

Integrated High-Throughput Compound Screening Platforms



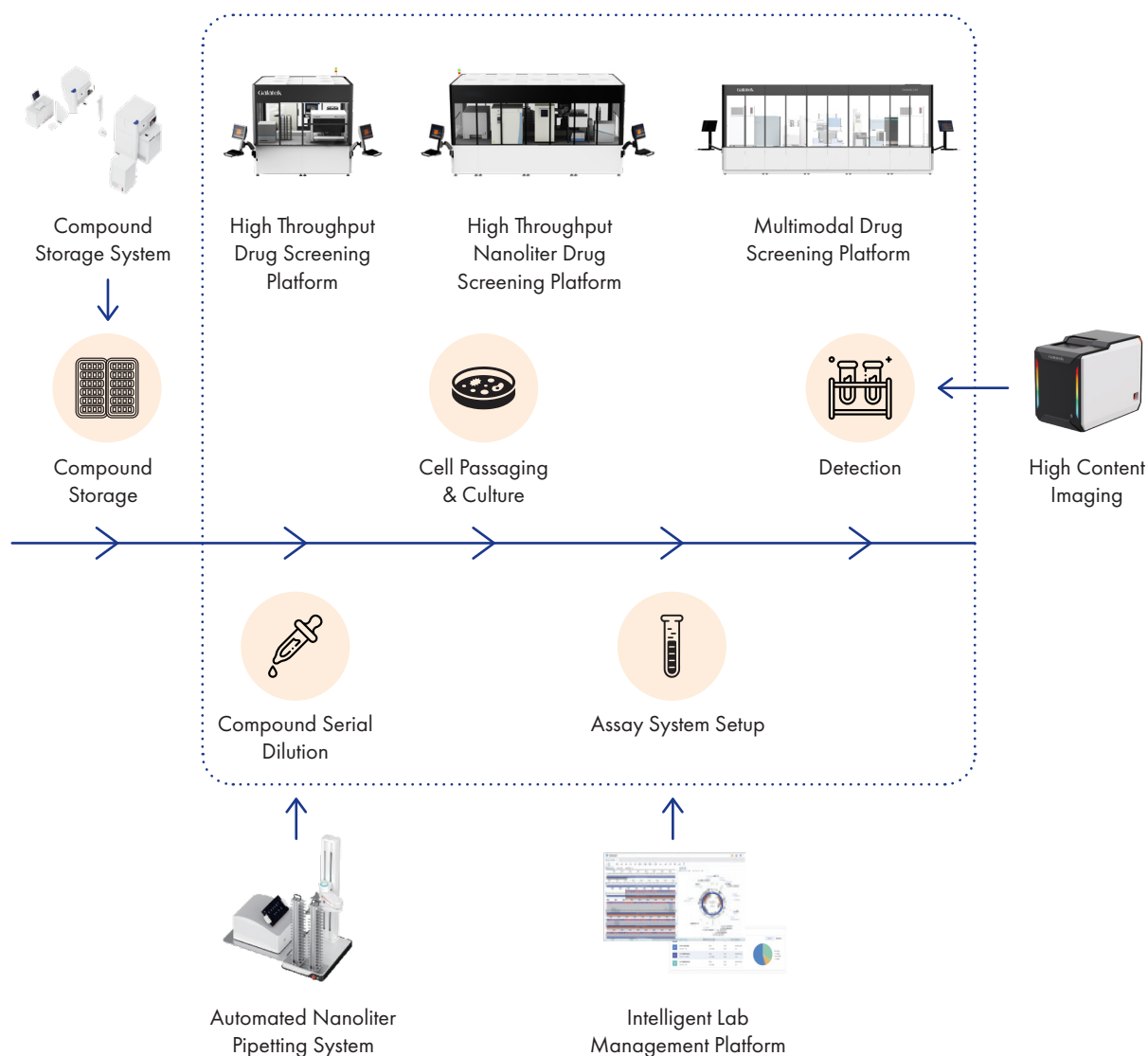
PORTFOLIO INTRODUCTION

Compound screening for drug discovery has evolved rapidly, driven by the need to evaluate larger compound libraries with greater precision and speed. High-throughput screening (HTS) technology, combined with AI-assisted data analysis and automation, now enables research labs to screen millions of compounds per day - reducing cycle times and improving the quality of decisions at every stage of the discovery pipeline.

Galatek's compound screening platforms automate the full workflow, from serial dilution and cell plating through digestion, media replacement, and detection. A tiered system portfolio allows laboratories to select the configuration that fits their throughput requirements and experimental needs, with a clear path to scale.

All platforms integrate with Galatek's onboard software for intelligent scheduling, experimental design, large-scale data management, and threshold-based compound flagging - providing structured, traceable data assets across every run.

Automated Cellular Testing Platform



Galatek's Drug Discovery systems automate the whole screening process from serial dilution, plating, digestion, through analysis. Different system offerings allow for flexibility based on the experimental needs of the laboratory.

The platform can be programmed with Galatek's AI-native software for large sets of data, threshold settings, quick screening of target compounds, and experimental design and scheduling.

SYSTEMS OFFERED



	High Throughput	High Throughput Nanoliter	Multimodal
	Compound Screening Platform	Compound Screening Platform	Compound Screening Platform
SPECIFICATIONS			
Dimensions	2,450 × 2,450 × 2,600 mm	4,200 × 2,450 × 2,600 mm	5,000 × 2,450 × 2,600 mm
Compatible plate types	96-, 384-well plates	96-, 384-, 1536-well plates, cryotubes	96-, 384-, 1536-well plates, cryotubes
Daily screening throughput	10,000–20,000 compounds (384-well plate)	30,000–50,000 compounds (384-well plate)	30,000–50,000 compounds (384-well plate)
Environmental control	Pos./neg. pressure laminar flow hood, UV	Pos./neg. pressure laminar flow hood, UV	Pos./neg. pressure laminar flow hood, UV
KEY CAPABILITIES			
Liquid handling	Standard pipetting Self-developed tilt module; no residue	Nanoliter dispensing Reduces compound consumption	Nanoliter + acoustic pipetting Automated acoustic pipetting system
Detection modes	Microplate reader	Microplate reader	Cell imaging, high-content detection, enzyme labeling, ELISA
Imaging system	—	—	High-content imaging AI-driven 2D/3D image analysis
Compound storage	—	Onboard automated freezer Cryotube decapping + scanning	Onboard automated freezer Cryotube decapping + scanning
Cell handling	Multi-plate simultaneous processing	Cell passaging, culture, centrifugation	Cell passaging, culture, centrifugation, automated plate washing
Data & software	Scheduling & data management	Multidimensional analysis; threshold-based compound flagging	Intelligent scheduling, experiment design; AI-driven hit identification services
BEST SUITED FOR	Low to medium throughput research; compact lab environments	Medium to high throughput; compound-limited workflows; enterprise & research institutes	High throughput with complex, multimodal detection needs; CRO/enterprise scale

Whether supporting early-stage compound library screening, organoid-based assays, or antibody research workflows, Galatek's platforms are designed to adapt as research programs scale. Each system is backed by Galatek's application expertise and integration support, ensuring that automation delivers not just throughput, but reproducible, high-quality data from day one