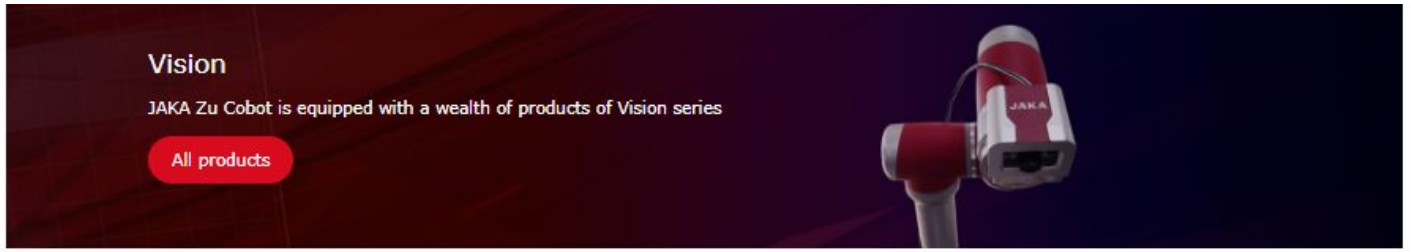
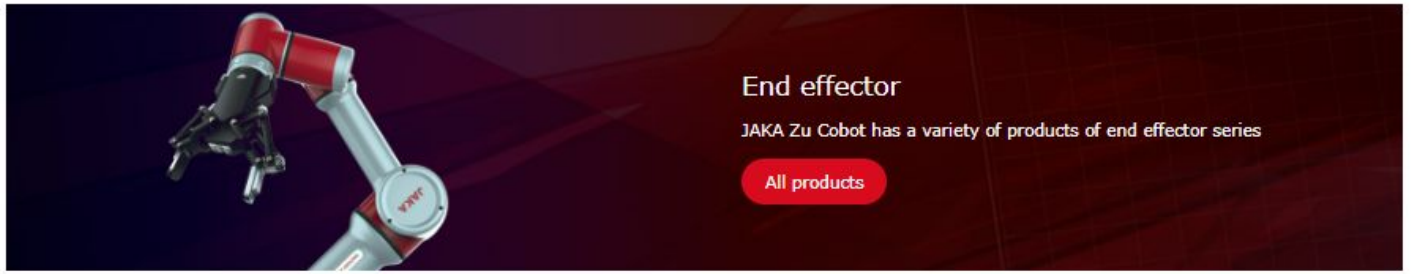
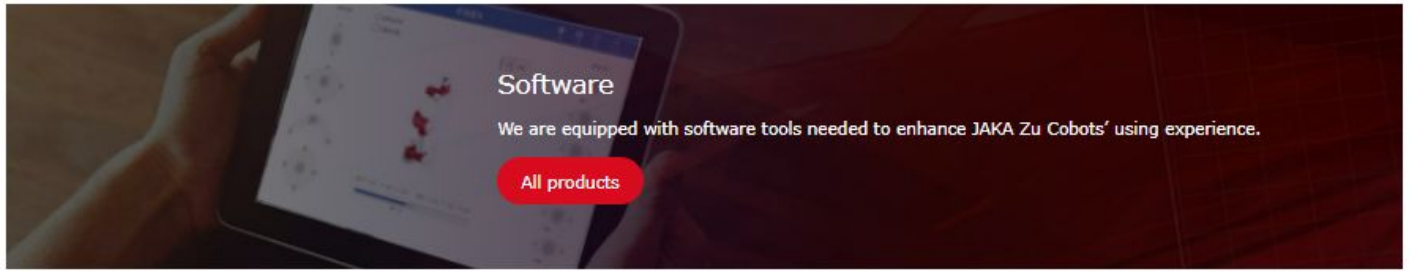
JAKA®


Vision
JAKA Zu Cobot is equipped with a wealth of products of Vision series
All products


End effector
JAKA Zu Cobot has a variety of products of end effector series
All products


Accessories
We provide abundant accessory configurations to make full use of functional software launched by JAKA Zu Cobots.
All products

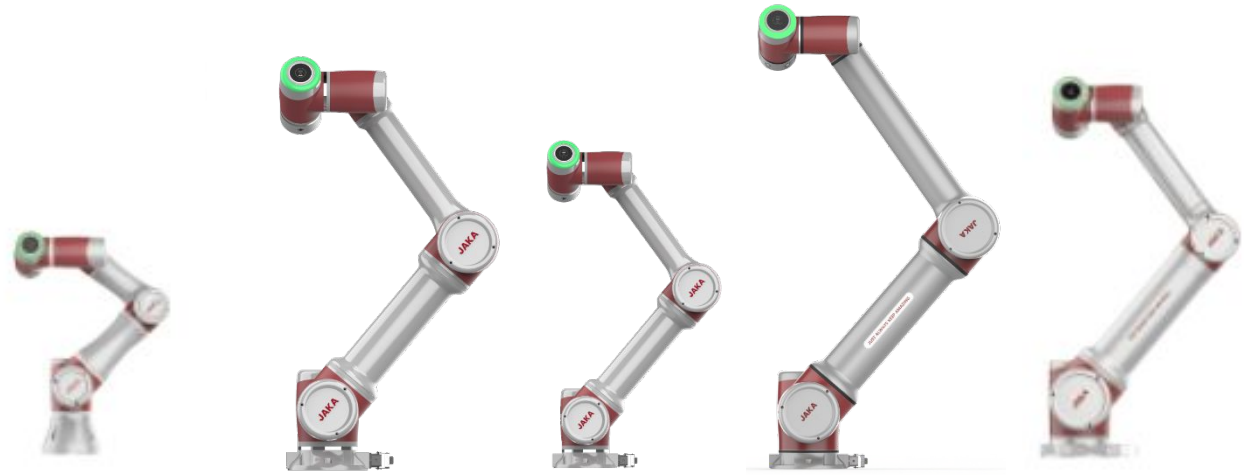

Software
We are equipped with software tools needed to enhance JAKA Zu Cobots' using experience.
All products

JAKA Family


JAKA Zu series Force Control S
JAKA All-in-one series
JAKA Pro series
JAKA Zu series
JAKA C series
JAKA MiniCobo
JAKA Vision Protection System

JAKA Zu® Cobots

- Easy Integration
- Easy to Use
- 80 000 hours



JAKA Zu 3 JAKA Zu 5 JAKA Zu 7 JAKA Zu 12 JAKA Zu 18

JAKA Zu® Cobots Force Control S

- Interactivity
- Force Sensitive
- Adjustability
- Safety

JAKA Zu 3s JAKA Zu 5s JAKA Zu 7s JAKA Zu 12s JAKA Zu 18s

JAKA®

JAKA All - in - one Cobots

- Small controller
- 2D Vision
- High Precision

JAKA Ai 3 JAKA Ai 5 JAKA Ai 7 JAKA Ai 12 JAKA Ai 18

JAKA Pro Cobots

- IP 68
- Highest Reach
- Reliable
- Strong

JAKA Pro 5 JAKA Pro 12 JAKA Pro 16

JAKA

JAKA ZU

JAKA Zu 3

Payload 3 kg I Reach
626 mm
Weight- 12.3Kg

JAKA Zu 5

Payload 5 kg I Reach
954 mm
Weight- 23Kg

JAKA Zu 7

Payload 7 kg I Reach
819 mm
Weight- 22Kg

JAKA Zu 12

Payload 12 kg I Reach
1327 mm
Weight- 41.3Kg

JAKA Zu 18

Payload 18 kg I Reach
1073 mm
Weight- 35.5Kg

JAKA ZU S

Comes with Force Feedback

JAKA Zu 3s

Payload 3 kg I Reach
626 mm I **Weight 12.3 Kg**

JAKA Zu 5s

Payload 5 kg I Reach
954 mm I **Weight 23 Kg**

JAKA Zu 7s

Payload 7 kg I Reach
819 mm I **Weight 22 Kg**

JAKA Zu 12s

Payload 12 kg I Reach
1327 mm I **Weight 41.3 Kg**

JAKA Zu 18s

Payload 18 kg I Reach
1073 mm I **Weight 35.5 Kg**

JAKA ZU Pro

- IP68, only 1 in whole market
- Durable in Water, dust and oil environment

JAKA Pro 5

Payload 5 kg I Reach 954 mm I IP 68
Weight 23Kg

JAKA Pro 12

Payload 12 kg I Reach 1327 mm I IP 68
Weight 41.3 Kg

JAKA Pro 16

Payload 16 kg I Reach 1713 mm I IP 68
Weight 73.9 Kg

JAKA CONTROL CABINET

- Unique miniature cabinet (smaller than A4 paper!)

参数(电控柜)

Parameters （Electrical cabinet)

JAKA | 节卡

标准版 CAB

IP等级	IP Level	IP44
电控柜I/O端口	Tool I/O	16个数字输入及输出， 2个模拟输入或输出 16 Digital input and output/2 Analog input or output
电控柜I/O电源	I/O Power	24V
通信方式	Interface	TCP/IP, Modbus TCP, Modbus RTU
电源	Power	100-240VAC,50-60Hz
电控柜尺寸	Size	410×307×235 (mm) (W×H×D)
重量	Weight	12kg (Zu 3,Zu 5, Zu 7) / 16kg (Zu 12, Zu 18)
材质	Material	不锈钢合金 Stainless steel

JAKA Minicab

输入电源	Vin	DC30~60V
输出电流	Lout	≤40A
电控柜尺寸	Size	180×128×47 (mm) (L×W×H)
IP等级	IP Level	IP20
电控柜I/O端口	Tool I/O	7路端口：输入输出可配置 7 Digital input:I/O configurable
电控柜I/O电源	I/O Power	DC24V
安装方式	Fixed Form	面板/导轨 Panel/Guide Rail
通信标配	Interface	TCP/IP, Modbus TCP, Modbus RTU
重量	Weight	约1.1kg About 1.1kg
材质	Material	铝合金、钢 AL,Steel

JAKA ZU TECHNICAL SPECIFICATION

	Parameter	JAKA Zu® 3		JAKA Zu® 5		JAKA Zu® 7		JAKA Zu® 12		JAKA Zu® 18	
Product features	Maximum payload	3kg		5kg		7kg		12kg		18kg	
	Weight	12kg		23kg		22kg		41kg		35kg	
	Working radius	626mm		954mm		819mm		1327mm		1073mm	
	Repeatability	±0.02mm		±0.02mm		±0.02mm		±0.03mm		±0.03mm	
	Number of axis	6		6		6		6		6	
	Programming	Drag teaching and graphic programming		Drag teaching and graphic programming		Drag teaching and graphic programming		Drag teaching and graphic programming		Drag teaching and graphic programming	
	Teaching pendant	PC, mobile (PAD/mobile)		PC, mobile (PAD/mobile)		PC, mobile (PAD/mobile)		PC, mobile (PAD/mobile)		PC, mobile (PAD/mobile)	
Working range and speed	Robot joint	**Working range**	**Maximum speed**	**Working range**	**Maximum speed**	**Working range**	**Maximum speed**	**Working range**	**Maximum speed**	**Working range**	**Maximum speed**
	Joint 1	±360°	180°/s	±360°	180°/s	±360°	180°/s	±360°	120°/s	±360°	120°/s
	Joint 2	-85°,+265°	180°/s	-85°,+265°	180°/s	-85°,+265°	180°/s	-85°,+265°	120°/s	-85°,+265°	120°/s
	Joint 3	±175°	180°/s	±175°	180°/s	±175°	180°/s	±175°	120°/s	±175°	180°/s
	Joint 4	-85°,+265°	220°/s	-85°,+265°	180°/s	-85°,+265°	180°/s	-85°,+265°	180°/s	-85°,+265°	180°/s
	Joint 5	±360°	220°/s	±360°	180°/s	±360°	180°/s	±360°	180°/s	±360°	180°/s
	Joint 6	±360°	220°/s	±360°	180°/s	±360°	180°/s	±360°	180°/s	±360°	180°/s
	Maximum speed of the tool end	/	1.5m/s	/	3m/s	/	2.5m/s	/	3m/s	/	3.5m/s
Specifications	Power consumption	150W		350W		350W		500W		500W	
	IP protection	IP54		IP54		IP54		IP54		IP54	
	Tool I/O ports	2 Digital inputs		2 Digital inputs		2 Digital inputs		2 Digital inputs		2 Digital inputs	
		2 Digital outputs		2 Digital outputs		2 Digital outputs		2 Digital outputs		2 Digital outputs	
		2 Analog input		2 Analog input		2 Analog input		2 Analog input		2 Analog input	
	Base diameter	129mm		158mm		158mm		188mm		188mm	
Control cabinet	IP protection	IP44		IP44		IP44		IP44		IP44	
	I/O ports	16 digital inputs, 16 digital outputs, 2 analog inputs or outputs		16 digital inputs, 16 digital outputs, 2 analog inputs or outputs		16 digital inputs, 16 digital outputs, 2 analog inputs or outputs		16 digital inputs, 16 digital outputs, 2 analog inputs or outputs		16 digital inputs, 16 digital outputs, 2 analog inputs or outputs	
	Communication	TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP		TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP		TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP		TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP		TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP	
	Power	100-240VAC, 50-60Hz		100-240VAC, 50-60Hz		100-240VAC, 50-60Hz		100-240VAC, 50-60Hz		100-240VAC, 50-60Hz	
	Size	410×307×235 mm (W×H×D)		410×307×235 mm (W×H×D)		410×307×235 mm (W×H×D)		410×307×235 mm (W×H×D)		410×307×235 mm (W×H×D)	
	Weight	13.5kg		15.4kg		15.4kg		18kg		18kg	

JAKA ZU PRO TECHNICAL SPECIFICATION

	Parameters	JAKA Pro 5		JAKA Pro 12		JAKA Pro 16	
Product features	Maximum payload	5kg		12kg		16kg	
	Weight	23.5kg		41kg		74kg	
	Working radius	954mm		1327mm		1713mm	
	Repeatability	±0.02mm		±0.02mm		±0.03mm	
	Number of axis	6		6		6	
	Programming	Drag teaching and graphic programming		Drag teaching and graphic programming		Drag teaching and graphic programming	
	Teaching pendant	PC,Mobile device (PAD/mobile)		PC,Mobile device (PAD/mobile)		PC,Mobile device (PAD/mobile)	
Working range and speed	Robot joint	**Working range**	**Maximum speed**	**Working range**	**Maximum speed**	**Working range**	**Maximum speed**
	Joint 1	±360°	180°/s	±360°	120°/s	±360°	120°/s
	Joint 2	-85°,+265°	180°/s	-85°,+265°	120°/s	-85°,+265°	120°/s
	Joint 3	±175°	180°/s	±175°	120°/s	±175°	120°/s
	Joint 4	-85°,+265°	180°/s	-85°,+265°	180°/s	-85°,+265°	180°/s
	Joint 5	±360°	180°/s	±360°	180°/s	±360°	180°/s
	Joint 6	±360°	180°/s	±360°	180°/s	±360°	180°/s
	Maximum speed of the tool end	/	3m/s	/	3m/s	/	3.9m/s
Specifications	Power consumption	350W		500W		750W	
	IP protection	**IP68**		**IP68**		**IP68**	
	Tool I/O ports	2 Digital inputs		2 Digital inputs		2 Digital inputs	
		2 Digital outputs		2 Digital outputs		2 Digital outputs	
		2 Analog input		2 Analog input		2 Analog input	
	Base diameter	158mm		188mm		246mm	
Control cabinet	IP protection	IP44		IP44		IP44	
	I/O ports	16 digital inputs, 16 digital outputs, 2 analog inputs or outputs		16 digital inputs, 16 digital outputs, 2 analog inputs or outputs		16 digital inputs, 16 digital outputs, 2 analog inputs or outputs	
	Communication	TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP		TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP		TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP	
	Power	100-240VAC, 50-60Hz		100-240VAC, 50-60Hz		100-240VAC, 50-60Hz	
	Size	410×307×235 mm (W×H×D)		410×307×235 mm (W×H×D)		410×307×235 mm (W×H×D)	
	Weight	15.4kg		18kg		18kg	

JAKA MINICOBO

JAKA MiniCobo

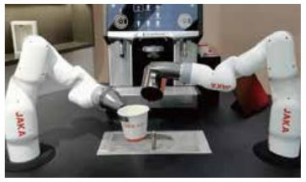
Product introduction

The JAKA MiniCobo is a small, rounded robot that is perfect for applications where appearance is important. Thanks to its built-in communication port, it doesn't require any external cables and can be easily connected to any tool that is compatible with JAKA. Additionally, JAKA's MiniCobo incorporates intelligent control algorithms, giving it a superior performance compared to its competitors. The MiniCobo operates quietly, making it an ideal solution for a range of industries including hospitality, education, retail, services, and entertainment, among others.

Cost-effective | Lightweight | Intelligent interconnection

Weight	Payload	Working radius	Repeatability
9.4kg	1.0kg	580mm	±0.1mm

Application cases


	Parameter	MiniCobo	
Product features	Payload	1kg	
	Weight	9.4kg	
	Work radius	580mm	
	Repeatability	±0.1mm	
	Axis	6 axes	
	Programming	Graphical programming, free-drive	
	Teach pendant	MT (Pad/Mobile) App	
	Collaborative operation	Accordance with GB 11291.1-2011	
Working range and speed	**Robot joint**	**Working range**	**Maximum speed**
	Joint1	±360°	180°/s
	Joint2	±120°	180°/s
	Joint3	±130°	180°/s
	Joint4	±360°	180°/s
	Joint5	±120°	180°/s
	Joint6	±360°	180°/s
	Maximum speed of the tool end	/	1.5m/s
Specifications	Rated power	150W	
	Temperature range	0-50℃	
	IP Protection	IP40	
	Installation	At any angle	
	Tool I/O	2 Digital inputs	
		2 Digital outputs	
		2 Analog input	
	Tool I/O power	24VDC	
	Tool I/O size	M8	
	Materials	Aluminum, PC	
	Base diameter	124mm	
	Cable length	6m	
MiniCab cabinet	Power input	20-60VDC	
	Current	0-11.67A	
	Size	180×128×47 mm (L×W×H)	
	IP Protection	IP20	
	I/O	7 Digital input: I/O configurable	
	I/O Power	24VDC	
	Installation	Panel/Guide Rail	
	Communication	TCP/IP, Modbus TCP, Modbus RTU, Profinet, Ethernet/IP	
	Weight	1.1kg	
	Material	Alumminum, Steel	

JAKA LENS 2D & VISUAL PROTECTION SYSTEM (VPS)

JAKA Lens 2D

JAKA Lens 2D

Product description

The JAKA Lens 2D camera is equipped with a high-resolution industrial camera, a light source module, and an optional camera lens to provide our collaborative robots with machine vision capabilities. Despite its small and delicate appearance, this camera is highly effective. It can be installed either in a fixed position or at the end of the cobot.

Convenient
Compatible with any JAKA cobot

Customizable
Optional camera lens
Various functions are available

Practical
The camera uses JAKA software, no need for additional licenses

Product Features

Integrated design

The 2D camera consists of three key components: a camera, a lens, and a light source. It is able to communicate with a JAKA robot control cabinet through the web, making it an easy-to-use and highly effective addition to our cobots.

Easy operation

Our control cabinet is embedded with intelligent vision algorithms. Additionally, it features flexible communication interfaces that are able to adapt to the robot body, ensuring that it is a highly versatile and adaptable tool.

Scenario-adaptable

Our 2D camera also supports third-party camera extensions and custom external light sources, making it highly versatile and adaptable to a wide range of application scenarios.

Technical aspects

Parameters	Lens 2D CGC500-F08	Lens 2D CGC500-F16
Resolution	2592×1944	2592×1944
Max frame rate	24fps	24fps
Data interface	Gige	Gige
Color mode	Black and white / color	Black and white / color
Lens focal length	8mm	16mm
Object distance	>100mm	>100mm
Vision	>70×50mm	>35×25mm
Precision	>0.08mm	>0.04mm
Image processing	Soft-trigger image acquisition, single frame processing time within 1s	Soft-trigger image acquisition, single frame processing time within 1s

JAKA Lens VPS

Product description

JAKA Lens VPS 2.0 is a cutting-edge technology that utilizes a high-performance AI-SoC chip, along with high-speed and large-capacity memory and storage. It is equipped with a high-performance acceleration engine, which can perform target detection, object recognition, human pose point extraction, and behavior understanding. The VPS is designed to be installed at the top of the cobot's working area, allowing the camera to monitor the behavior of inspected objects (both people and objects) in real time, ensuring the safety of both people and equipment. The camera also features a Gigabit Ethernet port, which supports data extraction and video visualization.

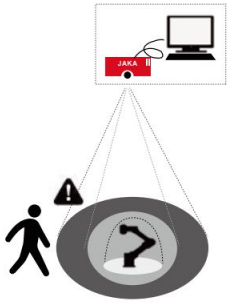
High reliability
Isolate external factors
The protection effect is stable and reliable

High performance
High speed combined with high storage capacity

Convenient
No complicated software installation required
Simple to install

Product Features

- Built-in neural network accelerator for AI recognition and analysis of video
- Event recording function, which can record key video segments, eliminate redundant information, trace back, and analyze more conveniently
- Plug and play, no need to install software, access settings via browser
- It can perform AI detection functions such as helmet wearing, personnel target tracking, personnel labor intensity, and video scoring calculation



Visual protection system working diagram

Basic parameters

Hardware platform	CMOS camera, embedded system, DSP, AI engine, etc.
Dimensions	101.7×72×51.1mm
Installation method	Directly above, sideways (suggested install at 45°)
Communication interface	Ethernet interface, RS485, PNP optocoupler isolation DI and DO

Visual parameters

Resolution	8.3 MP
Response time	200 ms
Installation height	≥2.5 m (suggested)
Coverage surface	4 m x 2.1 m (adjustable)

JAKA VISUAL PROTECTION SYSTEM (VPS)