Lab Suite Setup Guide



Getting You and Your Lab Connected

Make the **right preparations** for your digital lab. We recommend **checking** the following **before subscribing** to the VisioNize Lab Suite and its services:

1. Check the **IT prerequisites** for VisioNize Lab Suite with the [VisioNize Lab Suite Setup Guide*](#)
2. Check the **compatibility of your device** by having a look in the [VisioNize Lab Suite Device Overview*](#)
3. Check **what else is required** for connecting your lab devices, e.g., VisioNize box 2, VisioNize box 2 cable or VisioNize sense equipment

For more guidance and precise planning, contact your local Eppendorf sales representative.



Find helpful tips and tricks to help you navigate your lab through digital transformation



*A [list of helpful documents](#) can be found in the back including the links to the documents online.



Choose the Plan That Meets Your and Your Labs Needs



Sign up for free!

You can easily subscribe online with your myEppendorf-Account to receive access to the VisioNize Lab Suite: www.eppendorf.com/visionize-subscription

For starters:

VisioNize Lab Suite Essential FREE (for first 3 devices)

Gain free, hands-on experience with VisioNize Lab Suite and enjoy a glimpse into the digital, connected lab. The Essentials plan covers all necessary aspects to get started to digitally manage the lab for increased sample safety.

- > Real-Time Monitoring
- > Email Notification
- > Data Access for 7 days
- > Device Data Export

Please note:

This plan already includes 3 licenses for connected devices right from the start. Each additional device requires an additional license.

Hardware and software upgrades are not included and may require an additional fee.

For more peace of mind:

VisioNize Lab Suite Sample Safety+ Price / device / year

Be confident about your sample safety and guarantee smooth operation around the clock with the Sample Safety+ plan.

Enjoy the enriched feature set in VisioNize Lab Suite for more convenience!

- > All features of Essentials plan
- > SMS Notifications
- > Data Access for 90 days
- > Response-Based Alarm Escalation
- > Audit Trail

Please note:

The price per device license depends on total number of connected devices.



Connect Your Laboratory Devices

Connecting VisionNize touch enabled devices

1. Connect your device:

Connect the Ethernet interface at the rear side of the device to a patched wall port with a standard Ethernet cable.

2. Add the device to your device list:

Navigate to the “Device management” in the VisionNize Lab Suite, click “+ Add device”, and enter the serial number.

3. Check the device status:

Please ensure that your device changes from the “Pending” status to “Connected” in the device overview. This may take a while.





Connecting VisioNize box enabled devices

1. Connect the Eppendorf devices to the VisioNize box 2 or VisioNize box 2 cable:

Use an appropriate adapter cable. One VisioNize box 2 or VisioNize box 2 cable can manage up to 4 devices.

2. Update the VisioNize box 2:

Download the latest software version [here](#), unpack the ZIP file on an empty USB stick and connect it to the VisioNize box 2 or VisioNize box 2.

3. Add your VisioNize box 2 to the network:

Connect the Ethernet interface at the rear side of the device to a patched wall port with a standard Ethernet cable. The VisioNize box 2 also offers WLAN configuration - for details refer to the Operating Manual.

4. Add the device to your device list:

Navigate to the "Device management" in VisioNize Lab Suite, click "+Add device", and enter the serial number.

5. Check the device status:

Please ensure that your device changes from the "Pending" status to "Connected" in the device overview. This may take a while.

Connecting VisioNize sense equipment

VisioNize sense equipment, like the VisioNize sense environmental monitor and attached VisioNize sense temperature sensors, can also be connected by using the VisioNize box 2*. Please follow the same setup steps as on the left side (starting with step 2) to connect the VisioNize box 2 as a hub.

Repeat step 4 for each VisioNize sense environmental monitor. VisioNize sense temperature sensors will be added automatically.

*Please note: The VisioNize box 2 cable is not able to connect VisioNize sense equipment.



Lab Innovation Drivers & Proud Visionize Lab Suite Users

eppendorf

Enhanced Efficiency & Sample Safety with Visionize®

How a Molecular Testing Lab Boosts Sample Safety & Efficiency with Visionize

An Eppendorf Customer Story

Visionize Lab Suite is a cloud-based platform offering real-time device monitoring in the lab. From freezers, incubators, shakers, centrifuges, PCR cyclers and mixers, a whole range of devices can be connected – even fridges and freezers that are from third-party suppliers. Several environmental conditions can be tracked, including ambient temperature, pressure, humidity, and light. Lab users are instantly notified if device parameters drift outside their specified range, meaning samples and reagents can be kept safe at all times.



Dr. Kevin Roth

The Visionize Lab Suite is transforming sample monitoring in labs around the globe, across a broad range of applications. To deliver further into the real-world benefits of the system, we spoke with Kevin Roth, PhD, Head innovation and personalized therapy monitoring at a diagnostics lab in Heppenheim, Germany. Learn how Visionize from Eppendorf has improved sample monitoring for Dr. Roth and his team, and the far-reaching impacts this has had on their lab.



Storing Precious Samples and Reagents in a Diagnostics Testing Lab

The diagnostic lab is based at the MVZ Centre for Laboratory Medicine in Heppenheim and specializes on hematological malignancies. Dr. Roth leads the department of innovation and personalized therapy monitoring. The MVZ team handles a variety of critical samples, including blood, bone marrow, and other tissues collected from biopsies. These samples are used for a wide range of diagnostic techniques, such as classical morphology, flow cytometry molecular biology, and next-generation sequencing (NGS).

"The lab's samples and reagents are stored across a large number of fridges and freezers. These must be kept at consistent temperatures, as explained by Dr. Roth:

"Our fridges and freezers contain lots of highly valuable and irreplaceable cell and nucleic acid samples. To ensure integrity, we need to be sure they are stored properly at all times. Additionally, reagents for routine testing, such as dithionites, enzymes, primers, qPCR Assays, kits, and NGS reagents, have to be maintained at specific temperatures, to ensure our assays remain accurate and reliable as possible. Monitoring our fridges and freezers not only mitigates financial risk, but also is a requirement for accredited laboratories."

The molecular test lab alone processes around 5,000-6,000 samples annually, and this is predicted to increase year by year. As workflows continue to expand, the lab increasingly needs a reliable and efficient digital solution to monitor the temperature of its fridges and freezers.

The Search for an Effective Sample Monitoring System
Before adopting Visionize Lab Suite from Eppendorf, the testing lab evaluated different monitoring systems. Other systems were not able to record real-time temperature data or were incompatible with the lab's ultra-low temperature (ULT) freezers, meaning separate systems would have to be used for these units complicating monitoring. Furthermore, customer support was not accessible during off-peak times, as Dr. Roth says:

"During testing of another system, one of the reagents failed on a Friday afternoon and we couldn't get support from the software provider. By noon we were completely blind for the weekend, not knowing if our samples and reagents were safe. Lack of system alerts following sensor failure can lead to significant consequences, as seen at the Karolinska Institute in Stockholm in December 2022, when decades of research were destroyed when a freezer malfunctioned."

"The fast and effective alert system is a huge benefit of Visionize. We are glad we have a system that we trust will warn us if anything happens, so we can be sure that our samples are kept safe."

Kevin Roth, PhD, Head innovation at MVZ Centre for Laboratory Medicine in Heppenheim

Discover how the Visionize Lab Suite from Eppendorf has improved efficiency and sample safety in a high-demand molecular testing lab.



Customer Success Story: Enhanced Efficiency & Sample Safety with Eppendorf Visionize Lab Suite



'VisioNize Lab Suite adds value to the lab. We have a lot of sensitive samples and it is really important to not waste time on things that should not be problems. VisioNize has been great in monitoring our devices enabling users to regulate things from afar.'

**Ashmita Jha, Research Assistant, MIT,
Boston, United States**



'VisioNize Lab Suite helps us automatically log device data and use it for further purposes. This makes our evaluations extremely robust and our protocolling complete.'

**Process Development Drug Substance,
CureVac AG, Tübingen, Germany**

'An unreliable freezer that I could not monitor from outside has been one of my negative experiences in the past. Thanks VisioNize® Lab Suite, I am confident that our samples are safe as it allows monitoring from anywhere and warns irregularities immediately.'

**Prof. Dr. Sabine Ellinger,
Institute of Nutrition and Food Sciences,
Human Nutrition, Uni Bonn**





'We expect lab instruments to be connectable which is why we chose Eppendorf for our -80°C freezers and cell culture incubators.'


**Kilian Guse, PhD, CEO and Co-Founder,
GeneQuine Biotherapeutics,**





Everything at a Glance

 Get ready to setup the VisioNize Lab Suite:
www.eppendorf.com/visionize-setup-guide

 Learn what is required to connect your device:
www.eppendorf.com/visionize-device-overview

 Request your personal demo here:
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