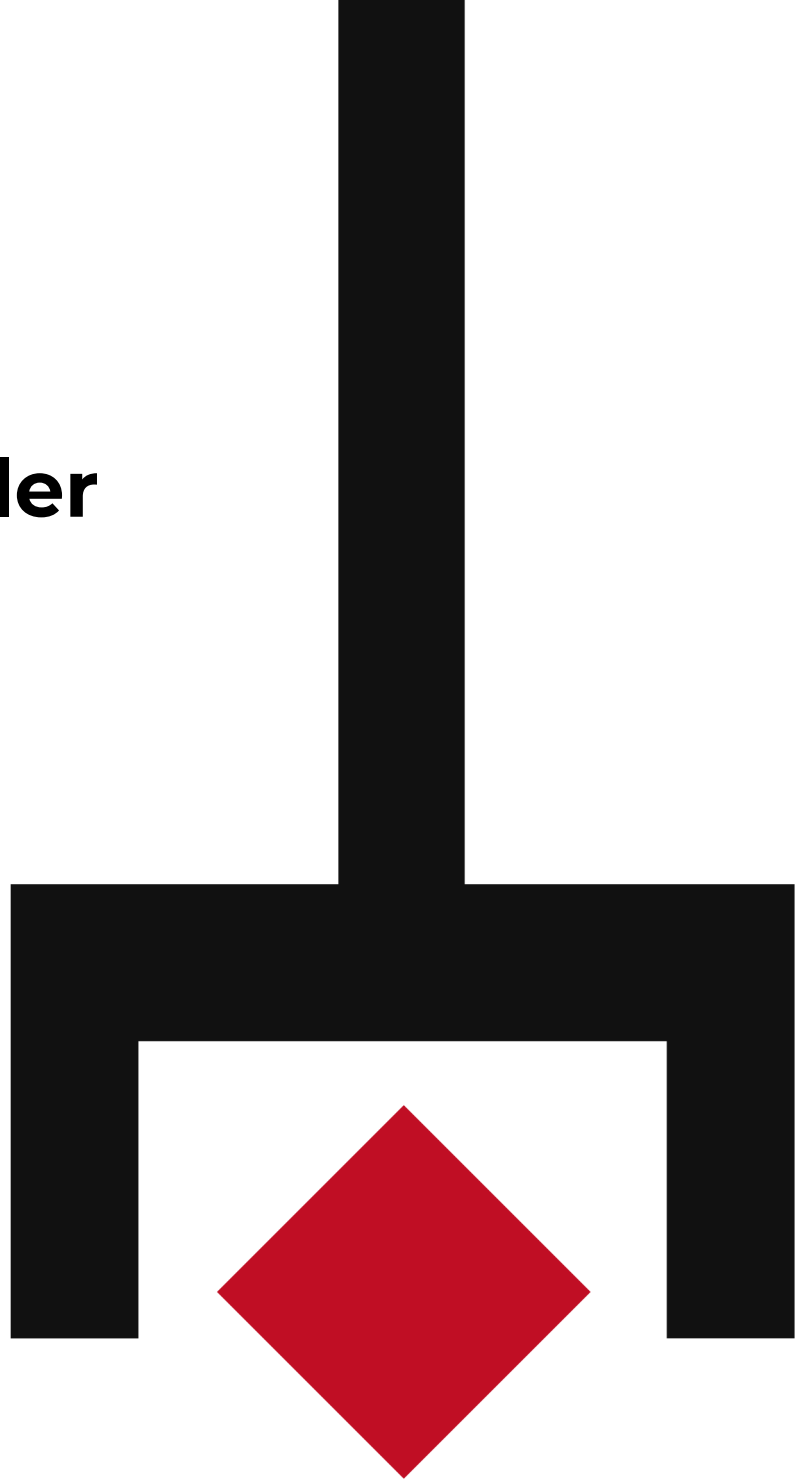




Product specification

Eureka Controller Advantage





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1 FEATURE OVERVIEW



1 Feature Overview



The Eureka Controller Advantage is a compact, high-performance industrial automation controller engineered for demanding manufacturing environments.

- **Intuitive Operation:** Advanced interface for rapid deployment and configuration.
- **AI-Powered Computer Vision:** Executes complex vision tasks with exceptional precision and speed.
- **Adaptive Masterless Picking:** Flexible part handling without pre-registered models.
- **Precision Calibration:** Industry-leading accuracy through advanced protocols.
- **Robotic-sensor Synchronization:** Seamless integration with laser scanner-equipped robots.
- **Advanced Stereo Vision:** AI-enhanced capabilities with Eureka 3D Camera (sold separately).

1.1 Supported Devices

Category	Brand	Models
Industrial Robots	ABB Denso Fanuc Kawasaki Kuka Mitsubishi Turin Universal Robots Yamaha Yaskawa	IRB 1100, IRB 1200, IRB 1300, IRB 910 VS-050, VS-060, VS-087, Cobotta, Cobotta Pro LR Mate 200iD, CRX-5iA, CRX-10iA, CRX-10iA/L RS007L, RS010N LBR iiwa 7, LBR iiwa 14 RC3CRH, RV4FL, RV7FL, RC6CRH STH030-500 UR3, UR5, UR10, UR3e, UR5e, UR10e, UR16e YK220X, YK510XE HC20DPT, GP7
Cameras	Eureka Camera Basler HIKvision Lucid Sentech USB	ECA2-156-F, ECA2-156-N, ECA3-120-F ace and ace 2 series MV-CA series, MV-CH series Triton series STC-MCS, STC-MBS series USB Video Class (UVC) compatible cameras
Laser Scanners	Micro-Epsilon Keyence	scanCONTROL 29xx, 30xx series LJ-X8000, LJ-V7000 series
IO modules	- -	Any Modbus/TCP, Modbus/RTU compatible modules Any Ethernet/IP compatible modules
Uninterruptible Power Supplies	Prolink	PRO851SFCU

Note: For a complete list of supported devices and models, please contact us for more details.

2 HARDWARE SPECIFICATIONS



1.2 Communication Protocols

Protocol	Description
Ethernet/IP	Support both Scanner and Adapter
Modbus	TCP and RTU
gRPC	Client/server Eureka application protocol
TCP/IP	Client/server Eureka application protocol

2 Hardware Specifications

Product model	ECO-ADV-3001	ECO-ADV-3001-B
Processor & Memory		
CPU	Intel Core i5-12500	Intel Core i5-14400
RAM	32GB	
Storage	512GB SSD	
GPU	RTX 2000 Ada	
I/O & Connectivity		
PCIe Slots	PCIe x16 (GPU), PCIe x4 (Free)	
Ethernet	2 x RJ45, 10/100/1000 Mbps	
Ethernet controller	LAN1: Intel I219-LM, LAN2: Intel I210-IT	
USB Ports	2 x USB 3.2 (Gen2), 6 x USB 3.2 (Gen1)	
Video Outputs	1 x HDMI, 4 x miniDP	
Serial Ports	2 x DB9, RS-232/422/485 support auto flow control	
Wireless	Intel Wireless-AC 9260	Qualcomm Atheros QCNFA765
Power		
Power Type	ATX/AT	
Input Voltage	9 ~ 36 VDC	
Power Consumption	Typical: 130W, Max: 205W	
Watchdog Timer	System reset, 1 ~ 255 sec/min	
Environment		
IP Rating	IP40 dust proof	
Temperature	-20 ~ 50°C (0.7 m/s airflow)	
Humidity	95% @ 40°C (non-condensing)	
Vibration	SSD: 3 Grms @ 5 ~ 500 Hz	
Shock	SSD: 20G, HDD: 50G (11 ms)	
Mechanical		
Dimensions (W×H×D)	235 x 192 x 127 mm (235 x 229 x 146 mm with antennas)	
Weight	3.9kg	
Installation	Desktop/wall mount	
Certifications		
EMC	CE/FCC Class A, CCC, BSMI	
Safety	CB/UL, CCC, BSMI	