Automate the Agilent 5400 Fragment Analyzer with the PlateCrane EX™ Robotic Arm

The PlateCrane EX and 5400 Fragment Analyzer combine to provide unsurpassed reliability and performance for automating high throughput nucleic acid analysis. Efficiently manage any high throughput task in your lab with confidence.

Hudson’s PlateCrane EX™ Robotic Arm is an affordable, flexible option for automating any plate handling task. The 5400 Fragment Analyzer from Agilent Technologies is a dependable parallel capillary electrophoresis instrument designed to integrate with robotic handlers such as the Hudson PlateCrane EX or SciClops™. Hudson Robotics and Agilent Technologies have collaborated to develop an integrated hardware and software solution, to address the needs of researchers working in high-throughput facilities.

The PlateCrane EX Robotic Arm

The PlateCrane EX is a simple yet robust pick-and-place robotic arm designed specifically for moving SBS standard microplates in a laboratory for high throughput applications. Multiple stack configurations are available to meet almost any need.

- Handles any SBS standard microplate and can work with lidded or unlidded plates
- Configurable to hold up to 15 plate stacks, or use a 10-stack carousel
- Small enough to fit into a standard laboratory hood
- Has available random-access stackers for RT incubation and time point assays
- The integrated workcell is easily controlled by Hudson’s Powerful SoftLinx V automation software

5400 Fragment Analyzer Automated CE System

The 5400 Fragment Analyzer is a parallel capillary electrophoresis instrument capable of simultaneously separating 96 samples. Available quantitative or qualitative reagent kits cover the broadest application range, from genomic DNA and RNA, to NGS libraries and PCR ampicons. Easily analyze over 2,400 samples per day with minimal hands on interaction.

- Controls all reagent drawers with a robust API
- Allows results to be batch processed post-electrophoresis using PROSize® Data Analysis Software
- Input sample names through LIMS integration
- Uses over 20 quantitative and qualitative reagent kits, covering a wide application range
- Minimal user interaction limits instrument downtime, allowing for truly continuous operations
- Efficiently analyze thousands of samples per day
Applications

The 5400 Fragment Analyzer permits high throughput quantitative and qualitative analysis of nucleic acids using a wide variety of reagent kits.

• Genomic DNA
• Large & small Fragment DNA
• Cell-free DNA (cfDNA)
• NGS Libraries
• Plasmids
• SSR/Microsatellites
• PCR Amplicons
• Restriction Enzyme Digests
• Small RNA NGS Libraries
• mRNA
• sgRNA
• Small RNA/microRNA
• Total RNA
• FFPE extracted nucleic acids