

Wireless Interconnection

JaKa Zu Collaborative Robot

6 axis cobot

Wireless collaborative robot control system

Mobile terminal APP based on Andriod,iOS,Windows

3kG payload,7kG payload,12kG payload

Real graphical programming based on movable programming modules

Support C language programming for system integration

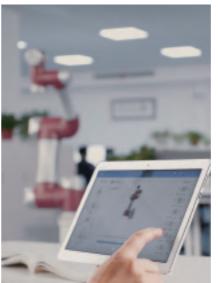
Integrated driving control

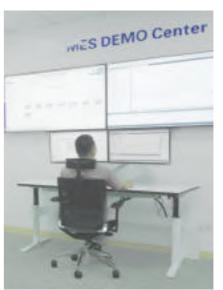
Integrated joint module

Wide industry application











#### Wireless Interconnection No need of teaching collaboration

Zu series robots pioneered mobile terminal APP control mode, freeing the traditional bulky teaching device and lengthy control lines, making the teaching process in the local space more convenient.

#### Remote Collaboration Break down geographical limit

Support remote programming control collaboration without geographical restriction. It realizes the control to multiple robot bodies via one mobile terminal .

Through the internet network, one mobile terminal can release program commands or task packages a number of verified safely Zu series robots worldwide.

#### Visual Perception Robots with identification ability

Zu series robots perfectly integrate software&hardware and visual system. Realize various identification including 2D object identification, 3D object identification, color identification, positionidnetification and distance identification.



Built-in torque feedback module, when the collision happens and reaches the torque limit, the robot stops in time, avoiding people and equipment being hurt, thus realizing the safe collaboration of human and machines.

## Drag Programming Quick Switching

Manually drag the end of the robot to the corresponding point. The robot arm learns ,stores and completes programming. Even users with zero experience can use easily the robot. The human-machine collaboration is more humanized. New program can be edited and continued in some minutes. Task can be switched quickly.

ST ALWAYS KEEP AMAZING

### Plug and Play

Light and compact, easy to mount Visual identification and high compatibility High flexible and universalizable Plug and play for industry production Quick plan

Extremely applicable for production of small batch, multi-batch, customization and short period.

Safety and Flexibility
Safe Operation, Simple and Flexible

Extremely easy to install at the any places on the production lines and sharply reduce the installation demand for space.

Outstanding visual positioning system guarantees switching at the multi-work tables at any time.

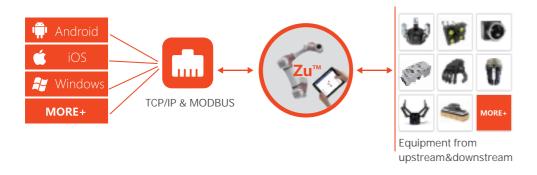
Perfectly compatible with clamping jaw, sucker, force senses, etc from various brands



# Openness and Compatibility Open Ecosystem, Mutual Integration & Collaboration

#### Openness universal control interfaces Supports interaction of multi-system

Zu series robots based on Linux system are of high compatibility. Users can interactively operate with the robots via TCP/IP and Modbus and Android, iOS and Windows system. Universal interfaces are offered to automatic equipment from upstream and downstream.



#### **ROS System for Second Development**

Open source ROS robot system is connected with the robots via TCP/IP for science research and development of complicated applications.



#### Human Beings Collaborate With Robots And Blend Into Environment

The integrated industrial design concept, as well as excellent collision stop and 3D visual identification, ensure that the Zu series robots can operate in harsh environments such as high temperature, high noise, high cleanliness and dust, without the need for a safety fence. It guarantees that people and other equipment are not hurted, and result in a good job. Achieve integration and cooperation between operators and other robots and work environments.











**Z**∪<sup>™</sup> **3** 

Weight Payload Work Diameter <12kg 3kg 580mm

#### Highlight

Light and compact for small work space, high accurate handling and assembly

#### Application

3C electronic,medical,R&D and moulding processing

## Zu™ Series Collaborative Robots











**Z**∪<sup>™</sup> **7** 

Weight Payload Work Diameter <22kg 7kg 814mm

#### Highlight

High payload,high cost performance,flexible and big load

#### Application

Food packaging, metal processing, automobile, medicine and chemistry



**Z**∪<sup>™</sup> **12** 

<31kg 12kg 1322mm

#### Highlight

High payload and big operation diameter used for strenuous manual handling work

Weight Payload Work Diameter

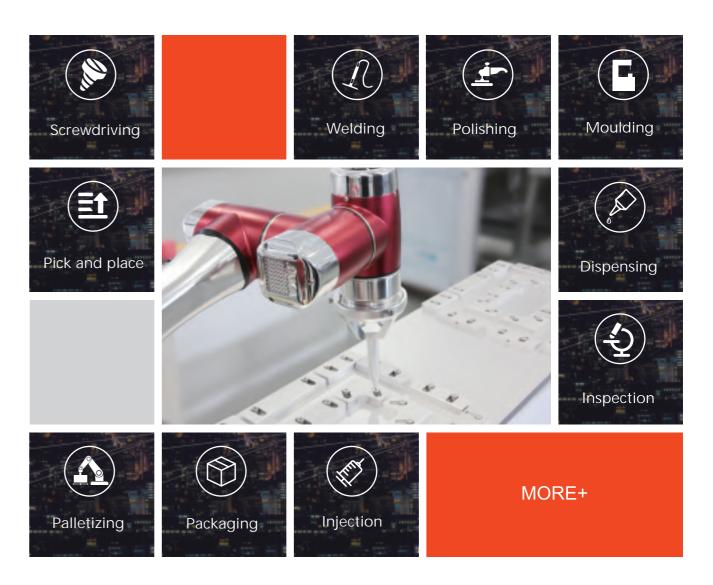
#### Application

Metal processing, moulding processing, automobile assembly, medicine and chemical industry



## **Industrial Application**

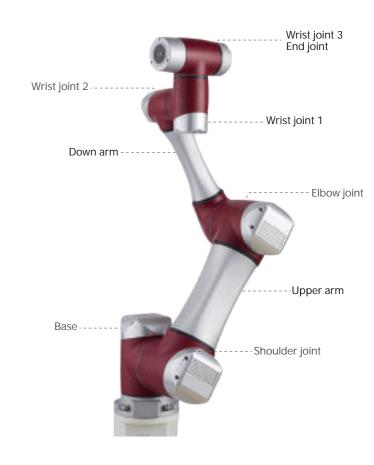
Zu series robots are applied widely to various production lines and work stations thanks to its leading core technology in the integrated joint designing, wireless interconnection, draging teaching, visual programming and safety protection.



Model	Zu <sup>TM</sup> 3	<b>Ζ</b> υ <sup>™</sup> <b>7</b>	<b>Z</b> ∪ <sup>™</sup> <b>12</b>	
Payload	3kg	7kg	12kg	
Weight (include cables)	<12kg	<22kg	<31kg	
Work diameter	580mm	814mm	1322mm	
Repetitive accuracy	+/-0.03mm	+/-0.03mm	+/-0.03mm	
Freedom degree	6 axis	6 axis	6 axis	
Program	Graphical/draging programming,	Graphical/draging programming,	Graphical/draging programming,	
Teaching type	Mobile terminal APP(PAD/Mobile phone)	Mobile terminal APP(PAD/Mobile phone)	Mobile terminal APP(PAD/Mobile phone)	
Collaborative operation	GB11291.1-2011	GB11291.1-2011	GB11291.1-2011	

Robot arm	Operation scope	Max speed	Operation scope	Max speed	Operation scope	Max speed
Base	±360°	180°/s	(-175,175)	180°/s	±360°	120°/s
Shoulder	±360°	180°/s	(-50,230)	180°/s	±360°	120°/s
Elbow	±360°	180°/s	(-155,155)	180°/s	±360°	180°/s
Wrist 1	±360°	360°/s	(-85,265)	180°/s	±360°	180°/s
Wrist 2	±360°	360°/s	(-175,175)	180°/s	±360°	180°/s
Wrist 3	±360°	360°/s	(-270,270)	180°/s	±360°	180°/s
Tool end Max speed	/	1m/s	/	1m/s	/	1m/s

Power	Min 120W, Rated 200W, Max 1.5kW	Min 120W, Rated 300W,Max2kW	Min 120W, Rated 450W,Max2.5kW
Temperature	0-50°C	0-50°C	0-50°C
IP classs	IP54	IP54	IP54
Robot installation	Any angle installation	Any angle installation	Any angle installation
Tool I/O terminal	DI 4	DI 4	DI 4
	DO 2	DO 2	DO 2
	Al 1	AI 1	AI 1
Tool I/O supply	24V	24V	24V
Base diameter	128mm	158mm	180mm
Materials	Aluminium alloy,ABS,PP	Aluminium alloy,ABS,PP	Aluminium alloy,ABS,PP
Tool connection	M6	M6	M6
Cable length	6 m	6 m	6 m



## Controller

IP Class	IP20
Controller I/O terminal	DI16 / DO16 , AI2 or AO2
Controller I/O supply	24V
Communication	TCP/IP, Modbus TCP/RTU
Power supply	100-240VAC,50-60Hz
Controller dimension	400mm X 230mm X 250mm (W*H*D)
Weight	17.5kg
Materials	Sheet metal parts