eppendorf

VisioNize

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.

Document management & device data export

> Quickly retrieve relevant device documentation, e.g. operating manuals and other SOPs. Export device parameter, event data, and any user interactions.

Maintenance management

> Plan your upcoming maintenance tasks in one tool and receive reminders when service is due.

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 CO$_2$ Incubators
CellXpert® C170i

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

Eppendorf Centrifuge
Centrifuge 5910 Ri

Eppendorf Cyclers
Mastercycler® X50 series*
Mastercycler® X40

*Mastercycler X50 eco not supported without Mastercycler X50 master device

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No VisioNize® onboard devices?
Don't worry, easily connect with our connect ware VisioNize box or VisioNize sense*:

VisioNize box enabled
The VisioNize box 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. Sensors, 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 monitoring kit 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 CO$_2$ 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

Instant Notifications
Receive alert and event notifications and quickly address any issues

Easy Data Access
Export device and event data, as well as logged user interactions

Alert Management
Track all alert acknowledgements with time-stamped data logs

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

Task Management
Plan and assign device-related maintenance tasks to ensure optimal device performance

Response-Based Alarm Escalation
Define escalation schemes to individual or multiple recipient groups based on presence in the lab
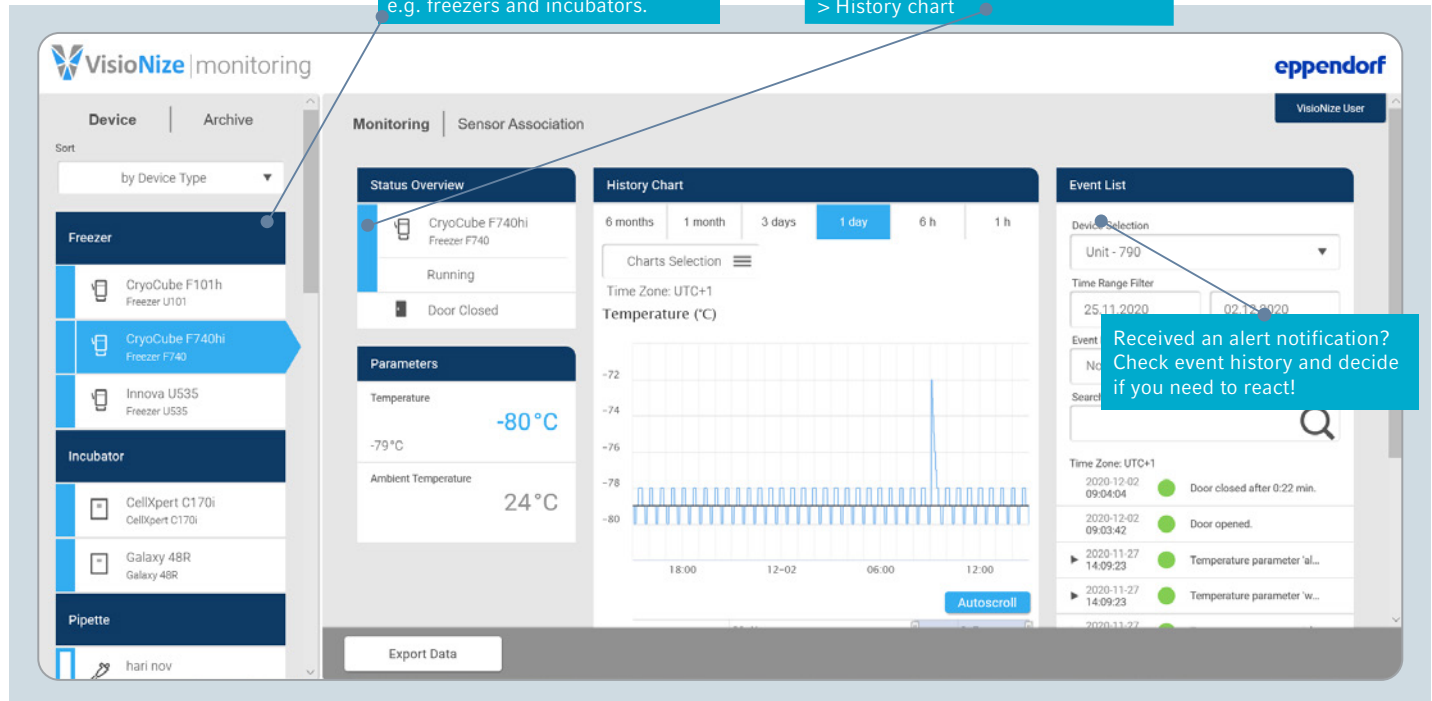
Manage Your Devices

Protecting your samples
Ensure the safety of your samples 24/7

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

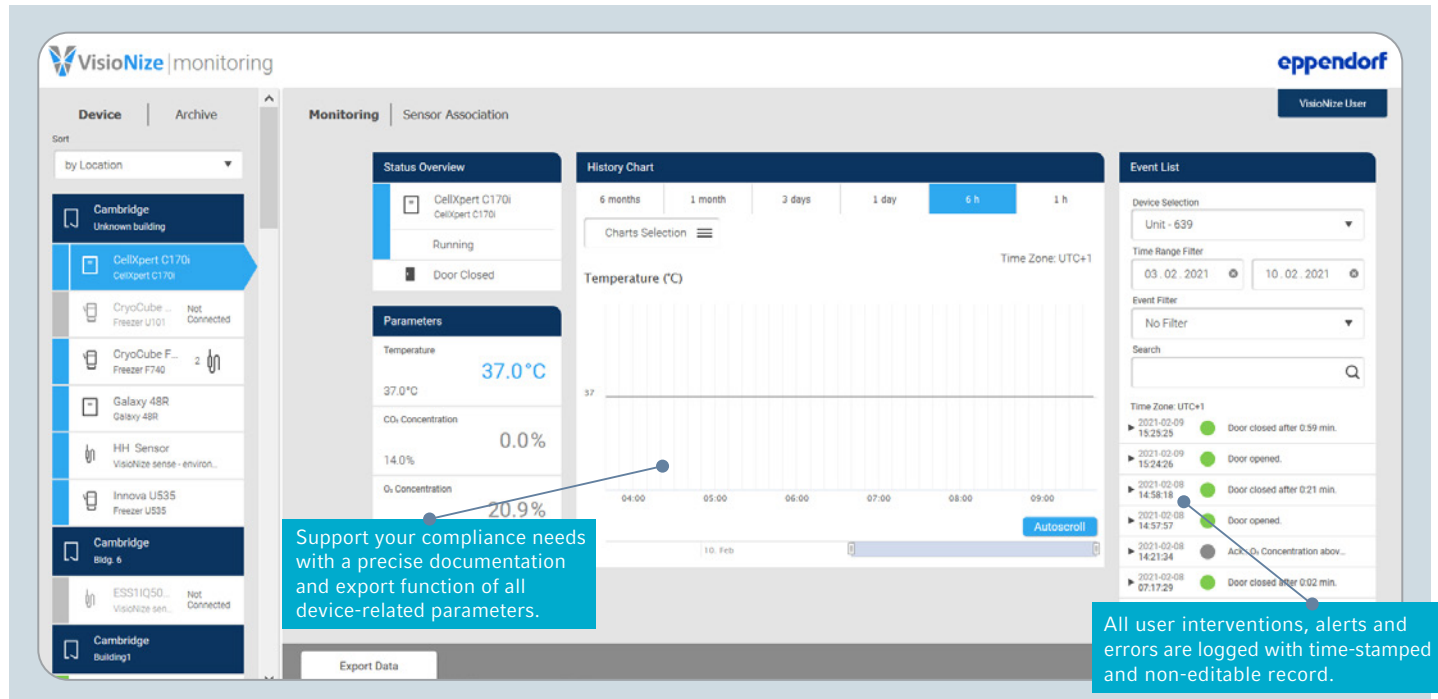Overview of all connected devices, e.g. freezers and incubators.

Monitoring dashboard of a CryoCube® F740hi freezer showing:
> Device status
> Parameters
> History chart

Received an alert notification? Check event history and decide if you need to react!

Meet Compliance Needs with Device Data Export

Digitalize your audit preparations with VisioNize Lab Suite and eliminate paper-based documentation.

Support your compliance needs with a precise documentation and export function of all device-related parameters.

All user interventions, alerts and errors are logged with time-stamped and non-editable record.

Maintenance Management for an Effective Lab

VisioNize Lab Suite supports you in managing your laboratory equipment to ensure your lab processes keep going. Oversee the maintenance status and plan and assign upcoming tasks to maintain your equipment.

Check the maintenance status of your device and if you can use the device for your experiment.

Add customizable tasks and assign them to lab members to effectively manage your lab.

Manage Your Activities

Plan your **upcoming tasks in one tool** and receive reminders when service is due. **Never lose sight** of your device maintenance needs with the VisioNize Lab Suite. All new software updates for VisioNize touch devices, VisioNize box and VisioNize sense are available immediately through VisioNize Lab Suite. Schedule the update based on your convenience and your lab's schedule!

Pipette calibration
2 devices

Task Overall Status: due

Task Description

Description

Send Pipettes to Eppendorf calibration service.

Task Planning

Recurring Task

Due Every

6   Months(s)

Remind

2   Week(s) before

Responsible

VisioNize User

Email-notification

SMS-notification

Devices

M45090I
Research plus 3120   due in 182 days

N47006I
Research plus 3122   due in 182 days

Add / Remove Device

Plan one-time or recurring maintenance tasks for all of your devices.

Get a reminder for a task via email and/or SMS text message.

Get notified when a maintenance task is due.

Perform Task   Delete task   Cancel   Save

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, O_2 and CO_2** 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"
"CO_2 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 VisioNize 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

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 and additional accessories such as cables via the Eppendorf e-shop or contact your local Eppendorf sales representative.

Enabling Connectivity with VisioNize sense

VisioNize sense 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, CO_2 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 and additional accessories such as cables 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 or VisioNize sense

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

VisioNize Lab Suite

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
> Document Management
> Task Management

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 VisioNize touch enabled devices
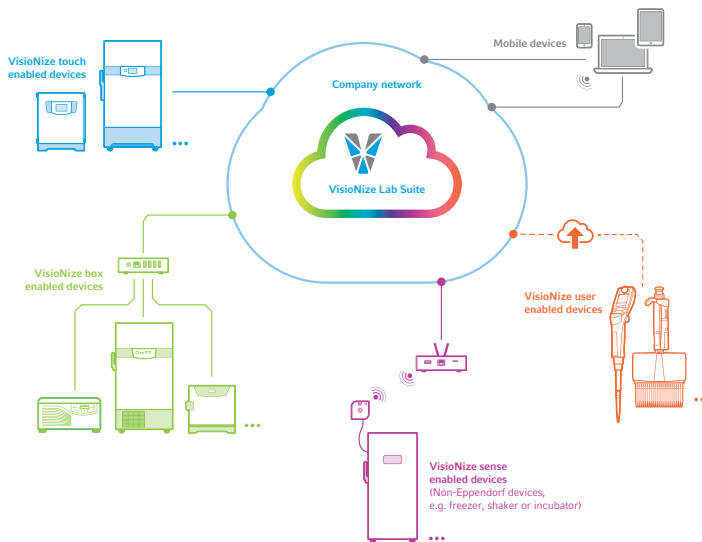
1. Connect your device:
Connect the Ethernet interface at the rear side of the device to a patched wall port with a standard Ethernet cable.

2. Add the device to your device list:
Navigate to the "device management" in the VisioNize Lab Suite, click "add device", select "A VisioNize touch enabled device" and enter the serial number.

3. Accept your device:
Navigate to the "Requests" tab in the device management app, select the device you want to add and click "Accept devices".

VisioNize touch enabled devices

Mobile devices

Company network

VisioNize Lab Suite

VisioNize box enabled devices

VisioNize user enabled devices

VisioNize sense enabled devices
(Non-Eppendorf devices, e.g. freezer, shaker or incubator)

VisioNize Lab Suite Setup Guide

Connecting VisioNize box enabled devices

1. Connect the Eppendorf devices to the VisioNize box:
Use an appropriate adapter cable. One VisioNize box can manage up to 4 devices.

2. Update the VisioNize box:
Download the latest software version here, unpack the ZIP file on an empty USB stick and connect it to the VisioNize box.

3. Add your VisioNize box to the network:
Connect the Ethernet interface at the rear side of the device to a patched wall port with a standard Ethernet cable.

4. Add the device to your device list:
Navigate to the "device management" in the VisioNize Lab Suite, click "add device", select "VisioNize box or VisioNize sense gateway router" and enter the serial number.

5. Accept your device:
Navigate to the "Requests" tab in the device management app, select the device you want to add and click "Accept devices".

VisioNize Box Manual

Connecting VisioNize sense

1. Connect the VisioNize sense gateway:
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 VisioNize Lab Suite, click "add device", select "VisioNize box or VisioNize sense gateway router" and enter the serial number.

3. Accept your device:
Navigate to the "Requests" tab in the device management app, select the device you want to add and click "Accept devices".

VisioNize Sense Manual

Step-by-step Setup Tutorial

⟨J⟩ eLabJournal

eLabJournal is an intuitive and flexible software solution to document research and track research data. The Electronic Lab Notebook transfers the proven paper-based documentation to the more safe, collaborative, and efficient digital world.
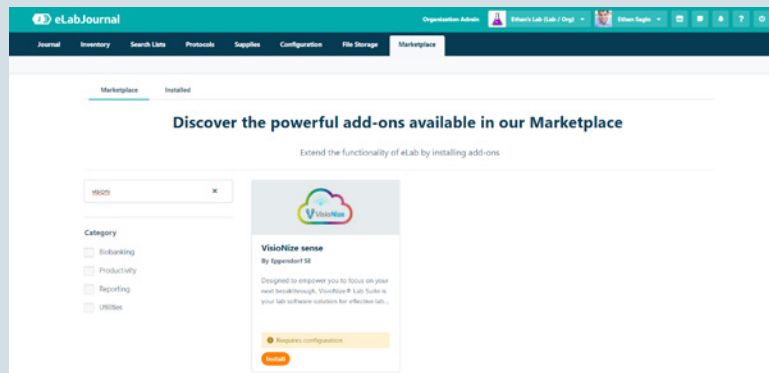
🌐 **Show more product information**

⟨I⟩ eLabInventory

With eLabInventory software, you can efficiently track any sample in the lab. Whether you want to track cell lines, tissue specimens, bacterial strains, DNA, RNA, proteins, or any biobank, you can set up templates to track any information about any item in your lab inventory.

🌐 **Show more product information**

Are you an eLabInventory user? Try out the VisioNize sense add-on!

The ability to monitor the viability and condition of samples in an inventory management system is imperative for laboratories, especially in GxP-compliant labs.

The VisioNize sense add-on for eLabNext eLabInventory lets users enjoy a seamless experience of their inventory management system while using environmental condition monitoring sensors from Eppendorf.

The add-on is available for free in the eLabNext Marketplace.

🌐 **Learn more**

Clustermarket: Improve Your Equipment Planning

Improve your lab workflows and planning of equipment
Clustermarket provides the easiest way to manage shared lab device scheduling and get all your team members' schedules aligned. Lab managers add the equipment and define booking rules, allowing team members to book the equipment by simply dragging and dropping.

Learn more about Clustermarket

See how to activate your integration in Clustermarket.

Lab Innovation Drivers & Proud VisioNize Lab Suite Users

Meet Kilian - Lab Manager at GeneQuine Biotherapeutics
Future-proofing his lab with VisioNize® Lab Suite

Making data simple and accessible has become much easier thanks to increasing digitalization. Laboratories like GeneQuine Biotherapeutics are striving not only for sample security but also seek solutions allowing data access in a flexible way and moreover supporting them to keep their lab running.

Meet Kilian, Co-Founder and CEO sharing his experience using VisioNize Lab Suite.

Reference Case: Data management and performance monitoring for future-proofing the laboratory

'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. VNLS 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 irregulatories 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 an 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

Find useful tips & tricks in our knowledge base:
www.eppendorf.com/visionize-lab-suite-knowledge-base

Request your personal demo here:
www.eppendorf.com/visionize-demo

Register and manage your subscription online:
www.eppendorf.com/visionize-subscription

Explore all Eppendorf digital lab solutions here:
www.eppendorf.com/digitallabsolutions

Explore our ecosystem partners:
www.eppendorf.com/vnls-partners

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