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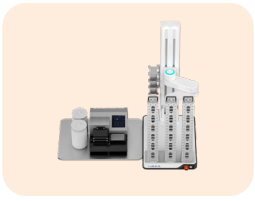
Smart Plate Handler



PORTFOLIO INTRODUCTION

The Smart Plate Handler is designed to create flexible integration of scientific instruments around a 4-axis collaborative arm and consumable stacker. The Smart Plate Handler can also be scaled to meet application-specific throughput requirements.

Scalable Throughput



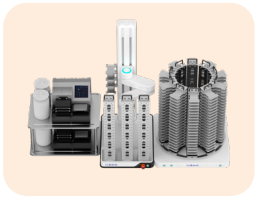
Standard Throughput

- Fixed stack
- Robotic arm
- Scheduling software



Expanded Throughput

- Fixed stack + expanded fixed stack
- Robotic arm
- Scheduling software



Maximum Throughput

- Fixed stack + carousel
- Robotic arm
- Scheduling software

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Galatek provides custom application-driven solutions by integrating the Smart Plate Handler with a wide range of commercially available devices. Automated scheduling completes each unique workflow.

Automated Plate Washing & ELISA	Automated High-Content Imaging	Automated qPCR Analysis	Automated Pipetting
			

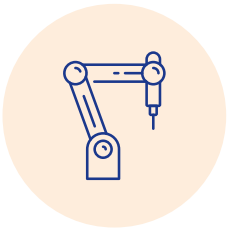
A Single Software Interface Synchronizes Each Workflow

Graphical Process Editing Interface: Enables edits without separate programming software

Scheduling: Automatically schedules multiple experiments to run in parallel, as device resources allow

Visualization: Gantt chart interface shows operation and resource utilization for each proces

PRODUCT FEATURES



Robotic Arm

Controlled four-axis robotic arm with intuitive teaching points and safe performance for flexibility in sample transfer, consumables, and de-lidding



Devices & Accessories

Easy configuration of hundreds of validated devices to maximize efficiency



Data Processing

Extracts processed data for analysis supporting drag-and-drop graphs for experimental process editing



Visualization

Real time data visualization from integrated devices, displaying lab operation, status, error reports and more

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PARAMETERS OF SMART PLATE HANDLER

Basic Parameters	**Dimensions**	500mm(W)*700mm(D)*1,212mm(H)
	Weight of Main Unit (Stand + Robotic Arm + 3 Stacks)	65kg
	Available Stack Types	• Available in 2 fixed stacks with wide-side gripping or 3 fixed stacks with narrow-side gripping, with optional random-access or sequential-access configurations for fixed stacks. • Additional configurations available for expanded fixed stacks or carousels
	Maximum Number of Plate Postions (Random-Access Stacks)	• 3 random-access fixed stacks, each with a capacity of 20 SBS sample plates: A total of 60 sample plates • 1 random-access carousel, with a capacity of 200 SBS sample plates: A total of 260 sample plates
	Maximum Number of Plate Postions (Sequential-Access Stacks)	• 3 sequential-access fixed stacks, each with a capacity of 25 SBS sample plates: A total of 75 sample plates • 1 random-access carousel, with a capacity of 200 SBS sample plates: A total of 275 sample plates
	Compatible Plate Types	SBS standard sample plates
	Minimum Transfer Time	10s
	Supply Voltage	220V, 50Hz
	Operating Environment	Temperature: 5-35°C, Humidity: 5%-95% (no frost)
	Extensibility	Sequential-access stacks, random-access stacks & carousels can be added to increase throughput
Robotic Arm	**Maximum Load**	500g
	Error Handling	Real-time automatic alerts for failures in plate gripping and incorrect placement
Barcode Scanner	Built-in scanning module in the robotic arm, compatible with common 1D & 2D codes	

Singapore, Germany, United States
officialmail@galatek.ai
www.galatek.ai
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