



VisioNize[®] Lab Suite Product Guide

You and Your Lab – Connected.



Table of Contents

Factors to consider when managing a laboratory	04
Why laboratory software?	07
Getting started	09
What are the benefits of using VisioNize Lab Suite?	15
Connecting devices	21
List of recommended documents	30

Factors to Consider when Managing a Laboratory

To meet new needs and overcome challenges in laboratories worldwide, Eppendorf offers smart lab management software solutions, such as the VisioNize Lab Suite, that **increase productivity** for all routine tasks in the lab.

There is a rising need for **greater sample security**, conformity with **increasing compliance pressures**, and **optimized lab management practices** to support a **more agile workforce**.



Sample Security

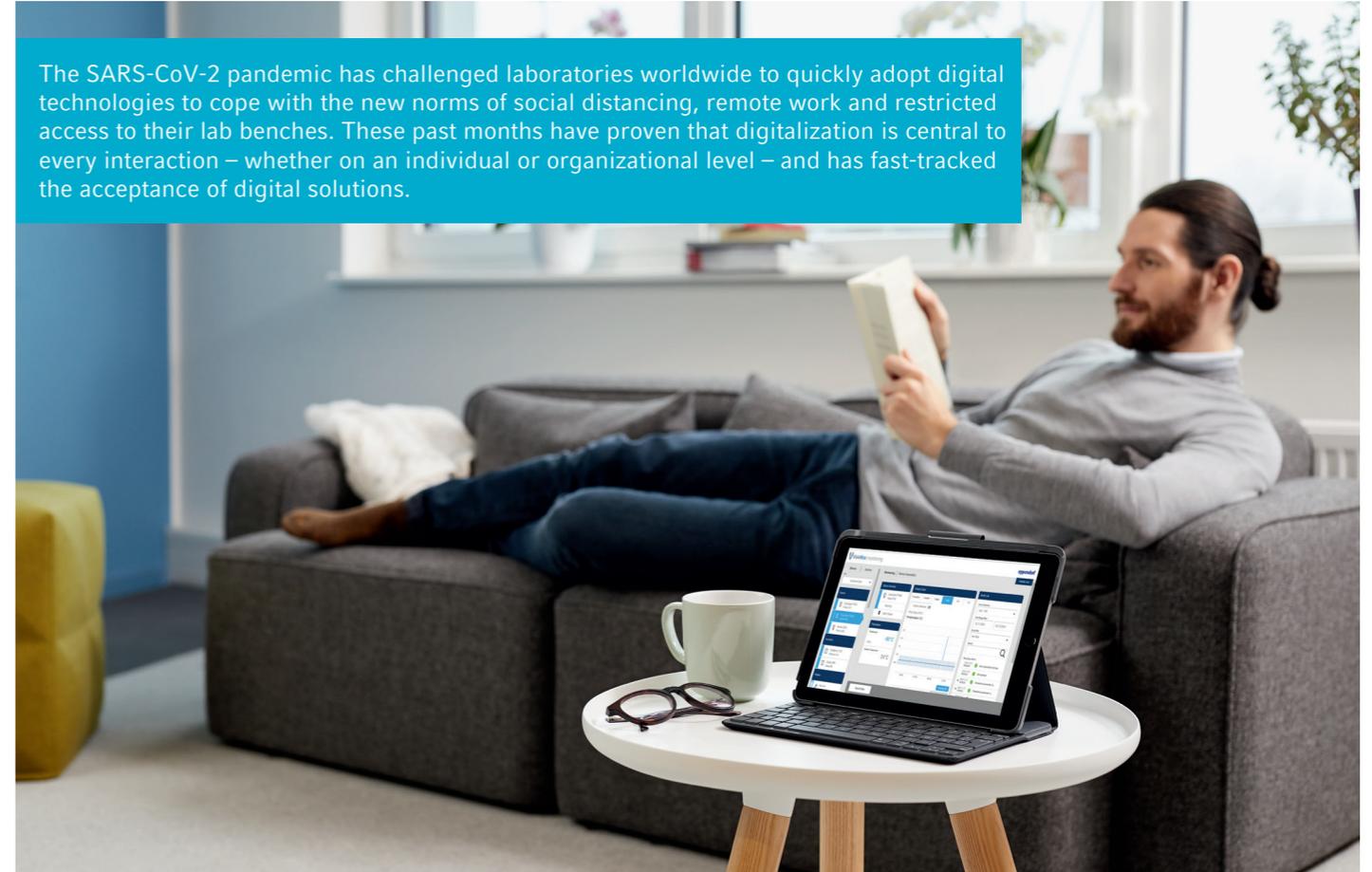


Compliance Needs



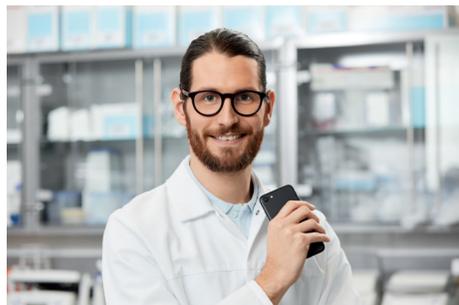
Maintenance Management

The SARS-CoV-2 pandemic has challenged laboratories worldwide to quickly adopt digital technologies to cope with the new norms of social distancing, remote work and restricted access to their lab benches. These past months have proven that digitalization is central to every interaction – whether on an individual or organizational level – and has fast-tracked the acceptance of digital solutions.



What's Your Vision for Your Daily Lab Life?

Lab Manager



- > Efficiency gains and convenience in managing and equipping a lab
- > Preventing sample loss through enhanced security and traceability
- > Cost reductions while increasing productivity
- > Minimizing unplanned downtime

Lab Technician



- > Being informed of device availability: device overview, availability, user intervention needs, and documentation
- > Reduce manual steps needed to complete an experiment
- > Keep better track of experiments
- > Better collaboration and data integrity

Quality Manager



- > Reduce efforts for audit preparation
- > Quality issues due to transfers between different systems and manual steps
- > Full confidence in quality of work, equipment operations and processes when being audited

Explore the World of VisioNize®

VisioNize Lab Suite is your solution for **effective lab management**. Gain access to a modular range of services and decide what works for your lab. These **services integrate** together to **support you and your lab**. The suite of services is kept updated, making it a sustainable investment. As you and your lab expand over time, VisioNize Lab Suite evolves to meet your needs and is designed to **empower you** to focus on your next breakthrough.



Benefits of Visionize Lab Suite and Services



Connect and manage devices
For Eppendorf and non-Eppendorf devices from pipettes to freezers up to microscopes



Plan all maintenance tasks
Automate maintenance tasks for all lab equipment. Receive notifications when due



Remote updates
New improvements are instantly available for all Visionize touch enabled devices, Visionize sense and Visionize box.



Remote monitoring
Monitor performance parameters of laboratory devices from anywhere



Alert notifications
Utilize escalation schemes and acknowledgement for convenience and peace of mind



Detailed audit log
Including device performance data, such as parameters, user interventions, setpoint changes and maintenance tasks



Access to device data
All relevant documents, SOPs, and operating manuals



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.

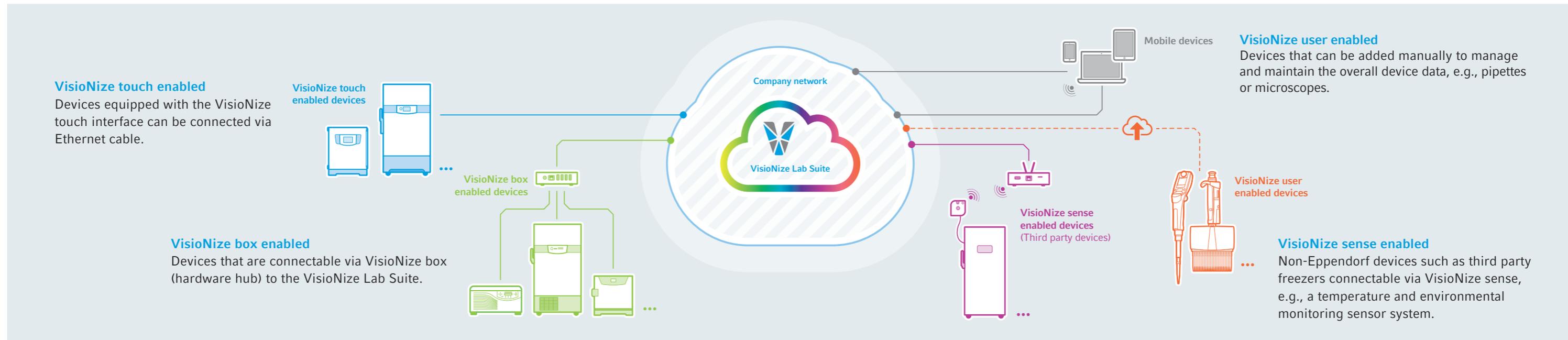
Find helpful tips and tricks to help you navigate your lab through digital transformation here: www.eppendorf.com/visionize

*A list of recommended documents can be found in the back including the links to the documents online.



Connecting Your Laboratory Devices

Connect your lab devices – from freezers to pipettes – to the **VisioNize Lab Suite** and utilize services such as remote monitoring and device management.



Additional connection hardware, e.g., **VisioNize box** or **VisioNize sense**, might be required. Consult us for precise planning and order placement. A step-by-step guidance is given in the [VisioNize Lab Suite Setup Guide*](#)

*A list of recommended documents can be found in the back of this brochure including the links to the documents online.

Self-Configure the VisioNize Lab Suite

1. VisioNize Lab Suite Basic

Following features and services are included:



Remote Monitoring

Check performance of connected laboratory devices from anywhere.



Email Notification

Receive alarm and error notifications, e.g. door and temperature alarms.



Remote Updates

New improvements are instantly available for all VisioNize touch enabled devices, VisioNize sense and VisioNize box.



Device Management

Add any kind of lab devices to the platform and include device-related information, e.g., location.



Data Access

Three months of data access (all device-related data) included. Can be extended with Data Access+.

2. VisioNize Lab Suite Device Connectivity*

How many lab devices would you like to connect?

Lab devices +/-

*Some devices require additional hardware, e.g., VisioNize box or VisioNize sense.



3. Book Additional VisioNize Lab Suite Services

Add-ons you can purchase to boost your efficiency



Alert+

Time- and response-based escalation schemes and acknowledgement.



SMS 50

Extend notification channel from email to SMS. Quantity: 50



Device Documentation

Audit trail & quick retrieval and export of device documents.



Data Access+ (promo)

Extended data access beyond three months.



SMS 250

Extend notification channel from email to SMS. Quantity: 250



Task Management

Plan one-time and recurring maintenance tasks and receive notifications when due.

Discover the Preconfigured Subscription Plans



Sample Security

Everything you need to start digitally managing your lab **for increased sample security.**



Compliance Needs

Everything you need to document and export device performance data to **be audit ready.**



Maintenance Management

Everything you need to maintain all of the lab's devices and **reduce device downtime.**

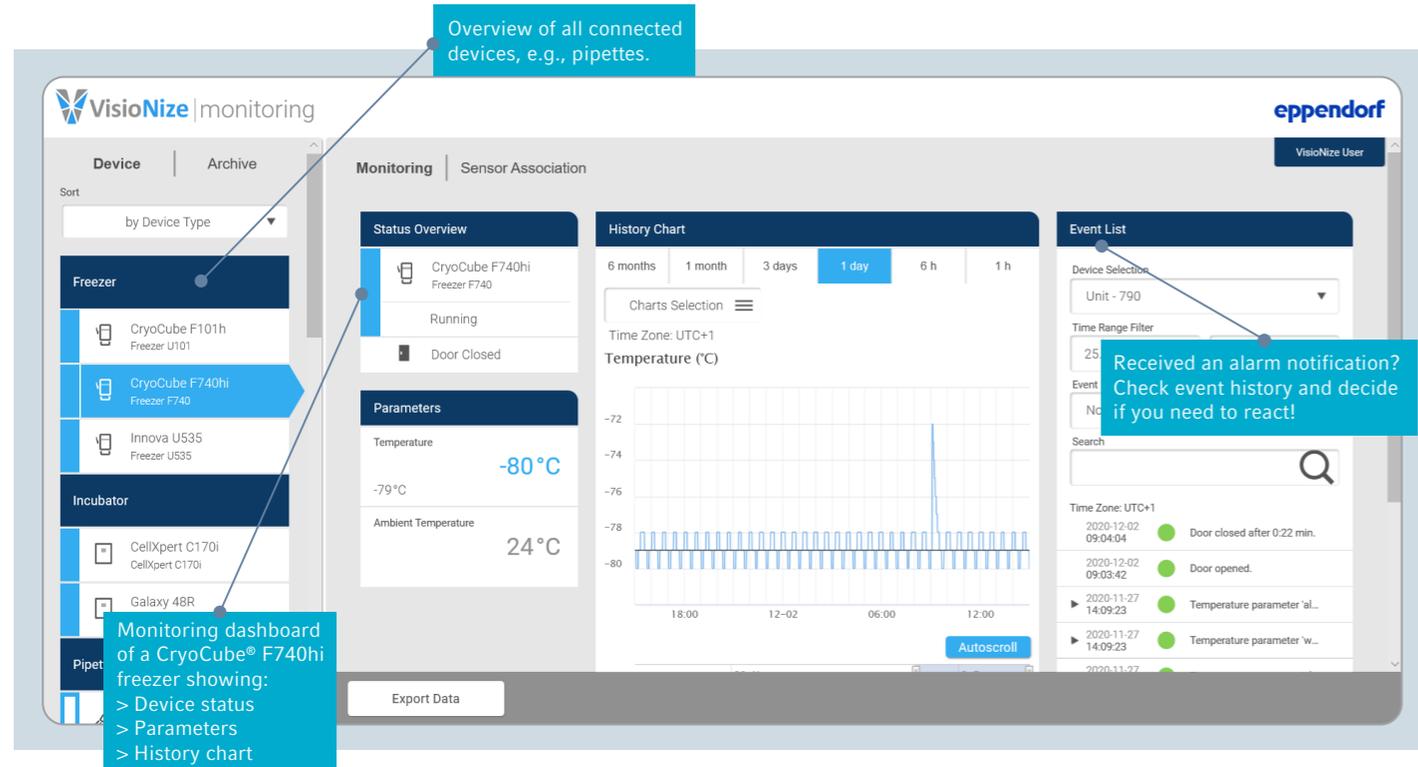
Enhance Sample Security with VisioNize Lab Suite

What is the cost of a freezer or incubator left open? Can you calculate the value of a year of your work? Don't get caught off guard in the middle of the night when there is an alarm in your lab. Remotely check your lab device performance whenever you want. VisioNize Lab Suite offers everything you need as a lab manager or scientist to start digitally managing your lab for increased sample security.

- > Receive **alert notifications** via email and SMS text messages for any kind of errors, warning, or events
- > **Notifications** are easy to configure and customizable for each device
- > Be notified of different internal **errors and alarms** for precise decision-making
- > Utilize the **escalation schemes** to reroute alarms to other people in the lab and acknowledge alarms when you are taking action
- > **Manage and monitor** your entire device fleet with VisioNize sense and connect all your temperature-controlled lab devices in one place.

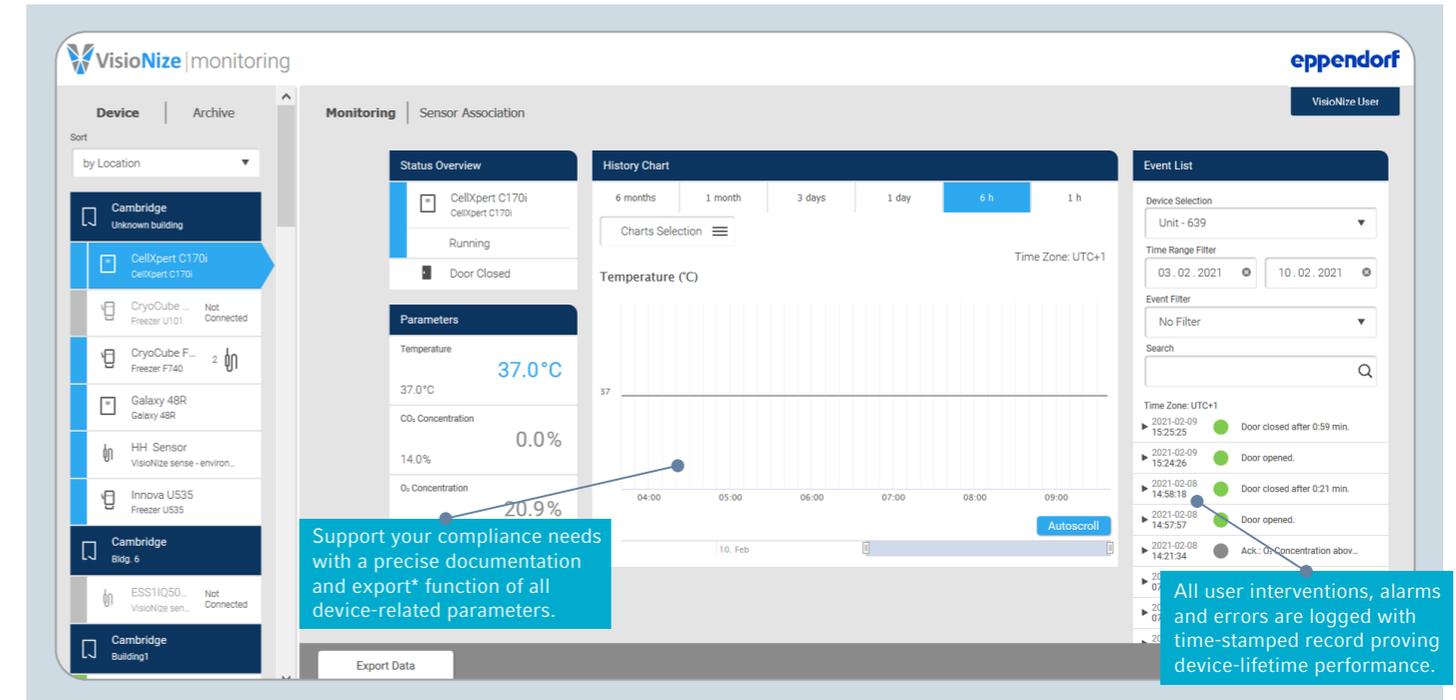


Sample Security



Meet Compliance Needs

Receive **support for your audit preparations** with VisioNize Lab Suite and **eliminate paper-based documentation** by switching to one platform for you and your lab.



*VisioNize Lab Suite Service "Device Documentation" required to activate export function.

Meet Compliance Needs

Regulatory authorities are encouraging companies operating in pharma and biotech to **demonstrate data integrity**.

VisioNize | audit trail eppendorf

Type: Event | Severity: All Severities | From: 15. 03. 2021 | To: 22. 03. 2021 | Who: User or Servicename | What: Device Serial No./Nickname | VisioNize User

Timestamp UTC	Timestamp Device Source Time	Severity	Activity User	Device	Description
2021-03-22 14:43:56	2021-03-22 15:43:56	●	Event created Device	Device Freezer HH CryoCube F740i [Lab Cambridge, Building 8] with ser.no F740FJ000019	Door closed after 0:11 min.
2021-03-22 14:43:44	2021-03-22 15:43:44	●	Event created Device	Device Freezer HH CryoCube F740i [Lab Cambridge, Building 8] with ser.no F740FJ000019	Door opened.
2021-03-22 14:42:45	2021-03-22 15:42:45	●	Event created Device	Device Freezer HH CryoCube F740i [Lab Cambridge, Building 8] with ser.no F740FJ000019	Door closed after 0:12 min.
2021-03-22 14:42:32	2021-03-22 15:42:32	●	Event created Device	Device Freezer HH CryoCube F740i [Lab Cambridge, Building 8] with ser.no F740FJ000019	Door opened.
2021-03-22 13:56:34	2021-03-22 13:56:34	●	Event created Device	Device Generic Device [Lab Panama] with ser.no 1006GI300054	Shaker device HH Innova 40 with serial number "SHAKERem8LFA" connected
2021-03-22 13:56:34	2021-03-22 13:56:34	●	Event created Device	Device Generic Device [Lab Panama] with ser.no	Shaker device HH Innova 40 with serial number "SHAKERem8LFA" selected

Logged activities such as user interventions, setpoint changes and performed maintenance tasks with timestamp.

Manage Your Maintenance Activities

As lab manager, you are interested in maintaining all the **lab equipment** to avoid **device downtime** in order to keep your lab processes going. How great would it be to have **one tool to support** in managing all lab equipment?

VisioNize | task management eppendorf

Device | Task | VisioNize User

Overview Upcoming Tasks

Search: [] All

Sort: by Maintenance Status

Overdue

HH Innova 40
Innova 4x Shaker

HH S44i
Innova S4i

Ready to work

1006GI300054
VisioNize box

1006GM100159
VisioNize box

1006HJ000223
VisioNize box

Add Task +

HH S44i
Innova S4i

Maintenance status: Overdue

Tasks

Shaker yearly maintenance 3 days overdue

Due Date: 2021-01-08

Description: -

Responsible Person: visionize.user@eppendorf.com

Edit Task Perform Task

Task History

No historic tasks available.

Device Information

Serial Number: S44iIM102404

Registration Number: -

Location: Building1 Cambridge

Edit Device

Related Documents

User Manuals (3)

Certificates (3)

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

Manage Your Maintenance 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!

The screenshot shows a task configuration window for "Pipette calibration" (2 devices). The interface is divided into three main sections: Task Description, Task Planning, and Devices.

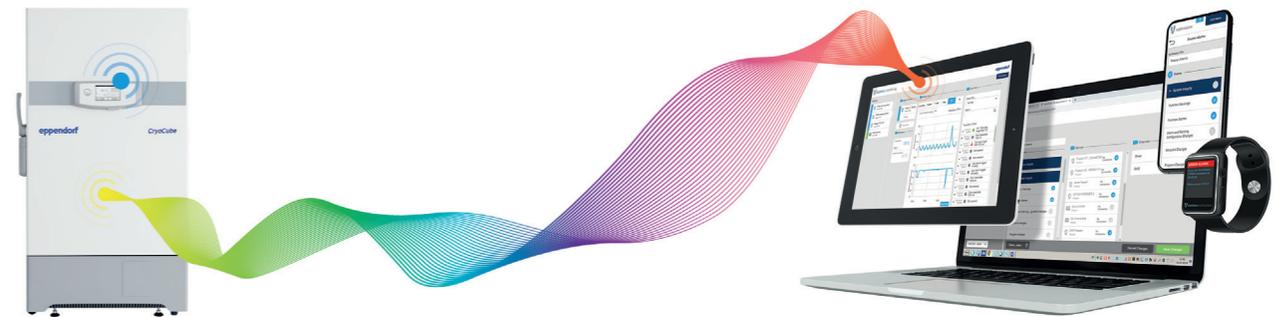
- Task Description:** Contains a text area with the description "Send Pipettes to Eppendorf calibration service." A callout box points to this area with the text: "Plan one-time or recurring maintenance tasks for all of your devices."
- Task Planning:** Includes a "Recurring Task" toggle (turned on), "Due Every" (6 Months(s)), "Remind" (2 Week(s) before), "Responsible" (VisioNize User), "Email-notification" (checked), and "SMS-notification" (unchecked).
- Devices:** Lists two devices: M450901 (Research plus 3120) and N470061 (Research plus 3122), both marked as "due in 182 days". A callout box points to the due date with the text: "Get notified when a maintenance task is due." Below the list is an "Add / Remove Device" button.

At the bottom, there are buttons for "Perform Task", "Delete task", "Cancel", and "Save".

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 alarm limit -60°C"
 - "Door open longer than 2:00 min."
 - "Mains power failure. Check power supply to the device."



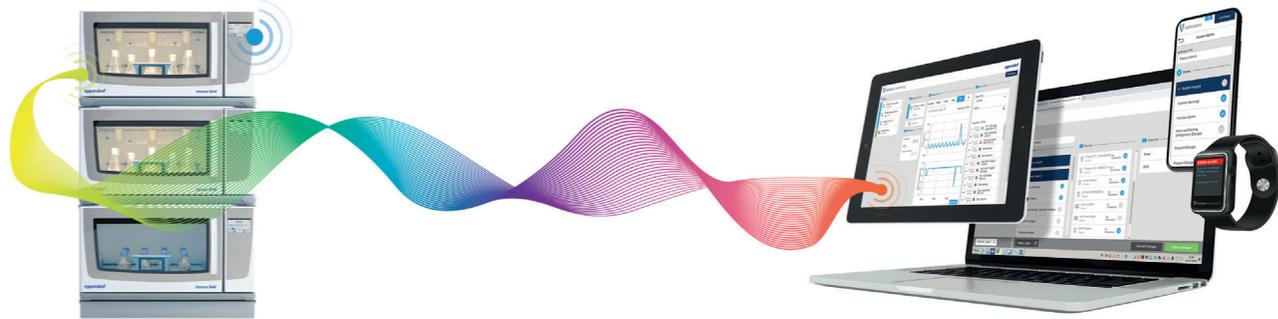
Connecting Your Incubators to VisioNize Lab Suite

- > **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
 - > Check if the device can be used for your experiment
 - > Export parameter and event data
- > Receive **real-time notifications** via email and SMS:
 - “Temperature below alarm limit 30°C”
 - “CO₂ pressure below warning level 0.4 bar. Check gas supply.”
 - “Long door opening: Close the door.”



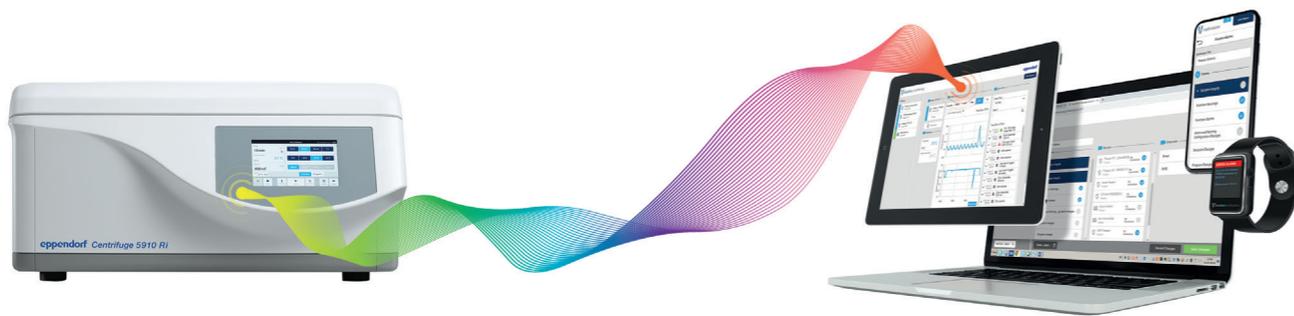
Connecting Your Shakers to VisioNize Lab Suite

- > **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
 - > Check if a device is available for your experiment
 - > 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.”



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** or if a device is available
- > Export **parameter** and **event data**
- > Receive **real-time notifications** via email and SMS:
 - “Execution of program ended”
 - “Temperature below alarm limit 30 °C”
 - “Imbalance: imbalance during run”



Managing Further Lab Equipment with VisioNize Lab Suite

VisioNize | device management

Agilent
Triple Quadrupole LC/MS

CellXpert C170i
CellXpert C170i

CryoCube F101h
Freezer U101

CryoCube F740hi
Freezer F740

Galaxy 48R
Galaxy 48R

HH Sensor
VisioNize sense - environmental m...

HH Centrifuge 5424R
Centrifuge 5424 R

HH Innova 40
Innova 4i Shaker

Innova US35
Freezer US35

P16212F
Research plus 3120

Q17091F
Research plus 3120

Research plus 3122
Research plus 3122

P16212F
Research plus 3120

General Info

Nickname: P16212F

Registration No.: -

Device Model: Research plus 3120

Serial No.: P16212F

Manufacturer: Eppendorf

Software Version: -

Location

Site: Hamburg

Building *:

Room *:

Position:

Address

Organization:

Street 1: Barkhausenweg 1

Street 2: -

Postcode: 22339

City: Hamburg

State: Hamburg

Pipette Specific Information

Pipette Type: manual

No. of Channels: 1

Vol. Setting: variable

Min. Volume: 100 µl

Discard Change

Digitize your lab devices based on lab location, serial number, manufacturer, assigned person etc. You can plan maintenance tasks, identify when a device is ready for use and access documents like manuals and certificates for devices from Eppendorf.

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, 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 alarm limits** in VNLS 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: www.eppendorf.com/visionize-setup-guide

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:
 - > Parameter alarms
 - > 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.





Your local distributor: www.eppendorf.com/contact

Eppendorf AG · 22339 Hamburg · Germany
eppendorf@eppendorf.com · www.eppendorf.com

www.eppendorf.com/visionize

iPad, iPhone and Apple Watch are registered trademarks of Apple Inc., USA. Microsoft and Azure are registered trademarks of Microsoft Corporation, USA. Eppendorf®, the Eppendorf Brand Design, VisioNize®, the VisioNize logo, CellXpert®, Mastercycler®, CryoCube®, Eppendorf Research® plus, Eppendorf Xplorer®/ Eppendorf Xplorer® plus are registered trademarks of Eppendorf AG, Germany. Innova®, Galaxy® are registered trademarks of Eppendorf Inc., USA. All rights reserved, including graphics and images · Copyright © 2021 by Eppendorf AG.