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Collaborative and configurable solutions **for your laboratory**

inSPIRE collaborative automation platform

ThermoFisher SCIENTIFIC

The Thermo Scientific™ inSPIRE™ collaborative automation platform brings configurable and intuitive solutions to your lab. Its innovative touch-enabled technology as well as flexible and compact design deliver inspired science.

Collaboration

The inSPIRE platform works alongside you. Innovative features such as SmartHandles and SmartShelves provide a truly collaborative platform.

Versatility

With its modularity, expandability, and the power of Thermo Scientific™ Momentum™ Workflow Scheduling Software, the inSPIRE platform is the perfect solution for a variety of diverse workflows.

Configurability

The inSPIRE platform's catalog of configurable components and space-saving design allow you to build the right solution for your current workflow while providing the flexibility to adapt to your evolving needs.

1 At-a-glance information

Visual indicator of instrument and system health

Thermo Scientific™ SmartHandle color informs users of instrument status, and overall system health. Instruments in warning or error states are identified by a SmartHandle color change which is easily identifiable from across the room.

2 Flexible and configurable

Superior instrument accessibility in a compact vertical design

Configure your inSPIRE platform to meet your needs through our large catalog of components. The modular design enables multiple systems to be joined to create expanded workflow solutions.

3 Spinnaker XT Microplate Robot

Collaborative and safe by design

The inSPIRE platform uses the fully collaborative Thermo Scientific™ Spinnaker™ Microplate Robot which has vision teaching, on-the-fly healing, built-in barcode reading for sample tracking, a full 360-degree workspace, an on-board container re-orientation station and mover-based container de/re lidding.

4 SmartHandles

Quick and easy instrument access

SmartHandles provide touch enabled automation control with haptic feedback allowing users to intuitively interact and share instruments with the inSPIRE platform. Requesting an instrument is easy! Simply grip the SmartHandle to register your request. Feedback is provided by the color and pulse of the SmartHandle.

5 SmartShelves

Actively positioned means no re-teaching required

Quickly and easily supply power and communication to an instrument through each Thermo Scientific™ SmartShelf's built-in communication ports. Depending on the chosen instruments, up to four SmartShelves can be placed on each inSPIRE platform central pole. Spill containment options are available.

Collaboration

The inSPIRE platform leverages innovative technology to provide a truly collaborative experience

SmartHandle technology provides at-a-glance system health by the color state

Green
The device is available for manual use

Red
Device error

Blue
The device is available for automated use

Yellow
Device warning

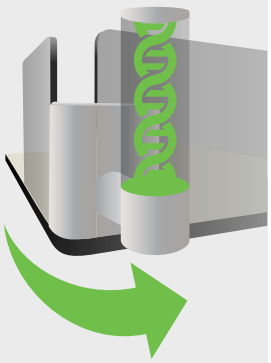
Pulsing*
The device is transitioning to the state indicated

* For example, pulsing green indicates the device is becoming available for manual use

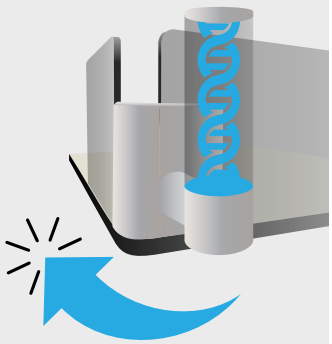
SmartShelves allow for touch enabled automation and easy instrument access

Requesting a device
Grip the SmartHandle for approximately one second, and then release it. The SmartHandle changes (pulsing green).

Wait for the SmartHandle to change (steady green), grip the SmartHandle, and when it vibrates gently swing the SmartShelf outward.



Returning a device
Grip the SmartHandle, and then slowly swing the SmartShelf in toward the center of the inSPIRE platform frame until a click is heard.

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CYTOMAT

Versatility

The inSPIRE platform has the versatility to be configured around a variety of workflows

Below are some examples of these workflows. However, the inSPIRE platform can be used for many applications. Ask us to see if we can inspire your workflow.

Analytics | Extractions | Screening | Immunoassays | Compound Management | Sample Preparation

Nucleic acid extraction, quantification and normalization

Samples can be stored and extraction can be performed all on one platform.

Core instruments

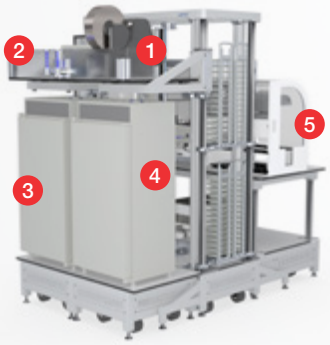
1. Sealer
2. Dispenser
3. Reader
4. DNA purification
5. Liquid handler
6. Incubator

Colony picking and growth

Large and small instruments are organized around the central platform to accommodate a complete colony picking and growth workflow.

Core instruments

1. Sealer
2. Peeler
3. 4 °C incubator
4. Shaking incubator
5. Liquid handler
6. Colony picker
7. Centrifuge



Assay-ready plate preparation

A tremendous amount of plates can be prepared in a compact space bringing the convenience of automation to plate preparation.

Core instruments

1. Sealer
2. Peeler
3. Dispenser
4. Centrifuge
5. Acoustic dispenser
6. Labeler
7. Carousel

Expandability

The modular design allows for multiple inSPIRE platforms to be joined. Connect two or more inSPIRE platforms using the Thermo Scientific™ FastTrak™ Microplate Mover.

Platforms displayed

1. High throughput screening inSPIRE platform
2. Compound management and storage inSPIRE platform

Analytics solution

With our Thermo Scientific™ Vanquish™ HPLC system loading capabilities, the inSPIRE platform can be configured for a complete analytics workflow solution—from sample preparation to detection.

Benefits

- Integrate one or more Vanquish HPLC and UHPLC systems
- Easy manual access to the Vanquish system
- Post mounted bottle holders and other accessories complete your workflow needs

Configurability

Choose the modular components from this catalog to build the solution for your workflow

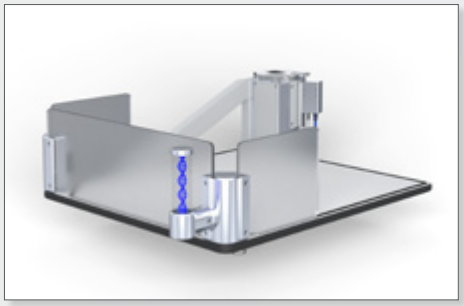
Main components

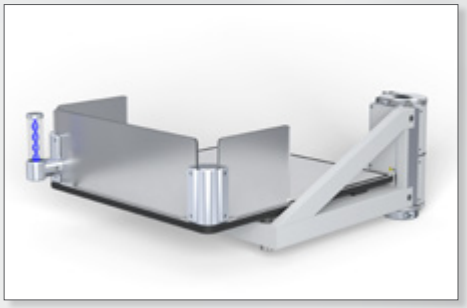
Central
Central unit that your configuration of SmartShelves, inSPIRE tables, and other components will be mounted onto.

- Four poles which can each support up to four SmartShelves
- Thermo Scientific™ Spinnaker™ XT Microplate Robot
- Thermo Scientific™ Momentum™ Workflow Scheduling Software and Host PC
- Built-in ambient microplate storage and guarding available
- Dimensions: 1200w × 600d × 1980h mm (47.2w × 23.6d × 78h in.)

SmartShelves
SmartShelves with SmartHandles provide touch enabled automation with at-a-glance instrument feedback so you can confidently interact with the platform.

- Built-in power and communication with Momentum software
- Capable of supporting one or more instruments and their reagents
- Positively located eliminating the need for re-teaching
- Supports up to 50 kg (110 lb.) in weight; Dimensions: 565w × 600d mm (22.2w × 25.6d in.)





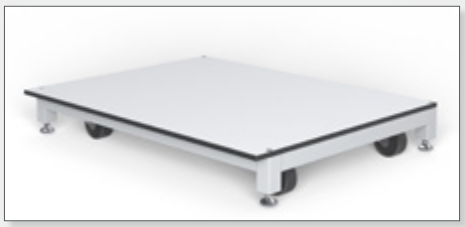
Risers

Instrument risers are the ideal option for adding taller instruments such as the Thermo Scientific™ Cytomat™ 2 C-LiN Automated Incubator Series around the inSPIRE platform.

- Built-in power and communication with Momentum software (options without power and communication are available)
- Multiple sizes available:
  Small (top left), Large (top right), Large without power (bottom)

600w × 600d mm (23.6w × 23.6d in.)

1100w × 850d mm (43.3w × 33.5d in.)



1100w × 850d mm (43.3w × 33.5d in.)

Tables

Tables provide fixed upper and lower surfaces for optimal instrument placement.

- Built-in power and communication with Momentum software
- Configurable with table accessories for additional access and capacity
- Multiple sizes available:
  Standard (left), Tall (right)

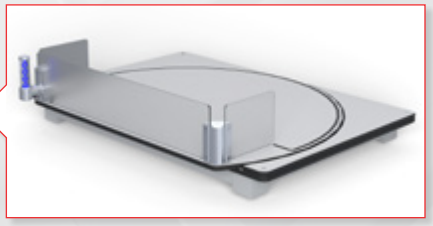
1200w × 800d × 860h mm (47.2w × 31.5d × 33.9h in.)

1200w × 800d × 1000h mm (47.2w × 31.5d × 39.4h in.)

Upgraded main components

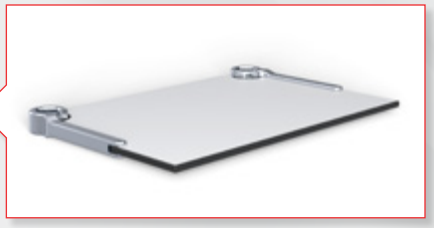
Rotating tabletop

The rotating tabletop provides the benefits of SmartHandle technology onto a tabletop. This is the perfect solution for heavier instruments which cannot be supported on a SmartShelf.



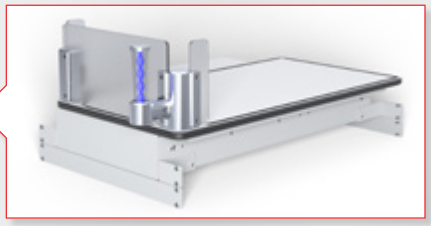
Mounted shelf

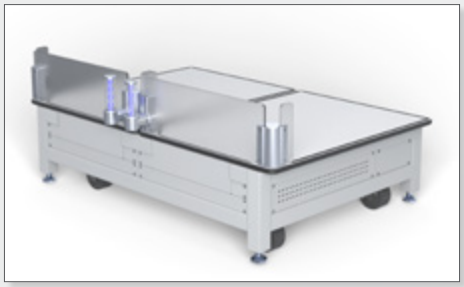
The mounted shelf can be an interior or exterior shelf providing space for instruments, reagents, computers and other scientific accessories. It mounts to two table posts (between upper and lower table surface). Supports up to 15 kg (33 lb); 800w × 500d mm (31.5w × 19.7d in.).

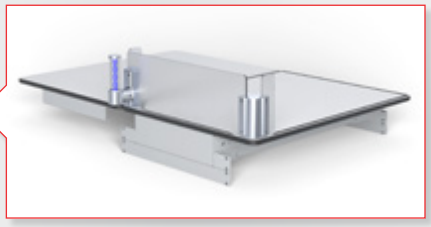


SmartSlides

Thermo Scientific™ SmartSlides incorporate SmartHandle technology with a slide for optimal instrument access in low harder to reach areas. This option is available for tables and risers.





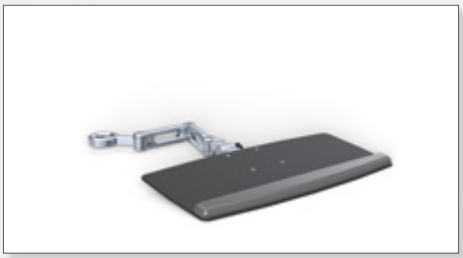


Accessories

Side guarding

Guarding options are available for the narrow side of the inSPIRE platform. Full and half length available.

* Half length guarding displayed



Keyboard mount

Mount a keyboard onto an inSPIRE post to free up table space.

Touchscreen monitor mount

Mount the inSPIRE Touchscreen on an inSPIRE post for convenient system interaction.

Bottle holder

For easy access to reagents, the bottle holder accessory can support up to six 1-L bottles.* The accessory can mount to SmartShelves, posts, and tables.

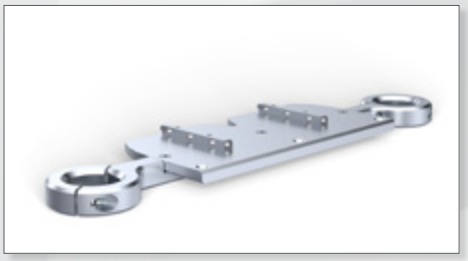
* Bottles not included

Post mounted power and communication module

Organize your system's communication and power distribution with an accessible connection point.

Mounted SmartJig nest

Provide storage for the SmartJig when teaching or healing workflows are not being performed.



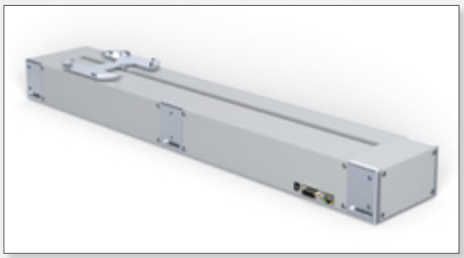
Side storage mount

Increase your system's storage space with the side storage mount which provides two additional storage mounting positions.

* Compatible with random and sequential storage access hotels

Power puck holder

Provide quick access to the Spinnaker XT Microplate Robot power puck controller.



FastTrak

A plate shuttle system which allows for the transfer of plates from one inSPIRE platform to the next.

* For more information see page 6

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Lab Automation

Workflow solutions for automating science

Life science researchers looking to improve workflows or increase efficiency rely on our industry-leading automation solutions of robotic movers, automated incubation, collaborative platforms and workflow scheduling software. Whether automating a single step or an entire workflow, our laboratory solutions deliver increased walk-away time, improved reproducibility and productivity without compromising data quality, allowing our customers to focus on their science.

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