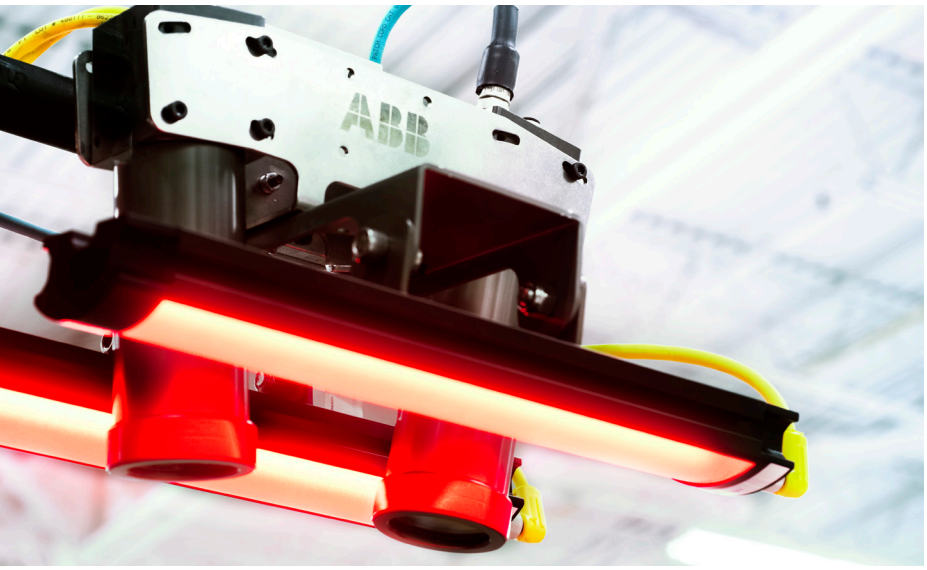
ROBOTIC SYSTEMS

FlexVision™ 3D

Integrated vision solution for ABB robots



This is the most capable integrated vision solution for ABB robots, FlexVision™ 3D systems see and react to changes within the industrial work environment.

Augments Robotic Manufacturing Processes
FlexVision™ 3D vision guided robotic (VGR) systems see and react to changes within the industrial work environment. FlexVision™ 3D enables ABB robots to precisely locate the grip points of a disoriented object within a 3D space.

FlexVisionTM 3D Makes Robot Vision Simple
FlexVision™ 3D systems include the vision hardware, the FlexVision™ software platform and the ABB standard specifications in the areas of robot dress, mechanical and electrical integration, and robot–vision programming modules.

The software platform includes unique technologies such for easy calibration, with quick and reliable integration. FlexVision™ leverages world class vision technology as the most reliable and repeated VGR software for ABB robots.

ABB FlexVision™ is Low Maintenance and Reliable
From proven technology and years of continuous design innovations, FlexVision™ 3D is the most capable and integrated vision solution for ABB Robots.

Vision Guided Robotics Provides Savings
- Manage variation in part styles and location
- Eliminate costly precision fixturing, mechanical part crowding and dunnage
- Automate operations that previously required human interaction
- Increase up–time and eliminate robot crashes by seeing the part on racks

The FlexVision™ VGR Platform
- Multi–camera 3D (GigE / PoE)
- Single camera 2D
- Robot mounted and stationary mounted cameras
- Automatic camera calibration
- Automated accuracy validation
- Extremely fast set–up and calibration processes
- Industrial, extreme flex cable system
- 3D position of parts in full 6º of freedom

Main Applications
- Material handling
- Machine tending
- Dispensing & sealing
- Press automation
- Powertrain assembly
- Body–in–White

Technical Data | FlexVision™ 3D Vision Systems	
Supported Robot Types:	
Robot controller	IRC5
Robot type	All 6-Axis IRB robot arms
Robot Controller Configuration Requirement	
Hardware	Digital I/O Board
Baseware	Version 5.15 or later
Performance	
Vision Accuracy	+/- 0.1 to +/-0.3 mm
Vision Processing Time	0.3 to 1.0 seconds
Typical Part Movement	+/- 15 º, +/-300 mm
Hardware	
Camera	High resolution(GigE / PoE)
Lens	Standard and anti-vibration lenses available
Light	LED lighting—2 lights standard, support for up to 6 lights

Function Package Features

- FlexVision™ 3D VGR runtime software license
- Extended robot cabinet with monitor
- LED lighting system, mounting brackets and power supply
- Camera, lens, and IP67 protective camera enclosure
- Vision Computer
- FlexVision™ 3D API (with easy to build vision robot programs)
- FlexVision™ 3D installation and commissioning manual
- Drawing package

Robot cabinet with monitor.

ABB Robotics
1250 Brown Road
Auburn Hills, MI 48326
USA

abb.com/robotics