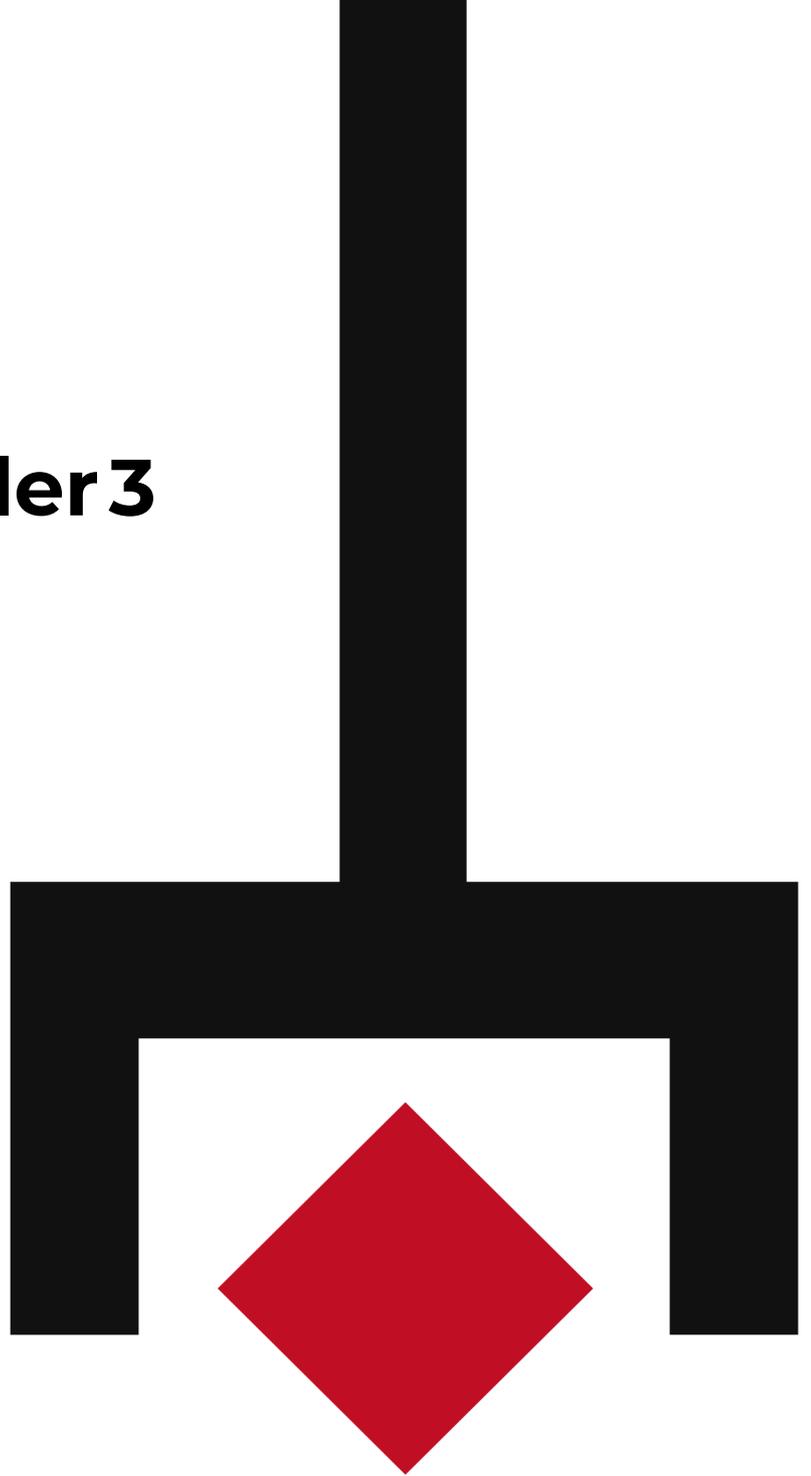




Product specification

# Eureka Controller 3





## Contents

<b>1 Feature Overview</b>	<b>2</b>
1.1 Supported Devices . . . . .	2
1.2 Communication Protocols . . . . .	3
<b>2 Hardware Specifications</b>	<b>3</b>

# 1 FEATURE OVERVIEW



## 1 Feature Overview



The Eureka Controller Generation 3 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
<b>Industrial Robots</b>	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
<b>Cameras</b>	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
<b>Laser Scanners</b>	Micro-Epsilon Keyence	scanCONTROL 29xx, 30xx series LJ-X8000, LJ-V7000 series
<b>IO modules</b>	- -	Any Modbus/TCP, Modbus/RTU compatible modules Any Ethernet/IP compatible modules
<b>Uninterruptible Power Supplies</b>	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
<b>Ethernet/IP</b>	Support both Scanner and Adapter
<b>Modbus</b>	TCP and RTU
<b>gRPC</b>	Client/server Eureka application protocol
<b>TCP/IP</b>	Client/server Eureka application protocol

## 2 Hardware Specifications

Product model	EC3-A1
<b>Processor &amp; Memory</b>	
<b>CPU</b>	Intel Core i5
<b>RAM</b>	32GB
<b>Storage</b>	512GB SSD
<b>GPU</b>	RTX 2000 Ada
<b>I/O &amp; Connectivity</b>	
<b>PCIe Slots</b>	PCIe x16 (GPU), PCIe x4 (Free)
<b>Ethernet</b>	2 x RJ45, 10/100/1000 Mbps
<b>Ethernet controller</b>	LAN1: Intel I219-LM, LAN2: Intel I210-IT
<b>USB Ports</b>	2 x USB 3.2 (Gen2), 6 x USB 3.2 (Gen1)
<b>Video Outputs</b>	1 x miniDP
<b>Serial Ports</b>	2 x DB9, RS-232/422/485 support auto flow control
<b>Wireless</b>	PCM-24S2WF
<b>Power</b>	
<b>Power Type</b>	ATX/AT
<b>Input Voltage</b>	9 ~ 36 VDC
<b>Power Consumption</b>	Typical: 130W, Max: 205W
<b>Watchdog Timer</b>	System reset, 1 ~ 255 sec/min
<b>Environment</b>	
<b>IP Rating</b>	IP40 dust proof
<b>Temperature</b>	-20 ~ 50°C (0.7 m/s airflow)
<b>Humidity</b>	95% @ 40°C (non-condensing)
<b>Vibration</b>	SSD: 3 Grms @ 5 ~ 500 Hz
<b>Shock</b>	SSD: 20G, HDD: 50G (11 ms)
<b>Mechanical</b>	
<b>Dimensions (W×H×D)</b>	235 x 192 x 127 mm (235 x 229 x 146 mm with antennas)
<b>Weight</b>	3.9kg
<b>Installation</b>	Desktop/wall mount
<b>Certifications</b>	
<b>EMC</b>	CE/FCC Class A, CCC, BSMI
<b>Safety</b>	CB/UL, CCC, BSMI