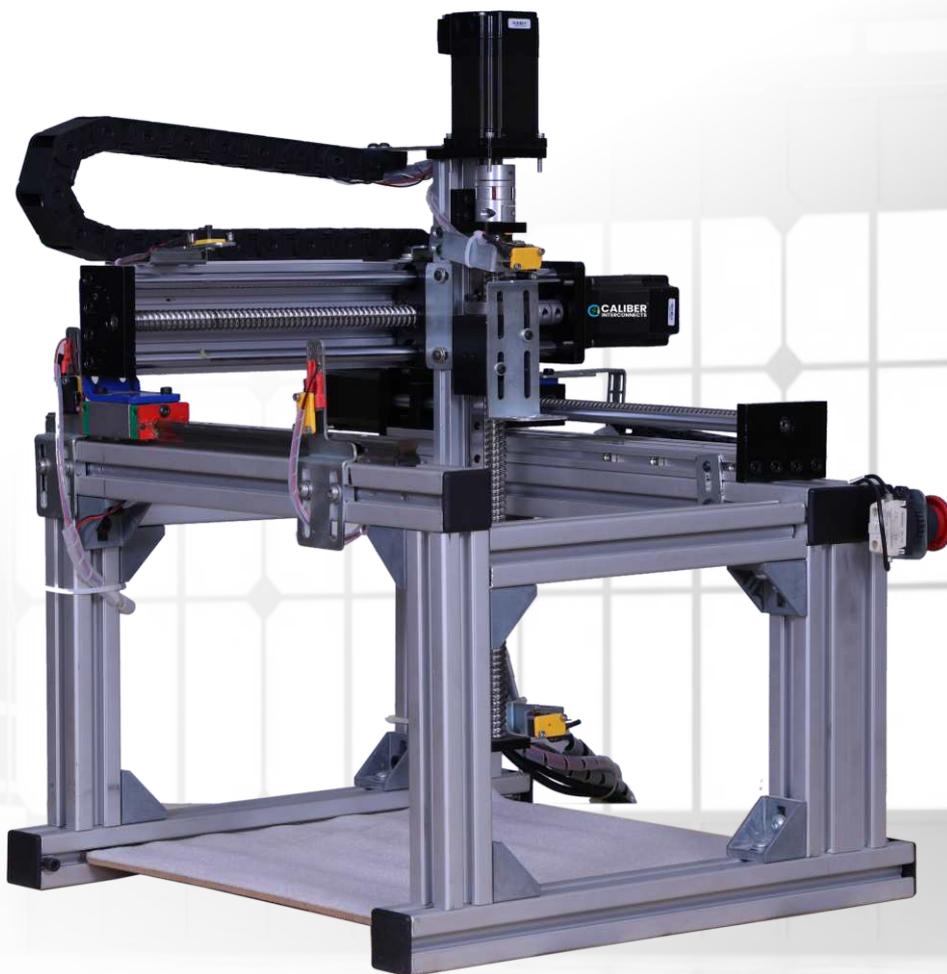


CARTESIAN ROBOTS



We offer Custom-Engineered Robotics Solutions

What sets Caliber apart in Cartesian Robotic Automation?



Full-Stack Engineering & Automation Expertise

- In-house design of motion systems, embedded control, mechanical enclosures and application software
- Custom automation solutions for test, assembly, material handling, sorting and pick-and-place
- Precision-engineered for repeatability, robustness and safety



Industrial Integration & Smart Control

- Compatible with ICT/FCT systems, MES/ERP platforms, barcode/RFID systems and conveyors
- Remote diagnostics, motion analytics and predictive maintenance ready
- Scalable deployment across labs, factories and multi-line production environments



Configurable Platform for Diverse Applications

- Modular Cartesian (Gantry-style) robotic system tailored to specific workflows
- Supports a wide range of end-effectors including grippers, test probes, suction cups and more
- Seamless integration into existing production lines or test stations



Fast Deployment & Long-Term Flexibility

- Designed for easy setup, minimal maintenance, and rapid reconfiguration
- Robust mechanical construction suitable for 24x7 operation
- Flexible software allows motion programming, test sequencing, or part handling logic

Core Technologies Powering Our Platform

Multi-Axis Linear Motion

Precision movement along X, Y, Z axes for accurate positioning

Smart Motion Control

Real-time coordination, velocity profiling and end-effector triggering

Flexible Tooling Support

Easily mountable tools for gripping, probing, inspection, or handling

Vision Integration

Camera-based alignment, inspection, sorting or part presence verification

Safety & Monitoring

Emergency stop, interlocks, fault diagnostics, remote access support

Connectivity

Ethernet, USB, Wi-Fi – ready for industrial systems and IoT integration

Specifications

Specifications	Features/Functionalities Capabilities
Platform Type	Cartesian Robot (Gantry Architecture)
Motion Axes	3 or more, configurable
Payload Capacity	Up to 5 Kg (extendable based on application)
Repeatability	± 0.1 mm
Cycle Time	5–15 seconds (use case dependent)
Controller Options	Embedded Control, PLC, or Industrial PC
Power Supply	230V AC / 50 Hz; Optional Pneumatics
Integration	MES, ERP, ICT/FCT, Vision Systems
Optional Features	Camera, Barcode Reader, Label Applicator

Application Areas

PCB Test Automation (ICT/FCT)

Pick and Place for Assembly or Packing

Conveyor Line Material Handling

Vision-Assisted Part Inspection or Sorting

End-of-Line Functional Testing

