SARSTEDT

Tempus600®

Point-to-point transportation of small clinical samples

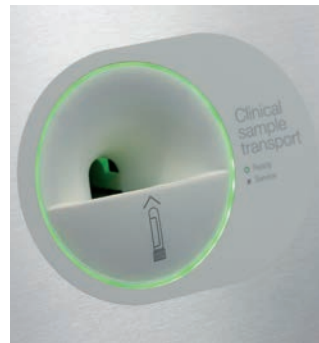Sample Transport

Vita

Bringing the laboratory to every department

The Tempus600® Vita sending station makes it easy to send small clinical samples directly to the laboratory as a single tube transport, arriving safely seconds after they are sent.

The sample tubes are sent immediately after being drawn without requiring any further packaging. As soon as a sample tube is loaded, the system is ready for the next.

The slim and minimalistic design ensures the sending station fits into most locations, occupying very little space.

Sample tubes are placed in the insertion point of the Vita.

Features

- Easy and intuitive to use – minimal training required
- Compatible with all sample tubes of:
  Length 80 – 110 mm, diameter 12 – 18 mm
  (including cap)
- Optional Sample Tube Orientation Module
- Dimensions: H x W x D = 157 x 38 x 41 cm

Benefits

- Predictable and improved total
  turnaround time (ToTAT)
- Handles up to 810 sample tubes per hour
- Just 2 week installation time,
  for new and existing buildings
- Requires minimal maintenance

Quantit

Drop & Go

The Tempus600® Quantit has been developed to cater for the need to dispatch several samples at the same time without any packaging.

Simultaneously and repeatedly, up to 25 samples can be placed in the drawer, and the system will then send the samples one by one. You don't even have to consider orientation, as Quantit manages that.

An optional urgency module can be added to Quantit. It allows you to access the system at any time and manually place urgent samples for immediate processing.

Loading up to 25 samples at a time

Urgency module

Features

- Loading up to 25 samples at a time
- Samples always oriented the right way by the system
- Compatible with all sample tubes of: Length 80 – 110 mm, diameter 12 – 18 mm (including cap)
- Dimensions: H x W x D = 124 x 63 x 49 cm
- Incompatible samples automatically rejected
- The software settings can be customised for usage patterns

Benefits

- Minimal time spent placing samples in the system
- Significant reduction in actions needed to send and receive samples
- Meets the demand for sending both high volume and urgent samples
- Capacity to handle up to 1250 sample tubes per hour
- Short installation time of two weeks, for new and existing buildings
- Requires minimal maintenance

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Quantit SL

One-touch handling automation solution for the distribution of small clinical samples

Tempus600® Quantit SL meets the need for automated loading and transport of small samples to a single destination, streamlining workflow and ensuring fast and predictable sample turnaround times.

Handling samples from, for example:

- Phlebotomies
- Sample reception areas
- Reception and redistribution of samples from transport systems (e.g. conveyor belts, pneumatic tube systems)

The samples are automatically received in Tempus600® Quantit SL by means of a side loader module and sent directly and securely to the laboratory. An optional urgency module can be added to Tempus600® Quantit SL. This allows you to access the system at any time and manually place urgent samples for immediate processing.

Tempus600® Quantit SL is easily integrated, as the system is mounted on a stand and can stand freely in the room or against the wall.

Conveyor belt

Features

- Capacity to handle up to 1250 samples per hour
- System ensures that samples are always correctly oriented
- Compatible with all sample tubes of length 80–110 mm, diameter 12–18 mm (including cap)
- Dimensions H x W x D = 141 x 110 x 57 cm
- Incompatible samples are automatically rejected

Benefits

- Automatic infeed and distribution of samples
- Meets the demand for sending both high volume and urgent samples
- Short installation time of 2 weeks for new and existing buildings
- Requires minimal maintenance

Solus

Automatic distribution of clinical samples from sample reception areas, from lab to lab and storage to lab

Tempus600® Solus can be integrated as part of a larger automation solution in the incoming sample reception. The system is used to redistribute samples after unpacking, streamlining time-consuming manual work procedures and minimising errors.

The samples must be quality-checked and approved by the automation solution before they are loaded into the system and sent directly and securely from the receiving area to the laboratory. If more than one destination is required, simply add an equivalent number of sending stations.

Tempus600® Solus is also suitable for automated transport of e.g. internal samples from the blood bank to the laboratory, from the sample storage to the laboratory or between two laboratories, improving work processes and freeing resources for other tasks.

Samples are inserted individually by a robotic arm or other automated insertion.

Features

- Capacity up to 1,250 samples/hour
- Communication via OPC-UA
- Dimensions: H x W x D = 24 x 44 x 82 cm

Benefits

- Automated transport of samples
- Safe, rapid and continuous operation without errors
- Requires minimal maintenance

Necto

Ideal as a sorting station, handling large quantities of samples – up to 1200 per hour

The Tempus600® Necto is an automated solution, delivering high throughput for the receiving, accessioning, and transporting of samples over long distances. Tempus600® Necto solution advantages:
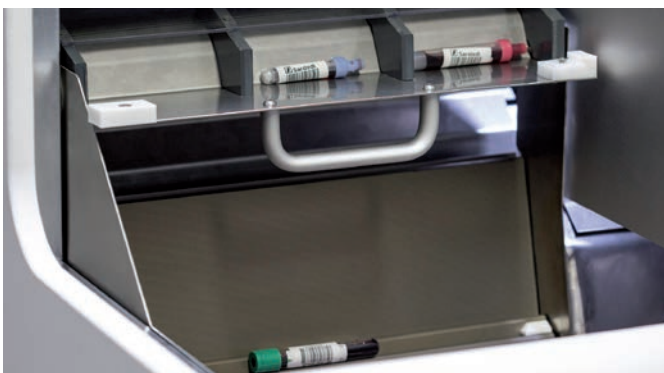
- Supports the automation of reception areas and blood test departments that receive large bulk volumes of small clinical samples

- Operates as a redistribution centre for samples sent from hospital departments via the Tempus600® system or conventional transport systems.

- Can operate as a combination of the above.

Tempus600® Necto streamlines the entire registering and sorting process, allowing samples to be transferred to up to six different locations – two local bins and four distant destinations. The Tempus600® Necto can be connected directly to Tempus600® receiving tray or lab automation systems via Tempus600® connection module.

Tempus600® Necto comes with one sending module as standard. Up to three more sending modules can be ordered with the solution.
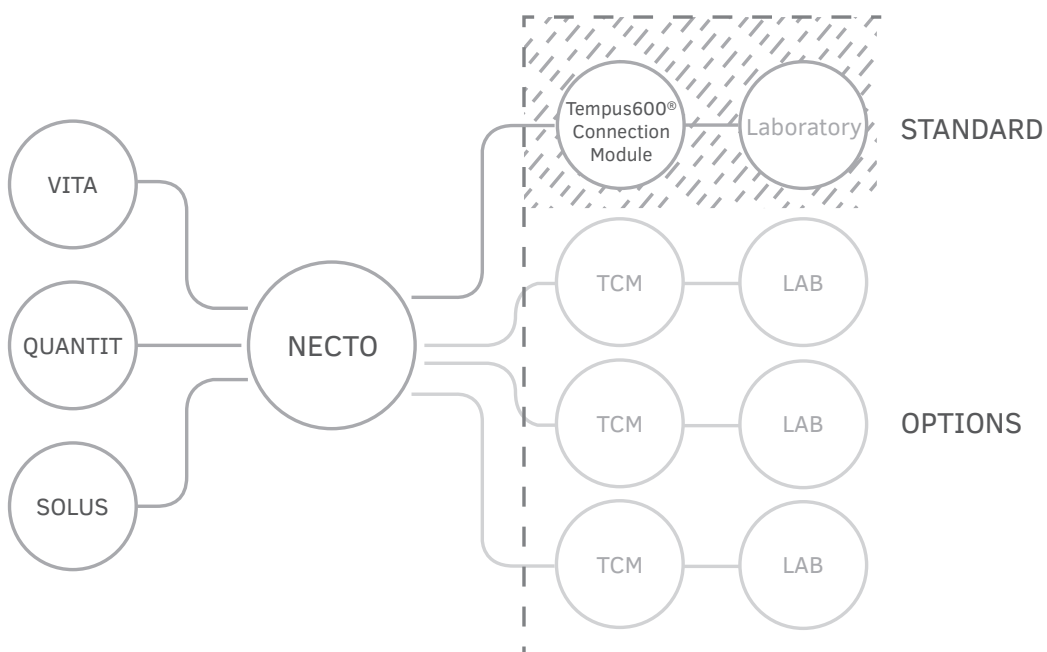
A: Sorting module

B: Urgent module

Features

- Automated sample accessioning

- Samples can be transferred to up to six different destinations – two local bins and four distant destinations

- Sample sorting by means of barcodes, tube type, LIS or as a combination

- Cap colour and tube geometry identification via camera

- Intelligent specimen transport into waiting loop if test order is missing

- Compatible with all sample tubes of following dimensions: Length 80–110 mm, diameter 12–18 mm (including cap),

- Up to 16 lines can be connected to Tempus600® Necto

- Capacity of bulk compartment approximately 600 tubes

- Throughput of up to 1200 tubes/hour

- The cabinet dimensions are approximately (H x W x D) 153 x 214 x 76 cm.

Benefits

- Ideal in combination with any analytical platform

- No pre-sorting or handling of sample tubes required

- Safe, rapid and continuous operation without error

- Requires minimal maintenance

VITA

QUANTIT

SOLUS

NECTO

Tempus600®
Connection
Module

Laboratory

STANDARD

TCM

LAB

TCM

LAB

OPTIONS

TCM

LAB

SARSTEDT HSS with Tempus600® Fero

The optimal configuration for your laboratory

The modular design of the HSS (High Speed Sorter) from SARSTEDT offers you the opportunity to create a solution precisely tailored to suit your needs.
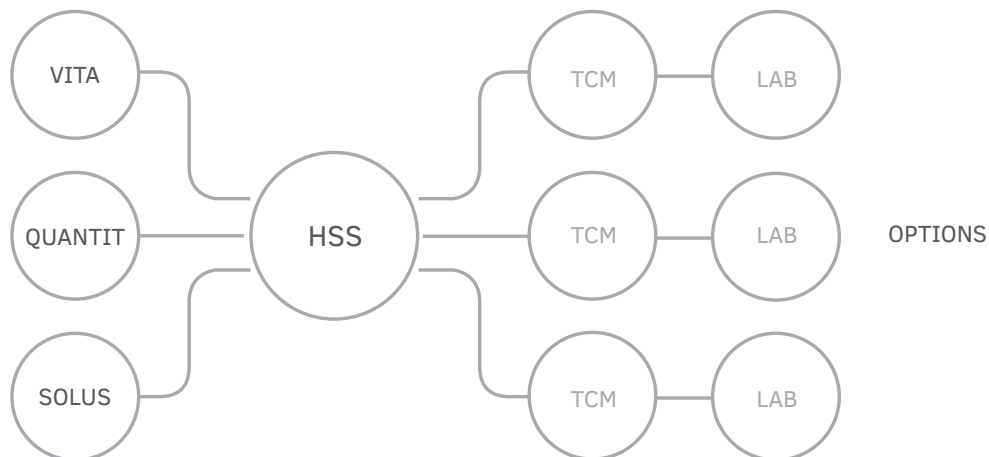
With Tempus600® Fero sending module you can use the potential of your HSS system even more efficiently by accelerating sample transport between the laboratories, thus reducing the total turnaround time (ToTAT) for clinical samples and optimising the entire pre-analytical workflow. This allows faster decisions to be made and can result in better treatment for patients.

In addition to sorting into racks, the gripper can transfer the sample tubes to one or two Tempus600® sending units. With the sending units the samples are sent directly to different laboratory areas. (e.g. EDTA samples to the haematology department).

The samples are received either at the Tempus600® receiving tray or at the Tempus600® connection module (direct connection to bulk loader or laboratory analysis line).

Optimise your processes

Heavy competition and cost pressure as well as limited personnel capacity means automating pre-analytical laboratory processes is particularly effective and in addition it takes the strain off your employees.

Features

- Sample loading

- Connection to Tempus600®,
  receiving samples from up to 16 lines

- Centrifugation status determination

- Sample identification

- Decapping

- Aliquoting

- Recapping

- Sorting

- Distributing

- Transfer to analysis platforms

- Archiving

- Sending samples with Tempus600®

Benefits

- Ideal in combination
  with any analytical platform

- No pre-sorting or handling of sample
  tubes required

- Modular design

- Customised automated workflow

Receiving Tray

Ensuring a gentle arrival in the laboratory

The Receiving Tray is usually located in the laboratory, receiving sample tubes from Tempus600® sending stations.

The samples arrive, one by one, and are gently slowed down before arriving in the Receiving Tray. From there, they are ready to be picked up by laboratory staff. A lid prevents the samples from falling out of the tray.

In case of high throughput sample transportation over long distances a brake module can be fitted to increase sample throughput and ensure failure-free sample receipt.

Receiving Tray with a brake

Filter bag for cleaning

Samples arrive in the Receiving Tray where they are retrieved.

Features

■ Up to two connections

■ Soft inside to reduce landing impact

■ Lights up inside when samples arrive

■ A lid prevents the samples from falling out of the tray

■ Optional brake

■ Dimensions: H x W x D = 65 x 28 x 43 cm

Benefits

■ The Receiving Tray is small and wall mounted – easy to fit in

■ Easy to access tray for cleaning

■ Minimalistic and user-friendly design

Connection Module

Connect to all automated lab equipment

The Tempus600® Connection Module is designed for the future. It is compatible with laboratory automation systems, including bulk loaders and sorters you already have installed, or plan to introduce in the laboratory.

The Connection Module, as part of an automated one-touch handling system for sample tubes, provides a wide range of benefits such as, fewer work procedures, no hands on the sample tubes and generally faster and safer handling.

In case of high throughput sample transportation over long distances a brake module can be fitted to increase sample throughput and ensure failure-free tube loading.

How does it work?

The sample tubes are delivered from the ward to the laboratory through the dedicated point-to-point system in just a few seconds. The sample tubes are gently slowed down before landing in the automation module, instantly ready to continue the journey into a bulk loader or sorter. From here they are automatically transferred e.g. onto a track system.

Brake module for GLP system

Features

- Dimensions: H x W x D = 63 x 38 x 23 cm
- Up to 8 connections
- Optional brake

Benefits

- Compatible with sorters and laboratory automation systems from all manufacturers and IVD suppliers
- Optimised feed of samples from ward to lab
- Easy access for cleaning

TM002

Complete control at your fingertips on an elegant, user-friendly display

TM002 enables you to control and monitor your Tempus600® equipment from one display.

The elegant display provides an intuitive interface and tiered access for users and technicians.

TM002 is built with the future in mind. The system is able to monitor up to 44 sending stations simultaneously and the software can be seamlessly updated online.

Intuitive user interface

Features

- Connection to a light signal indicating sample arrival

- Optional connection to a smartphone via text messenger in case of error

- Dimensions: H x W x D = 26 x 18 x 10 cm

Benefits

- Control TM002 remotely with any smartphone, tablet or desktop computer

- Fast, easy and intuitive operation using shortcut icons

- Option: communicates with total lab automation and sorters.

TMM

Central monitoring provides quick response to submissions and greater reliability with just one click!
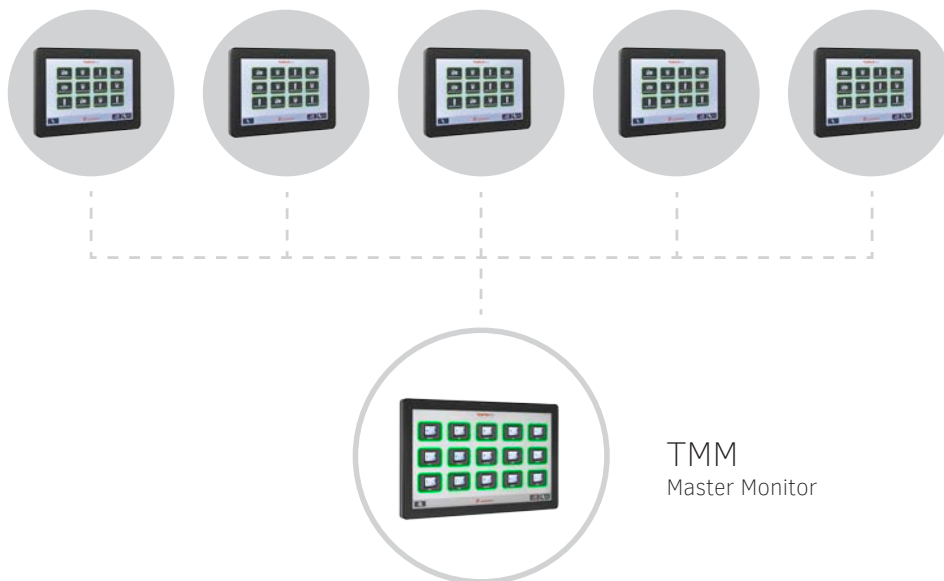
The TMM (Tempus600® Master Monitor) gathers data from local monitoring units on one screen, providing a complete overview of all installations in a logistics setup.

A single click on the local monitoring unit displays the status of all units and any equipment failures, together with a description of the fault. It makes it easy to locate faults in larger setups, and to react quickly to submissions, saving valuable time for technicians and staff in departments and in the laboratory. Overall responsibility for operations will determine where in the building the TMM is placed.

As an extra feature, the TMM can be connected to a light signal to indicate when a fault has occurred, reducing response time to alarms.

TM002 Control Unit

TMM
Master Monitor

Features

- Connect up to 15 TM002 monitoring units
- Ability to link a light signal to indicate faults
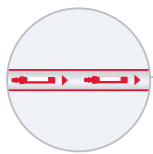- Dimensions: 33 x 54 x 10 cm

Benefits

- Greater reliability with a centralised overview of the whole setup
- Quick response time to submissions saves staff time
- Intuitive and user-friendly interface (same interface and icons as the TM002)
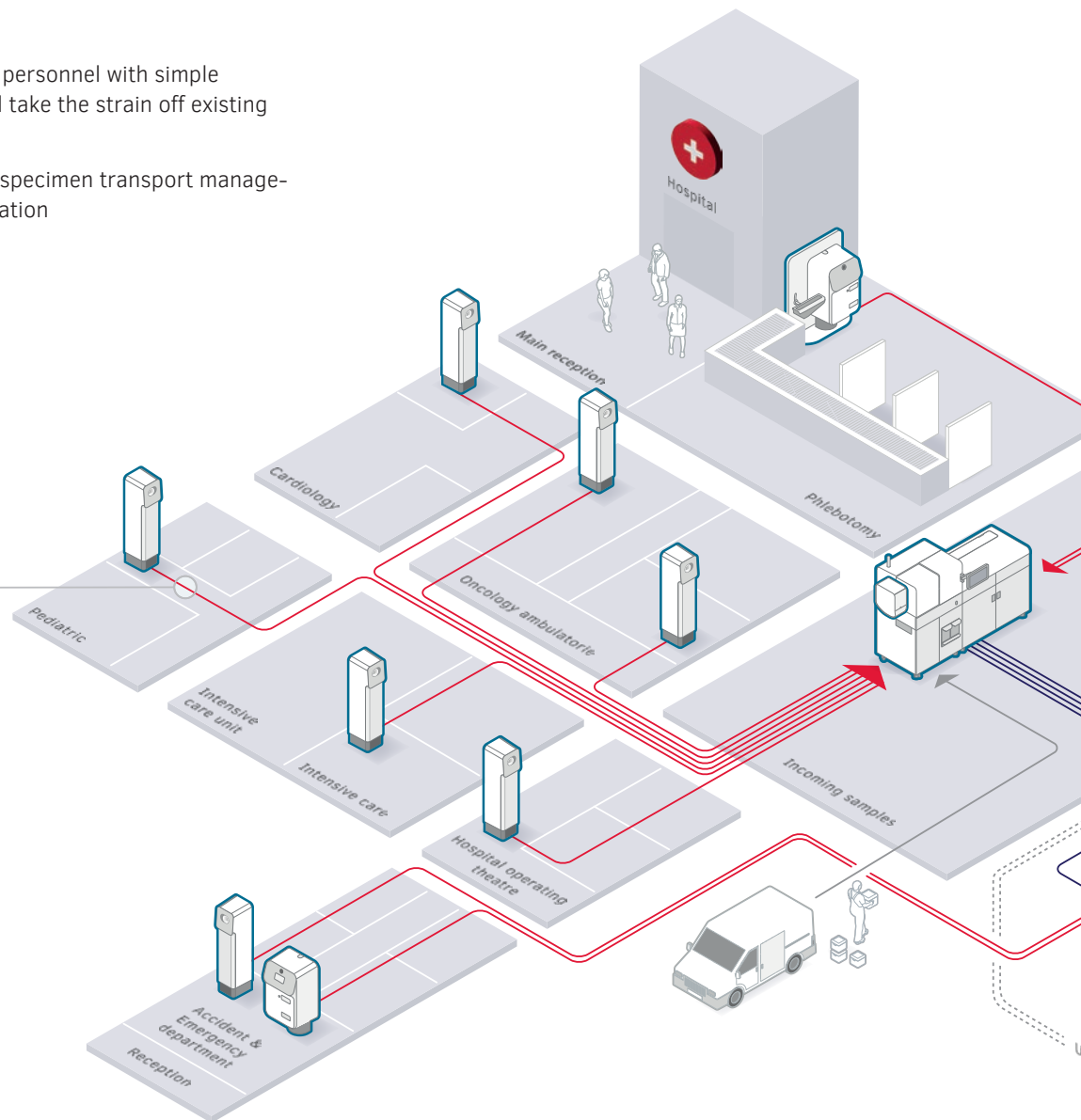
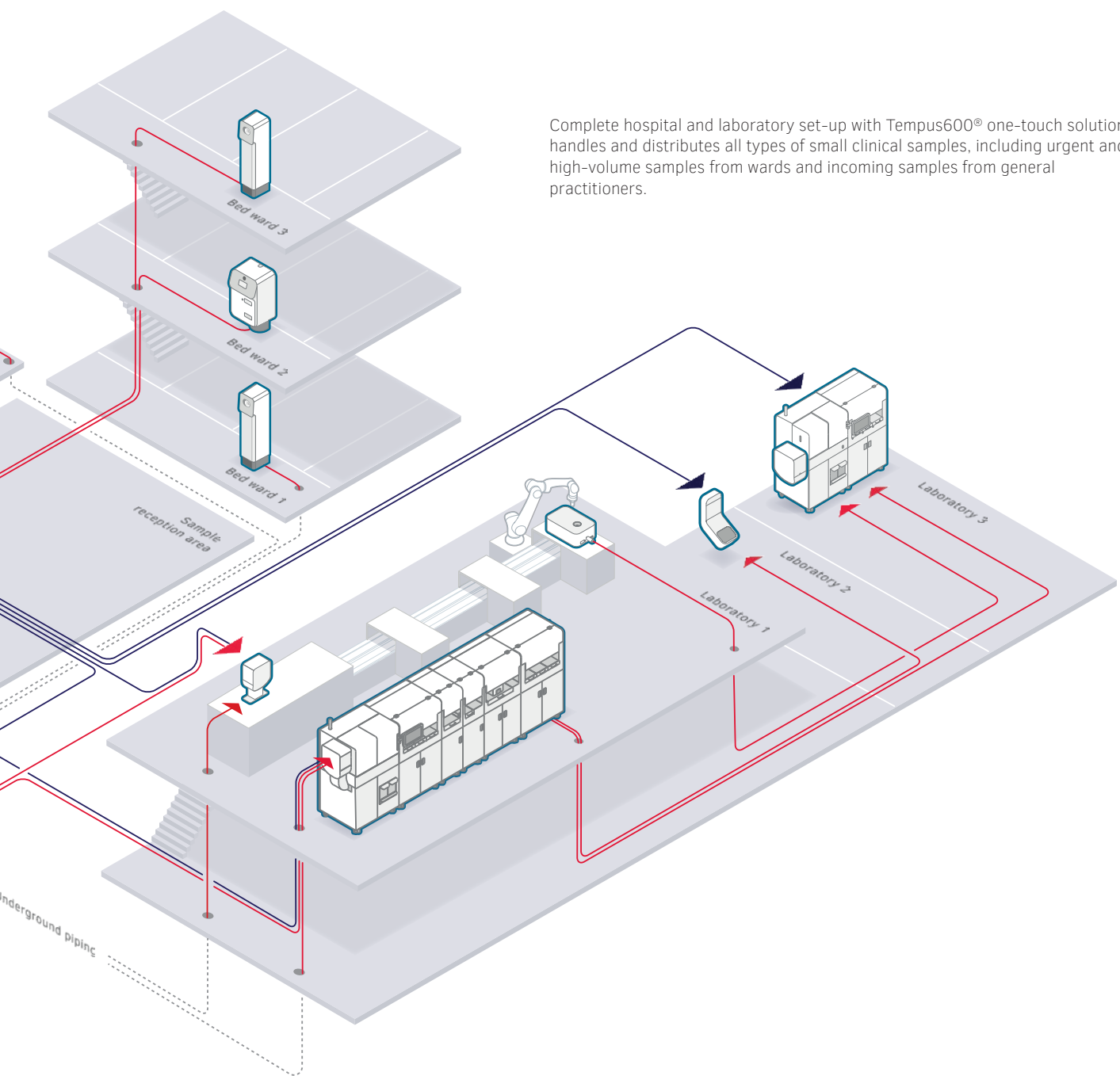# Optimise your sample flow and save time with Tempus600®

Optimise your sample flow and save time with Tempus600®

- Save valuable time for your personnel with simple direct sample transport and take the strain off existing transportation systems

- Take the next step towards specimen transport management and laboratory automation

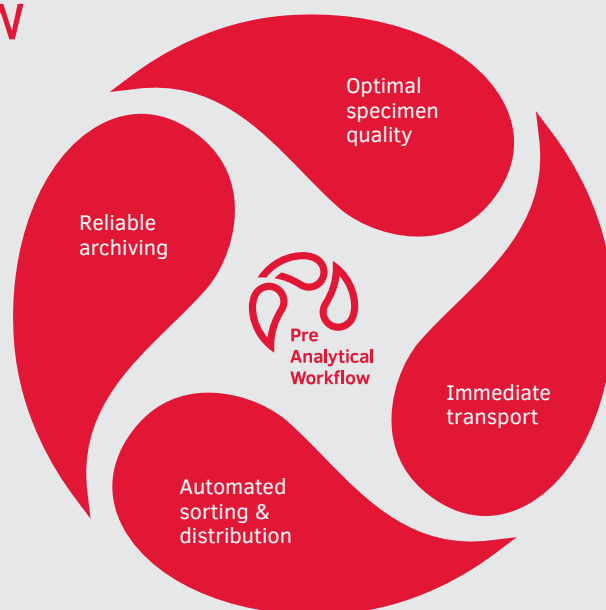Transport pipelines for blood and small clinical samples

Complete hospital and laboratory set-up with Tempus600® one-touch solution handles and distributes all types of small clinical samples, including urgent and high-volume samples from wards and incoming samples from general practitioners.

Bed ward 3

Bed ward 2

Bed ward 1

Sample reception area

Laboratory 1

Laboratory 2

Laboratory 3

Underground piping

If you have any questions,
we'll be happy to help!

Visit our website: www.sarstedt.com

Pre-analytical workflow made by SARSTEDT

Take advantage of the synergy of our synchronised systems.

Optimal specimen quality

Reliable archiving

Pre Analytical Workflow

Immediate transport

Automated sorting & distribution

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