QUALITY-ORIENTED
THE PURSUIT OF EXCELLENCE

Intelligent creation of good products for users
Create a good life for employees

JUNCAUTO

Focus on the industrial control solutions you need

2023

A COMPREHENSIVE BROCHURE OF THE FULL RANGE OF PRODUCTS

PLC programmable controller | Motion controllers

Junchuang (Xiamen) Automation Technology Co., Ltd

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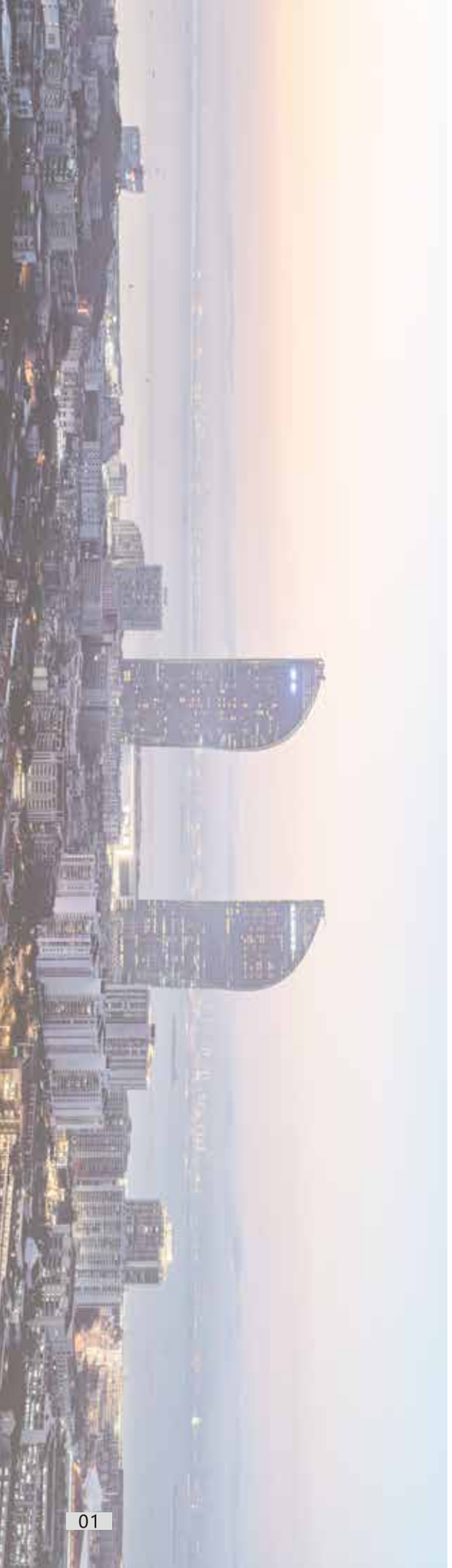
Version number:JC-014

Product Catalogue

PLC Mainframe

Extension Modules

Motion Controllers



Company Profile

Junchuang (Xiamen) Automation Technology Co., Ltd. was established in 2016, a national high-tech enterprise, specializing in the independent research and development and application of industrial automation products. As a technological innovation enterprise, Junchuang always adheres to independent research and development, deeply understands the field application and functional needs of equipment manufacturers, constantly researches and innovates products with military innovation characteristics, and uses advanced scientific research achievements to provide more competitive, advanced and reliable products and personalized industry customized solutions for the majority of equipment manufacturers to help users create market competitive advantages.

The company's main products: independent research and development of standard/customized PLC programmable controllers, motion controllers, man-machine interfaces, etc. The products cover EtherCAT bus, Profinet bus, RTEX bus, CANopen bus, electronic cam, multi-axis motion control, multi-axis linkage differential compensation and other features. Successfully developed vertical packaging control system, pillow packaging control system, electronic cam cutting machine, shear chasing machine, straightening machine and other control systems, multi-head weighing packaging control system, multi-axis motor control system, photovoltaic sun chasing control system, flat mask machine control system, N95 mask machine control system, popcorn machine control system, dispensing drop plastic control system and other solutions.

At present, the company enriches the product line at the rate of at least 2 new products per month, with a short R&D cycle, high efficiency and good quality. Products are mainly used in automatic dispensing, automatic packaging, photovoltaic power generation, data collection and analysis, automatic sewing, weaving, printing, food, medical and other fields of control systems and equipment manufacturers.

Junchuang is a temperature, national feelings of the enterprise, we have never forgotten the original intention, adhering to the quality of international brands, cost-effective to meet the needs of global market equipment manufacturers, so that more enterprises use our own brand, so that domestic controllers to the world!

Corporate Culture

Corporate Mission: Create good products for users and create a good life for employees

Corporate Vision: Become a world-renowned national brand in the field of industrial automation

Values: Worry about what users are anxious about, think about what users think, and create what users need

Core Idea: Do not forget the original intention, intelligently create domestic high-quality products

Quality Policy: Quality-oriented, the pursuit of excellence

Social Responsibility: Chase your dreams when you were young and contribute to the motherland

History Of Development

On March 8, 2016, the three people set sail side by side to establish Junchuang. The founder, Mr. Zeng Jianjun, will have 10 years of PLC field practical application experience and success Transform into the research and development of industrial. controllers, enter the industrial control market with personalized customization, and win user recognition with product characteristics and reputation.

In 2016

The special controller for the winding machine was successfully developed
Visual dispenser controller successfully developed
The controller of the granule packaging machine was successfully developed
12~16 axis customized controller successfully developed

In 2017

Settled in Xiang'an Torch Park Qiangye Building
24-axis PLC controller successfully developed
Photovoltaic sun-chasing controller wassuccessfully developed
State Grid outdoor temperature and humidity data collection Successful development of the controller

In 2018

Moved to Xiang'an Torch Park Building and expanded the area by 4 times
Won the title of Xiamen High-tech Enterprise
Won the Xiamen Intelligent Manufacturing Industry Association member
JS standard series new products are launched, and the product line is fully expanded

In 2019

Adhere to scientific research and innovation, and won the title of national high-tech enterprise
Electronic cam JM series controller successfully developed
The RTX bus controller was successfully developed

In 2020

Set up a sales team and triple the number of employees
Won the national intellectual property standard implementation system certification
Won the 2018-2019 contract-abiding and credit-worthy enterprise
Launched self-developed PLC programming software
The mask machine was successfully developed to help the national epidemic prevention work

In 2021

Regional offices have been established one after another
Won the title of Xiamen Science and Technology Small and Medium-sized Enterprise
The new trademark of JUNCAUTO was successfully registered
JH high-end controller was successfully developed
The electronic cam motion control function has been newly upgraded

In 2022

Relocated to a new factory building in Bafang, expanding the area by 5 times
Won the project of transformation of scientific and technological achievements
Won the 2020-2021 contract-abiding and credit-worthy enterprise
Jh2 bus type series PLC was put into the market
Rich JH series controller product line

Honors and Qualifications

Certification Certificates

Computer Software Copyright Registration Certificates

Patent Certificate

Application Field

Electronic Cam

Pillow Packaging

Data Acquisition

Automatic Dispensing

Control Cabinet System

Automatic Sewing

Automatic Printing

Medical Equipment

Automatic Weaving

Case display

Pillow packaging machine

It can realize the functions of fixed length, variable length, tracking standard, anti-cutting, anti-air bag, anti-scalding film and so on. When working in fixed-length and tracking mode, the fastest production capacity is 1200 packages/min. Working in air defense bag, anti-cutting material, indefinite length mode, the production capacity can reach 300 bags/min.

Automatic tea packaging machine

Automatic tea packaging machine can achieve the simultaneous packaging for the inside and outside bags. It can automatically complete bag making, measuring, filling, sealing, slitting, counting and other processes. It has moisture-proof, anti-odor volatilization, preservation of freshness and other functions. It has wide range of packaging, and can perfectly replace manual packaging, realize packaging automation, and it can substantially improve productivity and reduce business costs. It adopts double electronic scales, and the metering and packaging speed can reach 18-20 package/min. Weighing accuracy can reach ±0.1g.

Rebar straightening machine

Straightening machine, also known as wire straightening machine, straightening and cutting machine, is used to straighten and cut steel bars, and can cut stainless steel wire, aluminum wire, cold drawn wire, plastic coated steel wire, etc. Using our company's JM-type motion control PLC, the cutting length can be customized according to customer requirements. The flying shear can automatically calculate the synchronization distance according to the length set by the customer, and the flying shear can automatically calculate the fastest wire feeding speed according to different lengths. The cutting speed of products with a length of 400mm can reach 100m/min. The incision is neat, the error is within 0.4mm, and the system responds quickly.

Visual Dispenser

The visual dispenser mainly uses the camera to take the coordinates of the product, and then send the calculated coordinates to the motion controller, which then drives the manipulator to move to the product to perform the dispensing operation. It is widely used in crafts, electronics, clothing and other industries. The two modes can be imported by demonstration and PC graphics. With high-performance embedded motion control as the core, the specialized drip molding process art software control function is integrated. Multiple interpolation algorithms are built in to realize fast path editing and support a variety of files format.

Automatic granule packing machine

Automatic granule packaging machine can be flexible to achieve 4-scale, 8-scale and 12-scale system building. It can greatly improve weighing Efficiency. It can automatically complete bag making, measuring, filling, sealing, slitting, counting and other functions. It is mainly applicable to jasmine Tea, recipe tea, health tea, herbal tea and other materials. The dosing material system can be configured according to the characteristics of the materials. The electronic scale dosing system is suitable for single material, multi-material, material of irregular shape and other materials that can not be generally weighed in measuring cups. The weighing weight of each scale can be controlled independently and flexibly according to requirements. The weighing accuracy can reach ± 0.1g

Bag-feeding vacuum packaging machine

The bag vacuum packaging machine can realize the real and empty packaging, the operator only need to put a certain number of packaging bags in the bag of the equipment, the equipment can automatically take the bag, print the date, open the bag, to the metering device signal measurement and feeding, sealing, output, to achieve automatic packaging. The company chooses the JM motion control function PLC, to achieve high-speed servo feeding, pressing, greatly improve the packaging speed, can achieve 100 packages / min. Whether liquid, bulk, granular or powder products, can all be packaged and produced.

Pearl cotton chasing shear machine

Pearl cotton chasing shear machine is used for cutting and shaping pearl cotton, it utilizes the electronic cam technology and JM motion control type PLC developed by Juncauto, it is applied to pearl cotton packaging industry, it has made a leap forward compared with the original average capacity. Compared with the traditional mode of the industry, the speed has increased by nearly 7 times. The maximum capacity can reach 15 meters per minute. It can fully liberate manual labor, and also improve efficiency while greatly reducing costs.

Sorting machine

Sorting machine is sued for sorting SMD and LED. With the Juncauto JS series PLC, the operating speed can be 80K/h, processing time for single product is 45ms. It has high requirements for PLC scan cycle and stability. Compare to certain products that have been used in this industry, the speed has been increased by almost 10%, which significantly reduces the cost and improves the operational efficiency.

JUNCAUTO

PLC Controller

Juncauto series PLC is now mainly divided into high-order, bus, standard, customized, compact, motion control, to fully meet the needs of different industries, different customers, different equipment. PLC programmable controller in addition to have the function of traditional PLC on the market, also have U disk download program, electronic cam, custom instructions, built-in special algorithm custom, special hardware interface custom features, single pulse shaft can drive up to 24 axis stepping, servo motor, support a variety of communication technology, convenient connection, more cost-effective, integration, intelligence

JH2 Bus Type PLC

JH High Order PLC

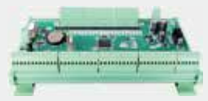
EtherCAT Card
Type PLC

JS Standard Type PLC

JT Compact Type PLC

PROFINET、
EtherCAT Slave Station

JE Bus Type PLC



JC Customized Type PLC

Product Features

Various communication methods

- RS232
- RS485
- 4G
- Bluetooth
- USB
- Ethernet
- WIFI
- Fieldbus

Communication protocols: support MODBUS RTU, MODBUS ASCII, custom protocol RS, MODBUS TCP/IP, CANOpen, EtherCAT, RTX, Profinet, etc。

USB interface communication

Function 1: With the unique USB dual-use function of Juncauto, the customer only needs to send the encrypted program to the end user via email, and the user will download and store the program in USB disk, and the USB disk is inserted into the USB port of the PLC controller, the system automatically recognizes and completes the download within 1S.
It is easy to operate, and it has practical functions, and the ladder file undergoes encryption processing, the program is safe and reliable to prevent source code leakage and to protect the rights of users.

- Insert the U disk into the PLC, it only takes about 1S for the program to be updated automatically.
- Batch download of programs to PLC via USB disk.
- The files in the USB disk have been generated and encrypted, and cannot be directly opened by the programming software to protect the user's intellectual property.

Benefits of using a USB flash drive downloader:

- Save time: When the equipment runs stably, it needs to download PLC programs in batches, it is time-consuming by using a computer through a serial line to download PLC programs in batches.
- Save fund: Since the equipment is often off the field, it takes a lot of labor to go back and forth to update the program, and program uploading is easily done via USB disk.
- Easy to use: It is easy to use and easy to update the program thanks to the USB disk that is easy to purchase and carry.
- Safe and reliable: PLC program in the USB disk is PLC. UJC file format and is encrypted, the file cannot be opened and occupies little storage space.

Function 2: It can use the protruding-to-protruding USB data cable to connect to a computer to implement online monitoring and facilitate data exchange with the computer, the transmission speed is fast and can reach 12Mbps.

Note: JS and JE series of PLCs need to switch functions by changing the status of M1293 when using function 1 and function 2, and it is recommended that the address is displayed in the touch screen.In addition to switching the status of M1293, USB function of JH and JH2 series of PLC can also switch the mode through the dip switch of the USB block on the PLC, open the small square cover on the left side of the PLC, the location is shown in the figure below.

When the dip switch is at position "2", the operation is under in function 1-U disk mode. (M1293:OFF)

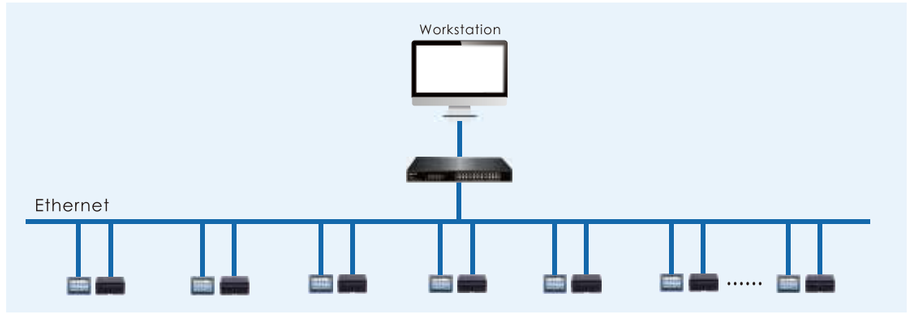
When the dip switch is at the "ON" position, the operation is under function 2 computer mode. (M1293:ON)

Ethernet communication

With Ethernet port, you can only easily fill in the set parameters through Ethernet communication, you can realize a PC to multiple PLC online monitoring, download the program. Can connect to the cloud platform, bind the mobile phone wechat, connect to the router, etc.

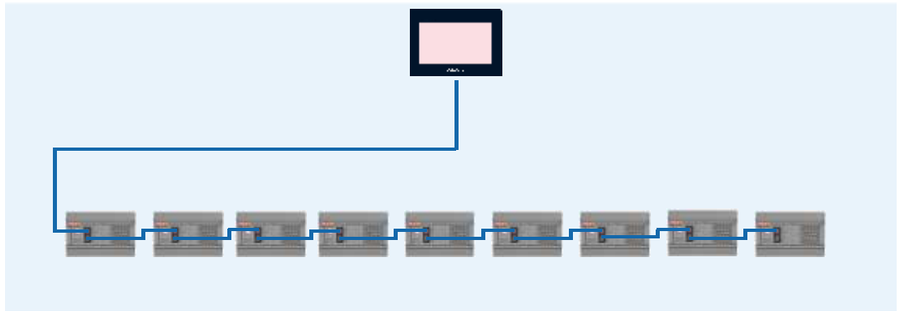
- Ethernet realizes multi-computer multi-screen data exchange

When each work station is equipped with an HMI, it is possible to work with multiple PLC groups simultaneously for communication, any two devices can exchange data, data exchange speed is fast and efficient. It supports Modbus TCP/IP protocol.



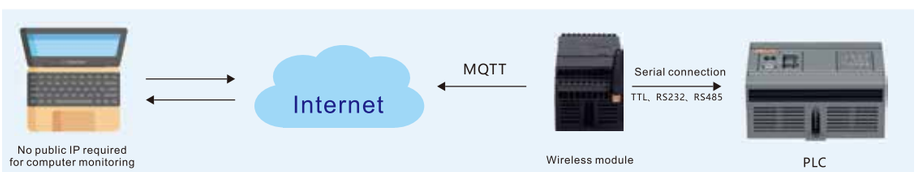
- Dual Ethernet ports realize switch function

When a device has multiple PLC controllers, there is no need to connect the switch in the traditional way. Using the PLC with dual Ethernet from Juncauto can easily realize one screen and multiple computers.



4G/WIFI communication

- Serial port data can be read through ID anytime and anywhere without port mapping, and the advanced P2P gateway penetration algorithm is adopted.
- It supports multi-mainframe access, i.e. there will be no confusion when multiple users request data from the device at the same time. Data will be sent to the required users in order of priority.
- After the establishment of P2P, it supports remote management, setting, and searching for devices, and it is convenient to configure the device name, baud rate, etc.
- Support full netcom 4G and wired network access to the Internet, communication mode redundancy automatic switching.
- It can be used for user-defined protocol devices, Modbus master/slave station devices, and supports MQTT protocol to connect to major cloud platforms.
- Simple, rich interface types: transparent transmission protocol, plug and play, easy to use.
- The products have wireless WIFI module and 4G communication module.



Product features

Bus communication

EtherCAT bus control

EtherCAT bus control

Bus servo

Bus stepping

Bus distributed IO

Bus valve terminal

Our advantage

Independent research and development

Use the independent research and development software platform of JUNCAUTO

It's easy to get started

No need to import XML files, network cable plug and play.

Flexible allocation

The ontology PLC supports both pulse and bus axes.

High compatibility

The bus and pulse motion control instructions are exactly the same, the same program can control the pulse servo and bus servo.

Mashups are supported

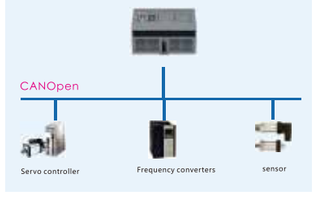
Support slaves for different brands of bus servo, stepping, distributed IO.

Communication rate

The maximum length between communication nodes is 100m, and the synchronization period is 1ms.

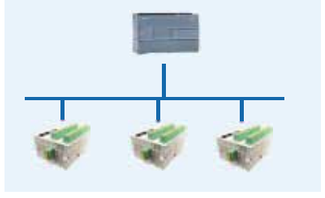
CAN bus communication

- Support CANOpen communication protocol, more stable, more intelligent, convenient wiring.
- The maximum communication rate is 1Mbps, which improves the operation efficiency of the equipment.



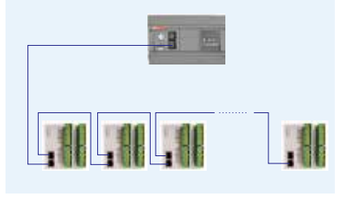
Profinet bus distributed IO

- Integrated and pluggable I/O modules, rich modules: analog, digital, weighing, temperature.
- The coupler body comes with 32 IO, compact and compact, and adopts a plug-in structure.
- Supports 32 slave connections, and each coupler supports 16 extensions.



EtherCAT bus distributed IO

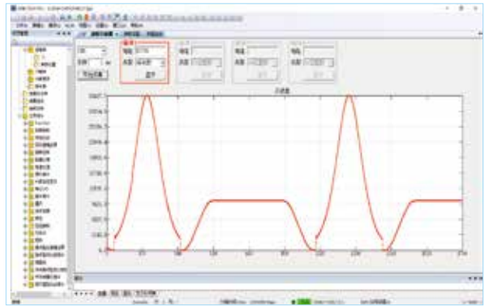
- Integrated and pluggable I/O modules, rich modules: analog, digital, weighing, temperature.
- The coupler body comes with 32 IO, compact and compact, and adopts a plug-in structure.
- Supports 32 slave connections, and each coupler supports 16 extensions.



Programming software features

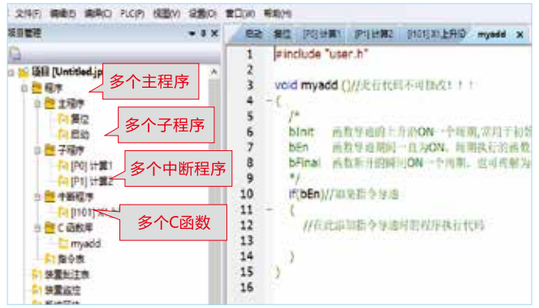
Oscilloscope function

Monitor the changes of each component over time during operation, which is convenient for analyzing problems and effective debugging.



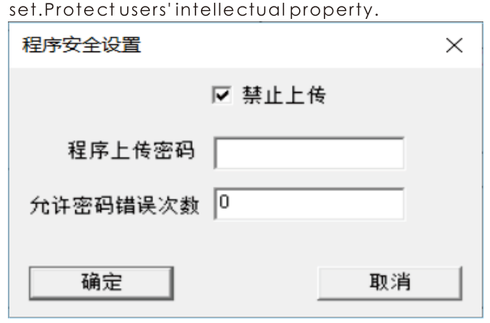
Support for creating multiple programs

Multiple main programs and subprograms can be created at the same time, interrupt programs, C functions, convenient classification, and function differentiation.



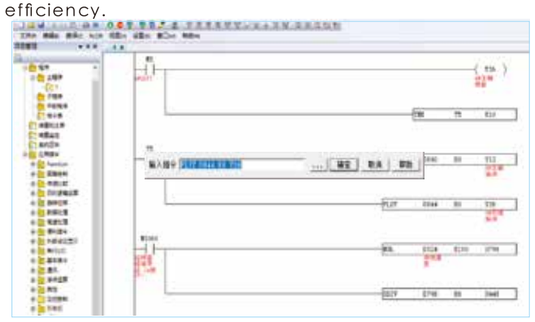
Program security settings feature

With password function, you can set whether PLC supports upload, and the number of uploads can be set.Protect users' intellectual property.



Enter the command, and the write is successful quickly

After entering the instruction, press "OK", the instruction is quickly generated, no need to wait, improve programming efficiency.



Remote communication PLC function

- Remote convenience: just run the ID generation software and "code" on the connection.
- Smooth operation: less data transfer, remote efficiency, no lag.
- Protect privacy: There is no need to control the terminal computer, and the terminal information is not leaked.
- Protection program: no need to send the program to the terminal, the program is confidential and secure.

Procedure

1. The terminal opens the identification code software (no installation), just connect the computer and the PLC with a serial port line, no need to open the programming software.
2. Select the remote mode transmission mode at the remote operation end, enter the terminal identification code and verification code. The remote connection to the PLC is successful.
3. After the remote connection of the operation terminal is successful, the remote serial port can be automatically mapped in the communication settings menu bar, and the "zero distance" sense of control PLC can be realized.

Product Features

Support function customization

- High cost performance, create industry-specific machines.
- One board is done, without multiple PLC online: set temperature, weighing, analog input / out, multiple SSR solid state output, multi-channel step / servo motor output, multiple communication interface control system and other powerful functions in one.

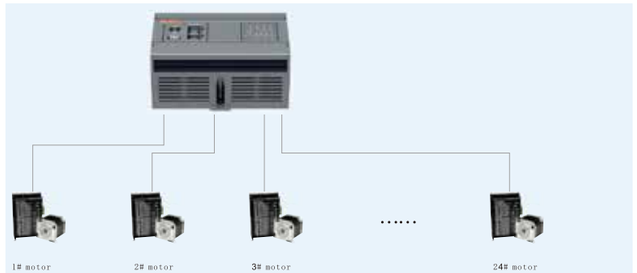
The advanced storage technology in case of power-down

- Program and data areas are permanently saved and stored in Flash, no battery backup is required.

Motion control functions

High speed output

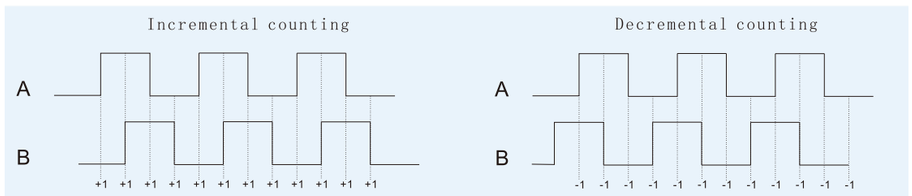
Pulse + direction: Up to 24 stepper/servo motors can be driven by a single board with high speed output at a maximum frequency of 200khz.



High-speed input

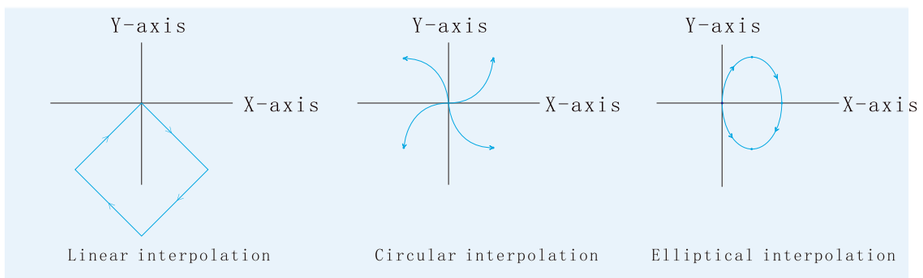
It supports single-phase high-speed counting up to 12 channels, AB-phase high-speed counting up to 6 channels: the maximum frequency of 200khz, it can be connected to the rotary encoder, the encoder rotates, PLC counts the input of the encoder.

AB-phase counting 4x frequency mode

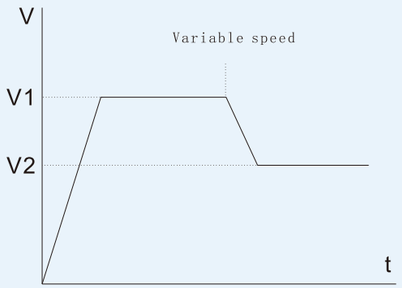


Interpolation function

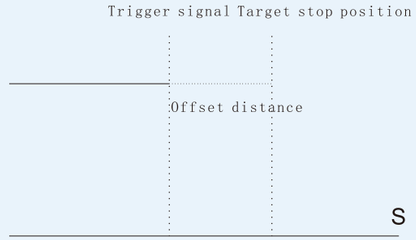
It supports two-axis linkage (linear interpolation/circular interpolation/elliptical interpolation)



Dynamic online variable speed



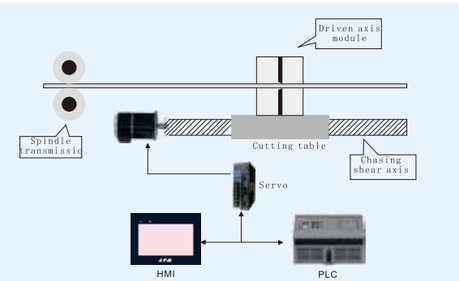
Dynamic modification of target position

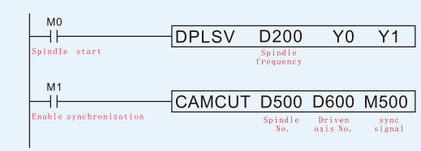


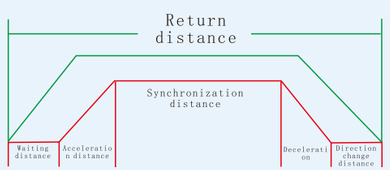
Wheel cutting, roll cutting, chase cutting, pillow type packing

- High accuracy, error within ±0.2mm at normal operation speed.
- Support for multi-segment indefinite length chasing shear with alignment.
- With fixed-length and alignment function, it is suitable for many occasions.
- The acceleration zone, deceleration zone and return zone have optimized curves for smooth and unobtrusive system operation.
- With electronic cam speed profile, the positioning is highly accurate and does not produce any cumulative deviation.

Chasing shear solution

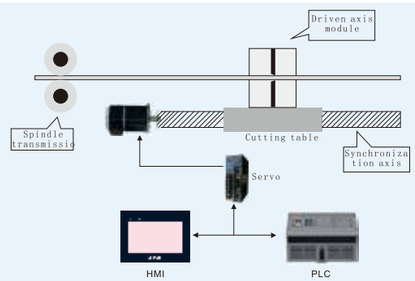


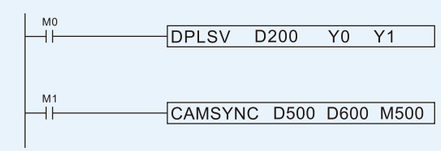




- Return distance=Shear length-waiting distance-acceleration distance- synchronization distance-deceleration distance-direction change distance
- The chasing shear system only needs to set the required waiting, acceleration, synchronization, deceleration and direction change distance parameters, it can meet the customer's cam adjustment and alignment functions.

Synchronization solution





- Electronic cam synchronization is easy to program. By using Juncauto's self-defined CAMSYNC instructions, the driven axis can be synchronized

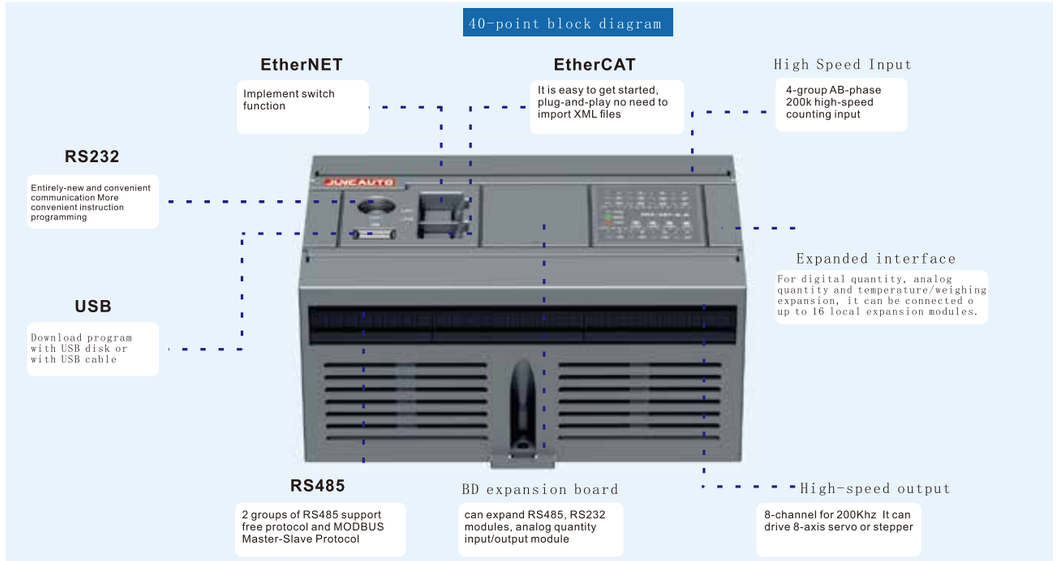
EtherCAT Bus Type PLC--JH2 Series

Multi-axis controller based on EtherCAT field bus has a bus transmission rate of 100Mbps, uses a distributed clock, combines pulse axes with bus axes, can quickly, accurately and efficiently transfer data, is convenient for users to quickly get started. It supports single-axis motion commands such as position, speed, torque and return to origin, and supports multi-axis commands such as electronic gear, electronic cam, linear interpolation and circular arc interpolation. With multiple built-in communication ports, there are RS232, RS485, USB and Ethernet ports for users to choose. It has perpetual calendar and can expand IO ports.

Performance features

- Pulse control method and bus control: The bus is combined with the pulse axis for flexible and free distribution.
- High speed input/output: 4-way AB phase for input of 200Khz, 8-axis high speed output of 200Khz.
- With Ethernet function, support online monitoring, download program, support MODBUSTCP/IP communication, free protocol communication.
- Using RS232 and RS485 dual-communication port, it both can realize HMI or PC communication, compatible with MODBUS ASCII and MODBUSRTU communication protocols.
- Advanced saving technology in case of power-down, the program is permanently saved.
- Rich expansion: it can be expanded to 512 digital quantities, it otherwise can be matched with analog, weighing and temperature expansions.
- Program undergoes encryption processing, it is optional to upload or not for protecting the user's intellectual property.
- You can download by inserting a USB disk, download and monitor the program by using a dual-headed USB cable for faster communication, with a download rate of up to 12Mbps.

JH2 series



Hardware Upgrade

- New upgraded appearance.
- More communication: USB/RS232/RS485*2.
- In-line terminals for easier disassembly.

Software Upgrade

- MODBUS communication commands are more convenient and PLC programs do not need to be polled.
- High-speed on-line connection is possible between the main body PLC mainframes.
- PLC program capacity is expanded to 60K.

Model List

Points	Number of bus axes	Model	
		A: AC power AC100V~240V;	D: DC power DC24V
16点	8~32轴	JH2-16T(/P/R)-A(S)	JH2-16T(/P/R)-D(S)
24点	8~32轴	JH2-24T(/P/R)-A(S)	JH2-24T(/P/R)-D(S)
32点	8~32轴	JH2-32T(/P/R)-E-A(S)	JH2-32T(/P/R)-E-D(S)
40点	8~32轴	JH2-40T(/P/R)-E-A(S)	JH2-40T(/P/R)-E-D(S)
48点	12~32轴	JH2-48T(/P/R)-E-A(S)	JH2-48T(/P/R)-E-D(S)
60点	12~32轴	JH2-60T(/P/R)-E-A(S)	JH2-60T(/P/R)-E-D(S)

Note 1: T: indicates transistor NPN output; P: Indicates the transistor PNP output. R: Relay output. With S: indicates that the input is an NPN/PNP bipolar input. Without S: The default is NPN input.
Note 2: D: indicates that the PLC is powered by a DC24V DC power supply. A: Indicates that the PLC supplies power to AC220V AC power supply.
Note 3: JH2 series supports NPN or NPN/PNP bipolar input, supports NPN or PNP output, the specific input and output type is determined by different models, you can download the product model catalog on the official website.

Technical parameters

Series Model Jh2-	JH2-1 6T/R-E	JH2-24T/R-E	JH2-32T/T2/T4/R-E	JH2-40T/R-E	JH2-48T/R-E	JH2-60T/R-E
Total number of points	16 points	24 points	32 points	40 points	48 points	60 points
Number of digital input points	8	14	16	24	24	36
Number of digital output points	8	10	16	16	24	24
Output method	T: NPN/R:Relay	T: NPN/R:Relay	T: NPN/R:Relay	T: NPN/R:Relay	T: NPN/R:Relay	T: NPN/R:Relay
High-speed input counter	3-way AB phase (X0 ~ X5)	3-way AB phase (X0 ~ X5)	4-way AB phase (X0 ~ X7)	4-way AB phase (X0 ~ X7)	4-way AB phase (X0 ~ X7)	4-way AB phase (X0 ~ X7)
High-speed input maximum frequency	200khz	200khz	200khz	200khz	200khz	200khz
Right Module	16	16	16	16	16	16
Left Extension	Communication extension supported	Communication extension supported	Communication extension supported	Communication extension supported	Communication extension supported	Communication extension supported
BD Board	Support 1 board	Support 1 board	Support 1 board	Support 1 board	Support 2 board	Support 2 board
Serial communication port	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2
USB communication port	None	None	Program Download/Firmware Upgrade	Program Download/Firmware Upgrade	Program Download/Firmware Upgrade	Program Download/Firmware Upgrade
Ethernet communication port	None	None	Support 1 port	Support 1 port	Support 1 port	Support 1 port
Number of pulse axes	T: 4 axis/ R:-	T: 5 axis/ R:-	T: 8 axis/ R:-	T: 8 axis/ R:-	T: 8 axis/ R:-	T: 8 axis/ R:-
High-speed output maximum frequency	200khz	200khz	200khz	200khz	200khz	200khz
Bus Function	EtherCAT Bus	EtherCAT Bus	EtherCAT Bus	EtherCAT Bus	EtherCAT Bus	EtherCAT Bus
Number of bus axis	8 axis	8 axis	T:8 axis/T2:16axis/T4:32 axis/R:8 axis	8 axis	8 axis	8 axis
Program Capacity	60k	60k	60k	60k	60k	60k
Perpetual Calendar	Supported	Supported	Supported	Supported	Supported	Supported
Size(mm)	114*100*73	114*100*73	155*100*73	155*100*73	278*100*73	218*100*73
Protection level	IP 20					
Working environment temperature	5~55°C (41-131°F) No condensation					
Relative Humidity	5~95%					
Transport ambient temperature	-25 ~70°C (-13-158T)					
Vibration resistance	10M/S^2					
Working altitude	0~2000M without capacity reduction, 2000M or more, ambient temperature <40°C (104°F)					
Description	Note: If the pulse axes and bus axes are total in 16 axes, the program can be customized to freely assign them. For example, the number of pulse axes is defined as 2 axes, the bus axes are 14 axes					

Electrical specification of input point

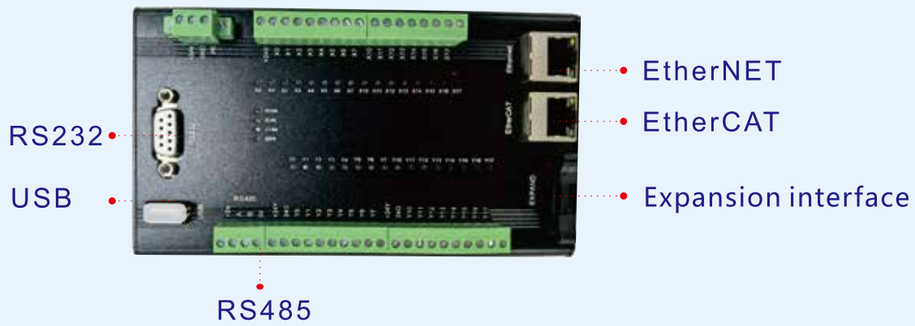
Series Model JH2-		16~24 point		32~60 point	
Input Points		X0~X5	X6~	X0~X7	X10~
Input Point Type		Digital input			
Input Current		5mA			
Input Impedance		4.7KΩ			
Maximum frequency		200kHz	10kHz	200kHz	10kHz
Response time	Off→On	<2.5μs	<20μs	<2.5μs	<20μs
	On→Off	<5μs	<50μs	<5μs	<50μs

Electrical specification of output point

Series Model JH2-		16T(/P)、24T(/P)、32T(/P)、40T(/P)、48T(/P)、60T(/P)	
Output Point Type		NPN	
Output Points		Y0-Yl 6: output points are even digits, 4 points for 16T, 5 points for 24T, 8 points for 32T~60T	Y1、Y3、Y5....Y17 (output point are base bit)
Maximum frequency		200Khz	10Khz
Maximum Load	Resistive	0.3A/1point（2.4A/COM）	
	Inductive	15W	
Response Time	Off→On	<2μs	<20μs
	On→Off	<3μs	<30μs

Series Model JH2-	16R、24R、32R、40R、48R、60R
Output Point Type	Relay Output
Output Points	All
Maximum load	2A AC250V /DC30V
Response time	About 10ms

JE Series



Model List

	Model		
	Number of bus axis		
Number of points	6 axes	16 axes	32 axes
32 points	JE6-1616T-E	JE16-1616T-E	JE32-1616T-E

Technical parameters

Series Model JE-	JE6-1616T-E	JE16-1616T-E	JE32-1616T-E
Total number of points	32 points	32 points	32 points
Number of digital input points	16	16	16
Number of digital output points	16	16	16
Output method	NPN	NPN	NPN
Power Supply Voltage	DC24V	DC24V	DC24V
High-speed input counter	4-channel AB-phase high-speed counter	4-channel AB-phase high-speed counter	4-channel AB-phase high-speed counter
High-speed pulse input frequency	200khz	200khz	200khz
Right Module	16	16	16
Left Extension	Not supported	Not supported	Not supported
BD Board	Not supported	Not supported	Not supported
Serial communication port	RS232/RS485	RS232/RS485	RS232/RS485
USB communication port	Support to download program with USB disk/firmware upgrade	Support to download program with USB disk/firmware upgrade	Support to download program with USB disk/firmware upgrade
Ethernet communication port	Support] (MODBUSTCP/IP)	Support] (MODBUSTCP/IP)	Support] (MODBUSTCP/IP)
Number of pulse axes	8 axis	8 axis	8 axis
Bus Function	EtherCAT Bus	EtherCAT Bus	EtherCAT Bus
Number of bus axis	6 axis	16 axis	32 axis
Program Capacity	60k	60k	60k
Perpetual Calendar	Supported	Supported	Supported
Size(mm)	176*90*53	176*90*53	176*90*53
Protection level	IP 20		
Working environment temperature	5 to 55°C (41 to 131°F) ,No condensation		
Relative Humidity	5 to 95%		
Transport ambient temperature	-25 ~ 70°C (-13-158T)		
Vibration resistance	10M/S^2		
Working altitude	0 ~ 2000M without capacity reduction， 2000M or more, ambient temperature <40°C (104°F)		
Description	Pulse axes and bus axes are total in 6 axes	Pulse axes and bus axes are total in 16 axes	Pulse axes and bus axes are total in 32 axes
	The program can be customized for free allocation. For example, the total number of axes is 16, and if the number of pulse axes is defined as 2, the bus axes are 14		

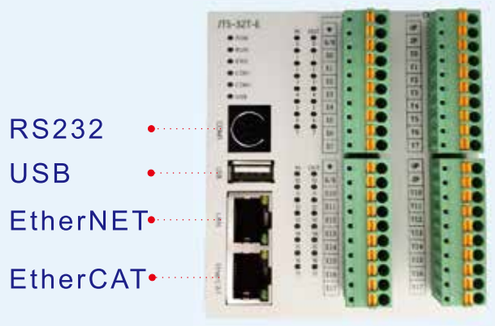
Electrical specification of input point

Series Model JE	JE Series	
Input Points	X0~X7	X10~
Input Point Type	Digital input	
Input form	DC (NPN type)	
Input Current	5mA	
Input Impedance	4.7KQ	
Maximum frequency	200kHz	10kHz
Response time Off→On	<2.5μs	<20μs
Response time On→Off	<5μs	<50μs

Electrical specification of output point

Series Model JE	JE Series	
Output Point Type	NPN	
Output Points	Output point, even， 8 points: such as Y0, Y2…	Output point, base, 8 points: such as YI, Y3…
Maximum frequency	200Khz	10Khz
Maximum Load Resistive	0.3A/1 point (2.4A/COM)	
Maximum Load Inductive	15W	
Response Time Off→On	<2μs	<20μs
Response Time On→Off	<3μs	<30μs

J T 5 Card Series



Model List

		Model		
		Number of bus axis		
points	Number of bus axes	Transistor output (NPN type)	Transistor output (PNP type)	Relay
32 points	8~32 axes	JT5-32T-E	JT5-32P-E	----

Technical parameters

Series Model JT5	JT5-32T(/P)8-E	JT5-32T(/P)16-E	JT5-32T(/P)32-E
Total number of points	32 points	32 points	32 points
Number of digital input points	16	16	16
Number of digital output points	16	16	16
Output method	NPN	NPN	NPN
Power Supply Voltage	DC24V	DC24V	DC24V
High-speed input counter	4-channel AB-phase high-speed counter	4-channel AB-phase high-speed counter	4-channel AB-phase high-speed counter
High-speed pulse input frequency	200khz	200khz	200khz
Right Module	16	16	16
Left Extension	Supported	Supported	Supported
BD Board	Not supported	Not supported	Not supported
Serial communication port	RS232/RS485	RS232/RS485	RS232/RS485
USB communication port	Support to download program with USB disk/firmware upgrade	Support to download program with USB disk/firmware upgrade	Support to download program with USB disk/firmware upgrade
Ethernet communication port	Support] (MODBUSTCP/IP)	Support] (MODBUSTCP/IP)	Support] (MODBUSTCP/IP)
Number of pulse axes	8 axis	8 axis	8 axis
Bus Function	EtherCAT Bus	EtherCAT Bus	EtherCAT Bus
Number of bus axis	8 axis	16 axis	32 axis
Program Capacity	60k	60k	60k
Perpetual Calendar	Supported	Supported	Supported
Size(mm)	93*80*60	93*80*60	93*80*60
Protection level	IP 20		
Working environment temperature	5 to 55°C (41 to 131 °F), No condensation		
Relative Humidity	5 to 95%		
Transport ambient temperature	-25~70°C (-13-158°F)		
Vibration resistance	10M/S^2		
Working altitude	0-2000M,without capacity reduction, 2000M above, ambient temperature <40°C(104°F)		
Description	Note: If the bus PLC model is JT5-32T16-E, it means that the total number of axes of pulse and bus shaft is 16, and the number of axes can be customized by the PLC program. If the number of pulse axes is defined as 2 axes, the bus axis is 14 axes		

Electrical specification of input point

Series Model JT5	Je5 Series	
Input Points	X0~X7	X10~
Input Point Type	Digital input	
Input form	DC (NPN type)	
Input Current	5mA	
Input Impedance	4.7KQ	
Maximum frequency	200kHz	10kHz
Response time Off→On	<2.5μs	<20μs
Response time On→Off	<5μs	<50μs

Electrical specification of output point

Series Model JT5	JE5 Series	
Output Point Type	NPN	
Output Points	Output point, even， 8 points: such as Y0, Y2…	Output point, base, 8 points: such as YI, Y3…
Maximum frequency	200Khz	10Khz
Maximum Load Resistive	0.3A/1 point (2.4A/COM)	
Maximum Load Inductive	15W	
Response Time Off→On	<2μs	<20μs
Response Time On→Off	<3μs	<30μs

Note: JT5 series supports NPN or NPN/PNP bipolar input, supports NPN or PNP output, the specific input and output types are determined by different models.

Profinet, EtherCAT Bus Type Distributed I/O

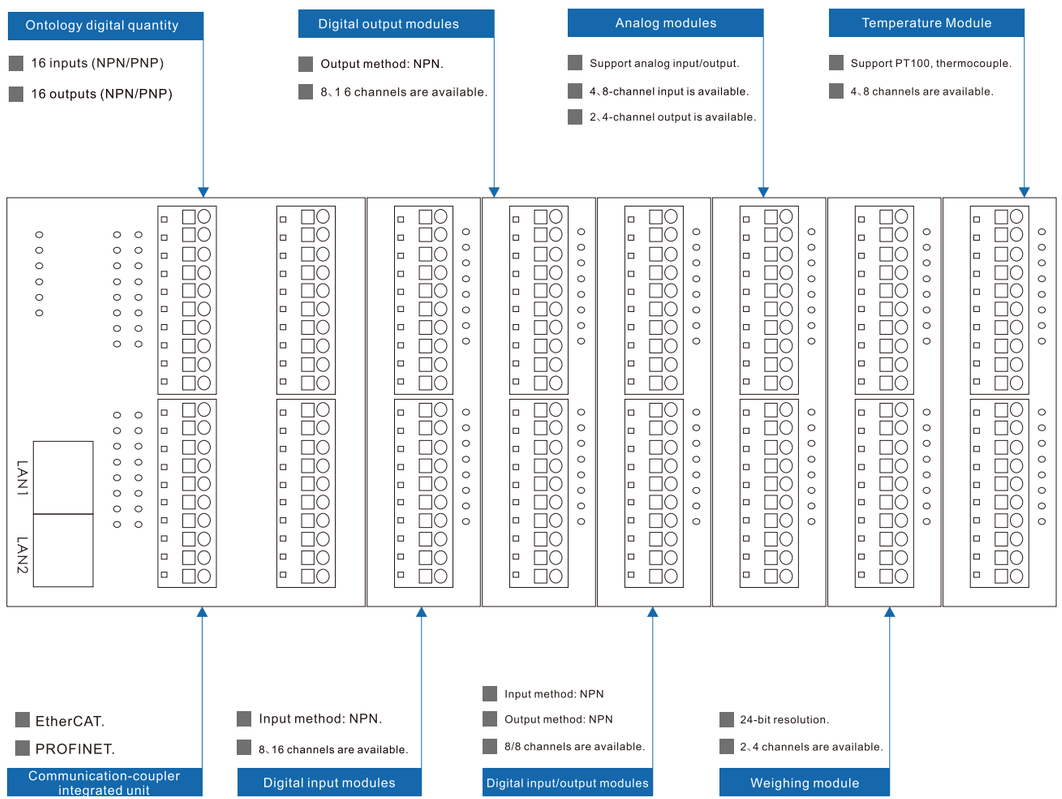
Launched by the PROFIBUS International Organization (PROFIBUS International, PI), PROFINET is a new generation of automated bus standard based on industrial Ethernet technology. PROFINET provides a complete network solution for automated communications, including current hot automation topics such as real-time Ethernet, motion control, distributed automation, fault security, and network security. Junchuang PROFINET bus products mainly cover integrated IO, plug-in IO, with Siemens S7-1200, has a wide range of applications in many industries.

EtherCAT is a deterministic industrial Ethernet, which was first developed by Beckhoff in Germany. Automation generally requires short update times (or cycle times), low communication jitter during data synchronization and low hardware costs, and EtherCAT was developed to allow Ethernet to be used in automation applications. Juncauto EtherCAT bus products include all-in-one IOs and plug-in IOs, with a wide range of products, models and functions.

Performance Features

- Spring-loaded extractable terminals for easier connection and maintenance.
- A wide variety of I/O: digital, analog, temperature, and weighing.
- Fast processing speed: high-speed ARM + dedicated ASIC.
- More cost-effective and easy to connect.
- Up to 32 digital points for a single module, expandable with 16 expansion modules.
- Card type machine, small size and small space occupation.

Distributed Remote Module



Coupler models at a glance

Coupler	
TEP-32TP	PROFINET coupler, 16 in (NPN/PNP type), 16 out (PNP type)
TEE-32TN	EtherCAT coupler, 16 in (NPN/PNP type), 16 out (NPN type)
TEE-32TP	EtherCAT coupler, 16 in (NPN/PNP type), 16 out (PNP type)

Extended models at a glance

Note: The coupler can be used with any expansion module of the TE series, and up to 16 expansion modules can be connected to one coupler.

Digital quantities	
TE-8XT	8-channel digital input, NPN type
TE-8YT	8-channel digital output, NPN type
TE-16YT	16-channel digital output, NPN type
TE-16T	8-channel digital input, 8-channel digital output, NPN/NPN type
TE-16YP	16-channel digital output, PNP type

Analog	
TE-4AI2AO	4/2-channel analog input/output, (0~10V,0~20mA)/(0~10V,0~20mA) adjustable
TE-4AO	4-channel analog output, adjustable (10~10V,0-20mA)
TE-8AI	8-channel analog input, (0~10V,0-20mA) adjustable

Temperature	
TE-4PTY	4-channel temperature input, 4-channel transistor NPN output, support PT100, measurement range: -50~300°C, accuracy: 1°C

Weighing	
TE-2L	2-channel weighing input, 24-bit resolution, accuracy: ±1%
TE-4L	4-channel weighing input, 24-bit resolution, accuracy: ±1%

Electrical specifications

		Digital Electrical specification of input point
Input type		DC (leakage type)
Input Impedance		4.7KΩ
Maximum frequency at input point		10kHz
Input response time	Off→On	<20μs
	On→Off	<50μs

		Digital Electrical specification of output point
Output method		NPN
Maximum frequency at output point		10kHz
Maximum Load	Resistive	0.3/1point
	Inductive	15W
Output Response time	Off→On	<20μs
	On→Off	<30μs

Advanced type PLC--JH series

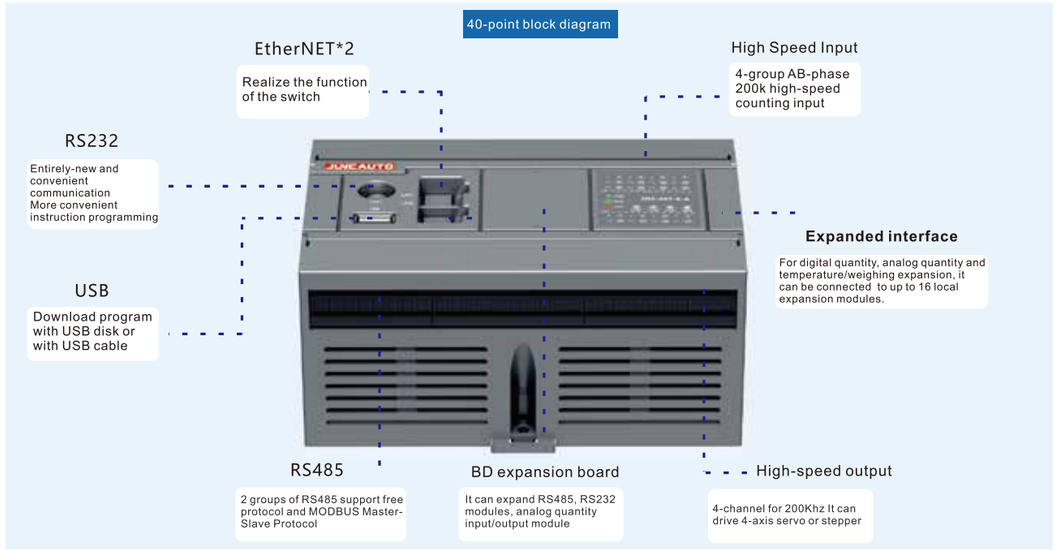
JH Series

JH Advanced type PLC series provides 14~60 points mainframe and 8~40 points digital input/output modules, including the maximum input/output expansion of the mainframe up to 256/256 points. In addition, it can be used with analog input/output expansion module, temperature expansion module and weighing expansion module, it is rich in expansion and is stable in performance to meet various applications.

Performance features

- High-speed input/output: Support up to 4 AB phase high-speed input,12 axis high-speed output.
- With Ethernet function, support online monitoring, download program, support MODBUSTCP/IP communication, free protocol communication.
- Using RS232 and RS485*2 dual-communication port, it both can realize HMI or PC communication, compatible with MODBUS ASCII and MODBUS RTU communication protocols.
- Advanced saving technology in case of power-down, the program is permanently saved.
- Rich expansion: it can be expanded to 512 digital quantities, it otherwise can be matched with analog, weighing and temperature expansions.
- Program undergoes encryption processing, it is optional to upload or not for protecting the user's intellectual property.
- You can download by inserting a USB disk, download and monitor the program by using a dual-headed USB cable for faster communication, with a download rate of up to 12Mbps.

System block diagram



Model List

	AC power supply		DC power supply	
	Without Ethernet	With Ethernet	Without Ethernet	With Ethernet
Points	Relay output	Relay output	Relay output	Relay output
16 Points	JH-16R-A(S)	JH-16R-E-A(S)	JH-16R-D(S)	JH-16R-E-D(S)
24 Points	JH-24R-A(S)	JH-24R-E-A(S)	JH-24R-D(S)	JH-24R-E-D(S)
32 Points	JH-32R-A(S)	JH-32R-2E-A(S)	JH-32R-D(S)	JH-32R-2E-D(S)
40 Points	JH-40R-A(S)	JH-40R-2E-A(S)	JH-40R-D(S)	JH-40R-2E-D(S)
48 Points	JH-48R-A(S)	JH-48R-2E-A(S)	JH-48R-D(S)	JH-48R-2E-D(S)
60 Points	JH-60R-A(S)	JH-60R-2E-A(S)	JH-60R-D(S)	JH-60R-2E-D(S)

		AC power supply		DC power supply	
		Without Ethernet	With Ethernet	Without Ethernet	With Ethernet
Points	Number of pulse shafts	Transistor output	Transistor output	Transistor output	Transistor output
16 Points	2/4 axes	JH-16T(/P)-A(S)	JH-16T(/P)-E-A(S)	JH-16T(/P)-D(S)	JH-16T(/P)-E-D(S)
24 Points	4 axes	JH-24T(/P)-A(S)	JH-24T(/P)-E-A(S)	JH-24T(/P)-D(S)	JH-24T(/P)-E-D(S)
32 Points	4/8 axes	JH-32T(/P)-A(S)	JH-32T(/P)-2E-A(S)	JH-32T(/P)-D(S)	JH-32T(/P)-2E-D(S)
40 Points	4/8 axes	JH-40T(/P)-A(S)	JH-40T(/P)-2E-A(S)	JH-40T(/P)-D(S)	JH-40T(/P)-2E-D(S)
48 Points	4/12 axes	JH-48T(/P)-A(S)	JH-48T(/P)-2E-A(S)	JH-48T(/P)-D(S)	JH-48T(/P)-2E-D(S)
60 Points	4/12 axes	JH-60T(/P)-A(S)	JH-60T(/P)-2E-A(S)	JH-60T(/P)-D(S)	JH-60T(/P)-2E-D(S)

Note 1: 16~24 points with 1 Ethernet port (no USB interface), if there is no Ethernet port, with 1 USB interface, 32~60 points with 2 Ethernet ports, default with USB interface.
Note 2: T: represents transistor NPN output; P: Indicates the transistor PNP output. With S: indicates that the input is an NPN/PNP bipolar input. Without S: The default is NPN input.
Note 3: D: indicates that the PLC is powered by a DC24V DC power supply. A: Indicates that the PLC supplies power to AC220V AC power supply.
Note 4: JH series supports NPN or NPN/PNP bipolar input, supports NPN or PNP output, the specific input and output type is determined by different models, you can download the product model catalog on the official website.

Technical parameters

The following are the technical specifications of PLC with Ethernet port, other technical specifications of PLC without Ethernet port are the same.

Series Model JH-	JH-1 6T(/P/R)-E	JH-24T(/P/R)-E	JH-32T(/P/R)-2E	JH-40T(/P/R)-2E	JH-48T(/P/R)-2E	JH-60T(/P/R)-2E
Total number of points	16 points	24 points	32 points	40 points	48 points	60 points
Number of digital input points	8	14	16	24	24	36
Number of digital output points	8	10	16	16	24	24
Output method	T: NPN/R: Relay	T/: NPN/R: Relay	T/P: NPN/R: Relay	T/P: NPN/R: Relay	T: NPN/R: Relay	T: NPN/R: Relay
High-speed input counter	3-way AB phase	3-way AB phase	4-way AB phase	4-way AB phase	4-way AB phase	4-way AB phase
High-speed input maximum frequency	200khz	200khz	200khz	200khz	200khz	200khz
Right Module	16	16	16	16	16	16
Left Extension	Communication extension supported	Communication extension supported	Communication extension supported	Communication extension supported	Communication extension supported	Communication extension supported
BD Board	Support 1 board	Support 1 board	Support 1 board	Support 1 board	Support 2 board	Support 2 board
Serial communication port	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2	RS232/RS485*2
USB communication port	None	None	Program downloading/Firmware upgrade	Program downloading/Firmware upgrade	Program downloading/Firmware upgrade	Program downloading/Firmware upgrade
Ethernet port	Support 1 port	Support 1 port	Support 2 ports	Support 2 ports	Support 2 ports	Support 2 ports
Number of pulse axes	T: 4 axis/ R: None	T: 4 axis/ R: None	T:4 axis/P:8 axis/Rename	T:4 axis/P:8 axis/Rename	T:4 axis/P:12 axis/Rename	T:4 axis/P:12 axis/Rename
High-speed output maximum frequency	200khz	200khz	200khz	200khz	200khz	200khz
Bus Functions	None	None	None	None	None	None
Number of bus axis	None	None	None	None	None	None
Program Capacity	30k	30k	30k	30k	30k	30k
Perpetual Calendar	Supported	Supported	Supported	Supported	Supported	Supported
Size (mm)	114*100*73	114*100*73	155*100*73	155*100*73	218*100*73	218*100*73
Protection level	Ip20					
Working environment temperature	5 to 55°C (41 to 131°F), No condensation					
Relative Humidity	5 to 95%					
Transport ambient temperature	-25~70°C (-13-158T)					
Vibration resistance	10M/S^2					
Working altitude	0 ~ 2000M, without capacity reduction, 2000M or more, ambient temperature <40°C (104°F)					

Electrical specification of input point

Series Model JH-		16T(/P/R)、24T(/P/R)		32T/(/P/R)、40T(/P/R)、48T(/P/R)、60T(/P/R)	
Input Points		X0~X5	X6~	X0~X7	X10~
Input Point Type		Digital input			
Input form		DC (NPN type)			
Input Current		5mA			
Input Impedance		4.7KQ			
Maximum frequency		200kHz	10kHz	200kHz	10kHz
Response time	Off→On	<2.5μs	<20μs	<2.5μs	<20μs
	On→Off	<5μs	<50μs	<5μs	<50μs

Electrical specification of output point

Series Model JH-		16T/P4、24T/P4、32T/P4、40T/P4、48T/P4、60T/P4		32T/P8、40T/P8	48T/P12、60T/P12
Output Points		Y0、Y2、Y4、Y6	Y1、Y3、Y5、Y7~Y17	Ya0, Y2... .Y16 (8 even output ports)	Y0, Y2... Y26 (12 even output ports)
Maximum frequency		200Khz	10Khz		
Maximum load	Resistive	0.3A/1 point（2.4A/COM）			
	Inductive	15W			
Response time	Off→On	<2μs		<20μs	
	On→Off	<3μs		<30μs	

Series Model JH-	16R、24R、32R、40R、48R、60R
Output Point Type	Relay Output
Output Points	All
Maximum load	2A AC250V /DC30V
Response time	About 10ms

Standard PLC --JS series

JS Series

JS standard PLC series provides 14-68 points mainframe and 8~40 points digital input/output modules, including the mainframe maximum input/output expansion up to 256/256 points. In addition, it can be used with analog input/output expansion module, temperature expansion module, and weighing expansion module, with rich expansion and stable performance to meet a variety of applications.

Technical parameters

Transistor output type mainframe

Note: The following models show that the input/output is NPN model, if the input and output are PNP type specifications, please refer to the catalog model released every month.

Model	Total I/O points	Output Mode	Output amount Rated current	Digital (high speed) Input Points	Digital (high speed) Output Points	Analog Input Points	Analog Output Points	Analog input /output Voltage Range	Output maximum frequency	Drive Motor	Communication Interface
JS-14T3-D	14 points	NPN	0.3A	8(2)	6(3)				100khz	3 sets	RS232/RS485
JS-16T-D	16 points	NPN	0.3A	8(4)①	8(4)	—	—	—	10khz	----	RS232/RS485
JS2-16T1-D	16 points	NPN	0.3A	8(2)	8(1)	—	—	—	200khz	1 sets	RS232
JS-24T6-D/A	24 points	NPN	0.3A	12(2)	12(6)	—	—	—	200khz	6 sets	RS232/RS485/USB
JS-24T2-D/A	24 points	NPN	0.3A	12(2)	12(2)	—	—	—	200khz	2 sets	RS232/RS485/USB
JS-32T4-D/A	32 points	NPN	0.3A	16(2)	16(4)	—	—	—	200khz	4 sets	RS232/RS485/USB
JS-32TL4-D/A	32 points	NPN	0.3A	16(6)	16(4)	—	—	—	200khz	4 sets	RS232/RS485/USB
JS-32T8-D/A	32 points	NPN	0.3A	16(6)	16(8)	—	—	—	200khz	8 sets	RS232/RS485/USB
JS-40T4-D/A	40 points	NPN	0.3A	24(6)	16(4)	—	—	—	200khz	4 sets	RS232/RS485/USB
JS-40T4-C-D/A	40 points	NPN	0.3A	24(6)	16(4)	—	—	—	200khz	4 sets	RS232/RS485/USB/CAN
JS-40T4-2AO-D	40 points	NPN	0.3A	24(6)	16(4)	—	2	0-10V	200khz	4 sets	RS232/RS485/USB
JS-40T4-1AI1AO-D	40 points	NPN	0.3A	24(6)	16(4)	1	1	0-10V	200khz	4 sets	RS232/RS485/USB
JS-48T4-D/A	48 points	NPN	0.3A	24(6)	24(4)	—	—	—	200khz	4 sets	RS232/RS485/USB
JS-48T4-6AO-D/A	48 points	NPN	0.3A	24(6)	24(4)	—	6	0-10V	200khz	4 sets	RS232/RS485/USB
JS-48T4-6AB-D/A	48 points	NPN	0.3A	28(12)	20(8)	—	—	—	200khz	8 sets	RS232/RS485/USB
JS-60T4-D/A	60 points	NPN	0.3A	36(6)	24(4)	—	—	—	200khz	4 sets	RS232/RS485/USB
JS-60T12-D/A	60 points	NPN	0.3A	36(6)	24(12)	—	—	—	200khz	12 sets	RS232/RS485*2/Ethernet
JS-68T4-D	68 points	NPN	0.3A	36(4)	32(4)	—	—	—	200khz	4 sets	RS232/USB

Relay output type mainframe

Model	Total I/O points	Output Mode	Output amount Rated current	Digital (high speed) Input Points	Relay Output Points	Analog Output Points	Analog input/output Voltage Range	Communication Interface
JS-14R-D	14 points	Relay	2A	8(4)①	6	—	—	RS232/RS485
JS-14R3-D	14 points	Relay	2A	8(4)①	6	—	—	RS232*2/RS485
JS-16R-D	16 points	Relay	2A	8(4)①	8	—	—	RS232
JS-1608R-D/A	24 points	Relay	2A	16(-)	8	—	—	RS232/RS485/USB
JS-1410R-D/A	24 points	Relay	2A	14(-)	10	—	—	RS232/RS485/USB
JS-32R-D/A	32 points	Relay	2A	16(2)	16	—	—	RS232/RS485/USB
JS-40R-D/A	40 points	Relay	2A	24(6)	16	—	—	RS232/RS485/USB
JS-48R-D/A	48 points	Relay	2A	24(6)	24	—	—	RS232/RS485/USB
JS-48R6AO-D/A	48 points	Relay	2A	24(6)	24	6	0-10V	RS232/RS485/USB
JS-60R-D/A	60 points	Relay	2A	36(6)	24	—	—	RS232/RS485/USB

Note 1: The input maximum frequency is 200kHz, ①Indicates that the high-speed input has a maximum frequency of 50kHz.

Note 2: In the product model, D means DC24V, A means AC100V-AC240V, and the default is DC24V without D or A suffix.

Note 3: JH series supports NPN or NPN/PNP bipolar input, supports NPN or PNP output, the specific input and output types are determined by different models, you can download the product model catalog on the official website.

Performance Features

- Pulse control mode: It can drive stepper/servo motor up to 12 axes.
- It supports single-phase high-speed counting to 12 channels and differential high-speed counting input up to 6 channels: the maximum frequency is 200kHz.
- With Ethernet function, support online monitoring, download program, support MODBUSTCP/IP communication, free protocol communication.
- Using RS232 and RS485 dual-communication port, it both can realize HMI or PC communication, compatible with MODBUS ASCII and MODBUS RTU communication protocols.
- Advanced saving technology in case of power-down, the program is permanently saved.
- It can be expanded to 256 isolated input/output ports.
- Program undergoes encryption processing, it is optional to upload or not for protecting the user's intellectual property.
- You can download by inserting a USB disk, download and monitor the program by using a dual-headed USB cable for faster communication, with a download rate of up to 12Mbps.

Electrical specification of input point

Specification \ Model	JS-14R-D JS-16R-D JS-16T-D		JS2-16T-D JS-14P-D JS-24P-D JS-32T/R-D/A		JS-48T-6AB-D/A	
Input Points	X0~X3	X4~	X0~X1	X2~X7,X10~	X0~X13	X14~
Input Point Type	Digital input					
Input form	DC (source type)					
Input Current	DC24V, 5mA					
Input Impedance	4.7KΩ					
Maximum frequency	50kHz	10kHz	200kHz	10kHz	200kHz	10kHz
Response time Off→On	<10μs	<20μs	<2.5μs	<20μs	<2.5μs	<20μs
Response time On→Off	<20μs	<50μs	<5μs	<50μs	<5μs	<50μs

Specification \ Model	JS-32P-D/A JS-32TL-D JS-48R-D/A	JS-40T-D/A JS-40R-D/A JS-60P-D/A	JS-60T-D/A JS-60R-D/A JS-48T-D	JS-40T-C-D/A JS-48T6AO-D/A JS-40T2AO-D/A	JS-40T1AI1AO-D/A JS-48R6AO-D/A JS3-60P-E-D/A	JS3-60T-E-D/A
Input Points	X0~X5			X6~X7,X10~		
Input Point Type	Digital input					
Input form	DC (source type)					
Input Current	DC24V, 5mA					
Input Impedance	4.7KΩ					
Maximum frequency	200kHz			10kHz		
Response time Off→On	<2.5μs			<20μs		
Response time On→Off	<5μs			<50μs		

Electrical specifications for output points

Specification \ Model	JS-14R-D	JS-16R-D	JS-32R-D	JS-40R-D	JS-48R-D	JS-48R6AO-D	JS-60R-D
Output Point Type	Relay Output						
Output Points	All						
Maximum load	2A AC250V/DC30V						
Response time	About 10ms						

Specification \ Model	JS-16T-D	JS2-16T-D		JS-24P-D/A JS-32P-D/A JS-60P-D/A JS3-60P-E-D/A	JS-40T-D/A JS-40T-C-D/A JS-32 (/40) T4-E-D/A JS-68T-D	JS-40T2AO-D JS-40T1AI1A0-D JS-48T6AO-D/A JS-60T-D/A	JS3-60T-E-D/A	JS-48T-6AB-D/A	
Output Point Type	NPN	NPN		NPN	NPN			NPN	
Output Points	All	Y0	Y2~	Y0,Y2,Y4,Y6..... (output points are even)	Y0,Y2,Y4,Y6	Y1,Y3,Y5,Y7~		Y0,Y2,Y4,Y6,Y10, Y12,Y14,Y16	Y1,Y3,Y5,Y7,Y11 Y13,Y15,Y17~
Maximum frequency	10kHz	200kHz	10kHz	200kHz	200kHz	10kHz		200kHz	10kHz
Maximum load Resistive	0.3A/1 point (2.4A/COM)								
Maximum load Inductive	15W								
Response time Off→On	<20μs	<2μs	<20μs	<2μs	<2μs	<20μs		<2μs	<20μs
Response time On→Off	<30μs	<3μs	<30μs	<3μs	<3μs	<30μs		<3μs	<30μs

Motion Control Type PLC--JHM/JM/JH2M/JEM/JT5M/JTM Series

JM/JEM/JHM/JH2M/JTM Series PLC-Electronic Cam

JM/JEM/JHM/JH2M/JTM series PLC provides 32-60 points mainframe with built-in electronic cam function, including fixed length chasing shear, flying shear, wheel cutting, synchronization and other technical solutions. It adopts electronic cam speed curve, has high positioning accuracy and has no accumulated error. With Juncauto's self-defined instructions, it is simple to make application programming and is easy to understand, and it runs smoothly. The alignment accuracy is within 0.20mm. It can also be used with analog input/output module, temperature module and weighing module. It is rich in expansion and has stable performance to meet various applications.

Model description

Note 1: PLCs with electronic cam functions include JM, JEM, JHM, JH2M, and JTM series.

Note 2: JH2M, JEM, JT5M are bus type and with electronic cam function PLC, other functions are the same as JH2, JE, JT5 corresponding model functions, you can refer to the previous chapter EtherCAT bus type PLC series description.JTM, JM, JHM are non-bus type PLC with electronic cam function, other functions are consistent with JT, JS, JH functions, you can refer to the previous section of the series description.Example: The PLC of the JM-32T-D model has more motion control functions than the PLC of the JS-32T-D model, and other functions are the same.The PLC of JH2M-32T-E-D model has more motion control functions than the PLC of JH2-32T-E-D model, and other functions are the same. The same is true for other models.

Note 3: For the use of electronic cam and multi-axis control, please refer to the "JUNCAUTO Motion Control User Guide".

Focus on motion control to make electronic cams simpler and more precise

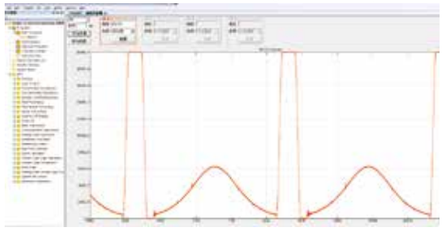
- Feature-rich: chasing clips, flying shears, synchronization, following, motion overlays, virtual axes, custom cams, etc
- Easy programming: Dedicated cam command control is simpler
- Case application Pillow packing machine: fixed length, variable length, follow-up standard, air defense bag, anti-scalding film, anti-cutting material, etc. When working in the fixed length and benchmarking mode, the fastest production capacity is 1200 packs/min. Work in anti-aircraft packages,Anti-cutting, variable length mode, production capacity up to 300 packs/min.

Performance characteristics

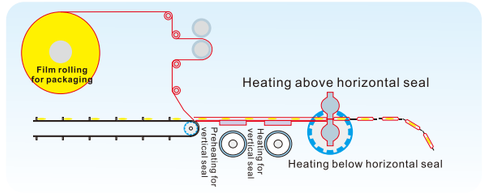
- Expandable to 256 isolated inputs/outputs.
- Advanced power-down preservation technology, program permanent storage.
- Pulse control mode: can drive up to 12 axis stepper/servo motor.
- The program is encrypted and can be set whether to upload to protect the user's intellectual property rights.
- You can download the program by plugging in a USB stick or use a dual-ended USB cable to download and monitor the program, the communication speed is faster, and the download rate can reach 12Mbps.
- Using RS232, RS485 dual communication ports, can realize HMI or PC communication, compatible with MODBUS ASCII, MODBUS RTU communication protocol.

Electronic cam PLC with oscilloscope function

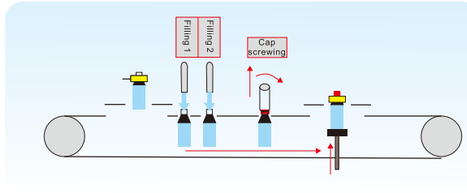
Oscilloscope function: monitor the change of each component over time during operation, to facilitate analysis of problems and effective debugging.



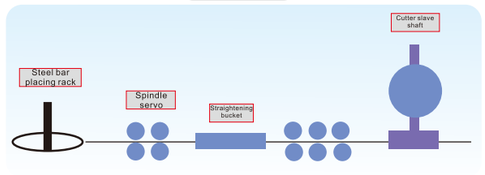
Typical applications



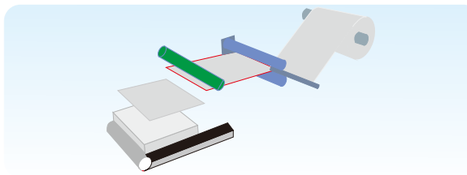
Pillow type packaging machine



Beverage filling machine

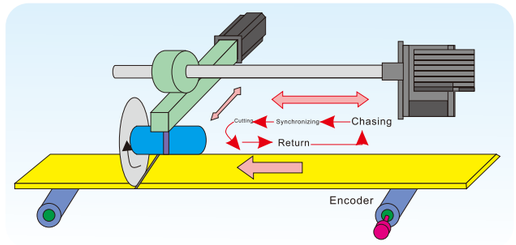


Steel bar straightener

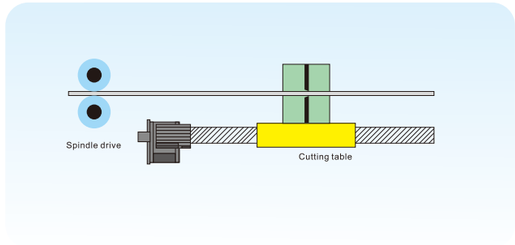


Automatic paper cutter

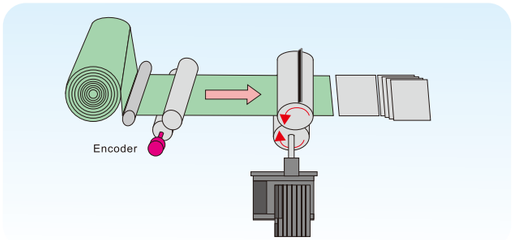
Motion control functions



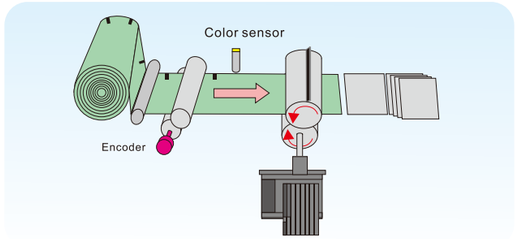
Chasing shear CAMCUT



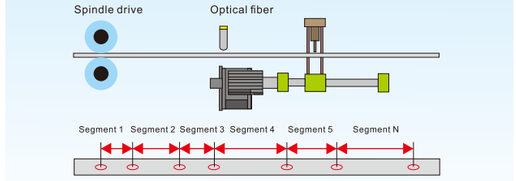
Flying shear CAM



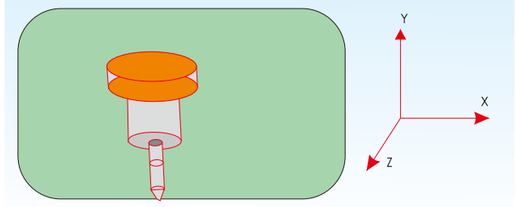
Fixed length cam CAM



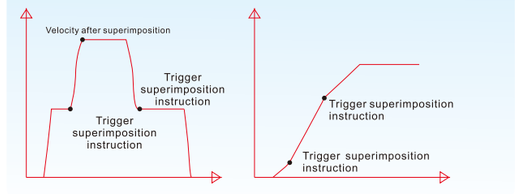
Unfixed long cam CAM



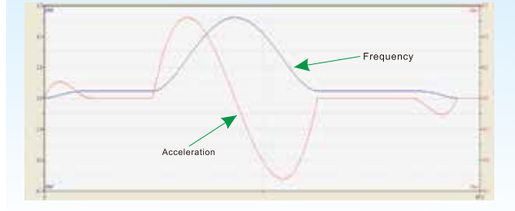
Variable length chasing shear CAM



Multi-axis linkage interpolation TRACK



Motion superimposition CAMADD



Custom cam CAM

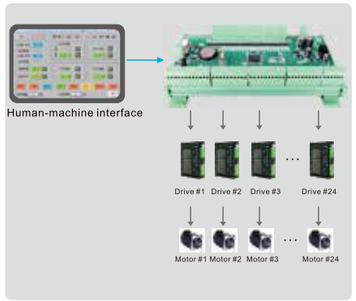
CUSTOMIZED PLC-JC SERIES

JC series

Output multi-axis motor type

Conventional PLC controllers have few motors driven by a single board due to the control method of pulse plus direction. In the case that multiple motors need to be driven at the same time, multiple PLC controllers will be used for driven online. The equipment wiring is complicated and the cost is very high.

Juncauto uses the PLC controller's own high-speed pulse output port to control stepper and servo motors. The system can drive up to 24 motors on a single board by selecting a CPU with multiple hardware timers to achieve multiple pulse output functions. The design can realize small volume, is easy for programming and is cost-effective, which not only reduces the workload of control system design, but also improves the reliability of the control system.



Performance features

- Single board drives motor: pulse + direction control method: up to 24-axis stepper/servo motor can be driven; bus method: no limit to the number of driven servo.
- Communication mode: RS232, RS485 dual communication port, it both can realize HMI or PC communication, is compatible with MODBUS ASCII and MODBUS RTU communication protocols.
- Advanced power-down saving technology: the program and data area will not be lost even when the battery is dead, the PLC program is safe and reliable, and the customer's intellectual property rights are protected.
- Connect expansion modules: expandable to 256 isolated input/output ports.
- You can download programs by plugging in a USB disk or download and monitor using a dual-headed USB cable, with faster communication, with download rates up to 1 2Mbps.
- Program undergoes encryption processing, it can be set whether to upload or not to protect the user's intellectual property.
- With built-in battery, it run perpetual calendar, can achieve automatic clock alignment and precise timing.

Technical parameters

Model	JC-1616G	JC-1624G	JC-2436G	JC-3248G
Total I/O points	32 points	40 points	60 points	80 points
Power supply method	DC24V	DC24V	DC24V	DC24V
Output method	NPN	NPN	NPN	NPN
Output rated current	0.3A	0.3A	0.3A	0.3A
Number of digital input points	16	16	24	32
Number of digital output points	16	24	36	48
High-speed pulse output maximum frequency	200Khz	200Khz	200Khz	50Khz
High-speed pulse input points	2	4	4	—
High-speed pulse output points	8	12	16	24
Number of drive motors	8 sets	12 sets	16 sets	24 sets
Whether to support perpetual calendar	Not supported	Supported	Supported	Supported
Communication interface	RS232/RS485/USB			

Electrical specification of input point

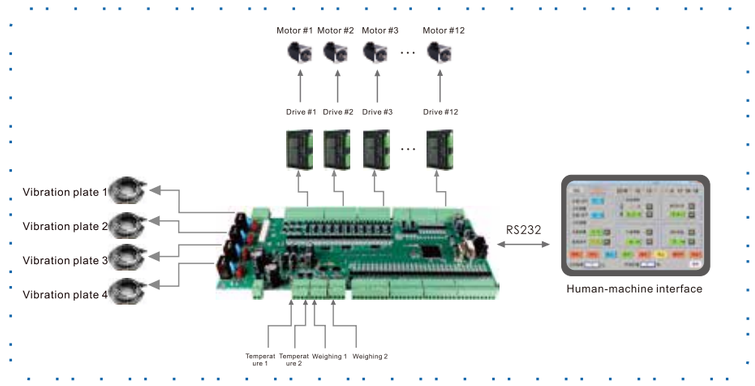
Specification \ Model		JC-1616G		JC-1624G		JC-2436G		JC-3248G
Input Points		X0~X1	X2~	X0~X3	X4~	X0~X3	X4~	All
Input Point Type		Digital input						
Input form		DC (source type)						
Input Current		DC24V, 5mA						
Input Impedance		4.7KO						
Maximum frequency		200kHz	10kHz	200kHz	10kHz	200kHz	10kHz	10kHz
Response time	Off→On	<2.5μs	<20μs	<2.5μs	<20μs	<2.5μs	<20μs	<20μs
	On→Off	<5μs	<50μs	<5μs	<50μs	<5μs	<50μs	<50μs

Electrical specification of output point

Specification \ Model		JC-1616G	JC-1624G	JC-2436G		JC-3248G
Output Point Type		Transistor NPN				
Output Points		All	All	Y0~Y37	Y40~Y43	All
Maximum frequency		200kHz	200kHz	200kHz	10kHz	50kHz
Maximum load	Resistive	0.3A/1point (2.4A/COM)				
	Inductive	15W				
Response time	Off→On	<2μs	<2μs	<2μs	<20μs	<2μs
	On→Off	<3μs	<3μs	<3μs	<30μs	<3μs

Special control system for packaging machine

Traditional tea packaging machine requires multiple PLC modules to be connected and assembled, which is expensive. Juncauto has developed a customized controller for the tea packaging industry, which integrates powerful functions such as weighing, temperature control, multi-channel stepping/servo motor control system, etc., with super high cost performance and system reliability. The speed of automatic tea packaging can reach 20 packs/minute, and this controller has been put into use in large quantities all over the country.



Product Highlights

Intelligent weighing and test functions: Adopt double scale design to improve weighing efficiency. The weighing input signal is fed back to the vibration plate control circuit, forming a closed-loop control system. With large weight deviation, vibration is fast; with small weight deviation, vibration is slow. Its weighing accuracy can reach ±0.1g.

Intelligent temperature control PID function: The heating time is adjusted by PID control to achieve closed-loop control of the temperature, and the measurement range is (±1+200)°C. Through the self-rectification function of the system, the best PID parameter value is obtained, and the accuracy error is less than 1°C.

Technical parameters

Model	JC-3240T-4S2L2T
Power supply method	DC24V
Output method	Transistor NPN, SSR (4-channel solid-state outputs to control heating rods or vibrate plate)
I/O	32-channel DI, 40-channel DO (including 4-channel 10A current output)
Communication method	RS232
Analog input	2-channel temperature acquisition channels, 2-channel weighing inputs
Maximum frequency at high-speed pulse output	200Khz
High-speed pulse output points	12 points
Number of drive motors	12-axis stepper/servo motor
USB interface	Insert U disk to download the program

Product Advantages

Other Brand Product

- Standard module assembled with many actuators, occupying large area and without high integration
- External controller with digital tube button to set and adjust parameters, which is troublesome to operate
- The controller is connected to the vibration plate drive externally, and its weighing' temperature is also connected to the special function module externally, with a single function.
- The driven motor is less, when it needs to drive multiple motors, it needs multiple PLC for interconnection control, cost is great.

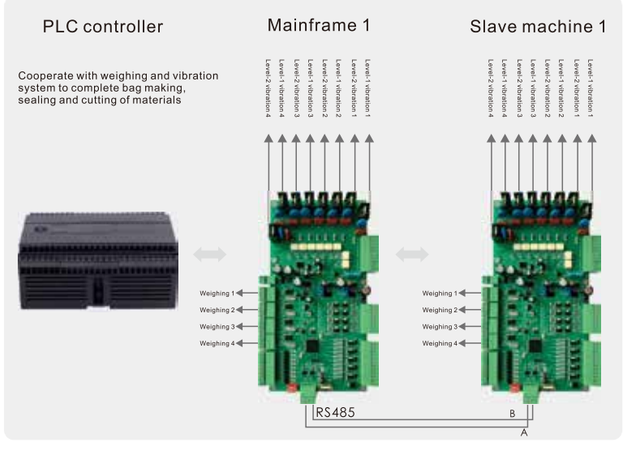
Our Product

- Weighing and temperature test, drive motor circuit, vibration feeding system and other functions are integrated on one board, with small size.
- Adopt touch screen to set parameters, it can set a variety of tea parameters recipe, the picture is intuitive, simple and convenient operation
- Adopt double scales design, greatly improve weighing efficiency, accuracy up to ±0.1g.
- Single board can drive 12 stepper/servo motors at the same time, no need for multiple PLC assembly

CUSTOMIZED PLC-JC SERIES

Special control system for multi-scale weighing and vibration

Weighing control is an important part of the packaging process, this controller uses 4-scale control and can realize the work in turn, so that the production efficiency increased by 4 times, and it can do the function of combined scales according to the actual needs. The system uses dual 485 buses, one 485 bus takes the touch screen as the mainframe, the main PLC and a number of this controller as a slave, to achieve the function of multiple machines on one screen. The other 485 bus takes a main external PLC as the mainframe and multiple local controllers as slaves to achieve coordination between control systems with the main PLC as the dominant, thus realizing to build 4 scales, 8 scales, 12 scales and other systems.



Product Advantages

- Single board with 4 scale system, greatly improving weighing efficiency
- The single board can meet the user's needs and the system is flexible and easy to build.
- Touch screen for setting parameters, easy and convenient, intuitive screen
- Multi-language design by setting interface function display via touch screen
- Customized PLC with 4 scales, support customer ladder programming

Technical parameters

Model	JC-0810P-8S4L
Power supply method	DC24V
Output method	Transistor NPN, SSR (8-channel solid-state output to control vibration plate)
Motor output	4-channel door-opening motor forward and reverse control output
Communication method	2 RS485 groups
Analog input	4 inputs for weighing detection
Number of digital input points	8
Number of digital output points	10
USB Interface	Insert USB disk to download the program

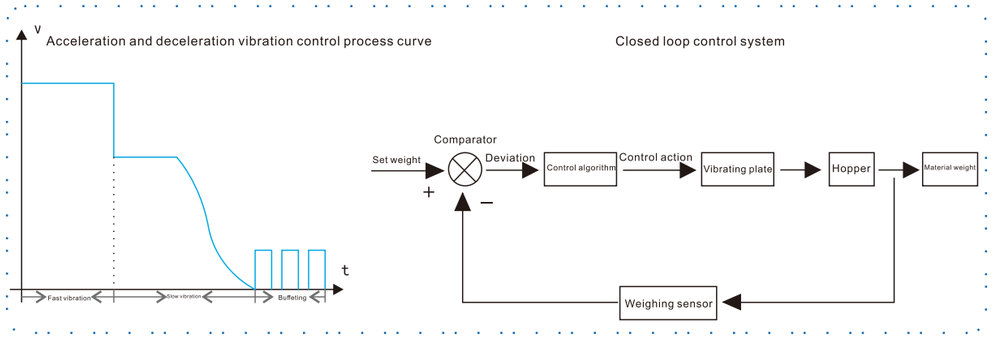
Product Highlights

Intelligent weighing test function

The design of four scales greatly improves the weighing efficiency. The weighing input signal is fed back to the vibration plate control circuit to form a closed-loop control system. The weight deviation is large, the vibration is fast; the weight deviation is small, the vibration is slow. Its weighing accuracy can reach ±0.1g.

Intelligent vibratory feeding system

The 8-channel vibration plate output control is used, of which 4-channel vibration control with photoelectric sensor for primary feeding, and 4-channel with weighing sensor for accurate weighing control



Special control system for winding machine

The controller is suitable for winding machines with up to 6 axes. It has a built-in 4-axis interpolation algorithm: X, Y, Z and A axes (winding axes, also called spindles), and the other two axes are auxiliary axes. If XYZ axes completes the winding action of the pins through the spiral interpolation algorithm, while the Y axis or Z axis automatically adjusts the speed and position according to the pre-set wire diameter and spread width to complete the neat and orderly wire arrangement according to the speed of the spindle. There are various types of line arrangement for users to choose. In addition to the 4-axis built-in algorithm, the user can program the extra I/O ports according to the PLC ladder diagram programming to realize the function expansion, and with a 0-10V output to control the winding tension.

Technical parameters

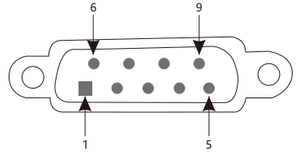
Model	JC-3932T-1AO
Power supply method	DC24V
CPU	ARM+DSP
Number of digital input points	39
Number of digital output points	32
High-speed input points	2
High-speed output points	6 (200Khz)
Drive motor	**6** sets
Number of analog input points	1
Analog input range	Voltage: 0-10V
Communication Interface	RS232/USB

Performance features

- Built in interpolation algorithms: straight line, circular arc, spiral winding, etc.
- Various types of lineup: free start-stop, aside, incremental or decremental by layers, start-stop per layer, etc.
- Maximum pulse output frequency up to 200Khz for each axis.
- Up to 39 inputs and 32 outputs for general-purpose I/O ports, expandable to 256 isolated input/output ports.
- With 32-bit ARM+DSP as the core, it can control 6-axis stepper or servo motor to complete various complex single-axis and multi-axis movements.
- Tensioner can be controlled by outputting 0-1 0V

RS232 interface

JC Customized PLC-RS232 Interface



Pin number	Description	Description
2	TXD	Sending data
3	RXD	Receiving data
5	GND	Signal Ground
9	GND	Signal Ground

Serial port (RS232/RS485) communication parameter specifications

Category	Parameters
Communication Mode	Half Duplex
Baud rate	9600bps (factory default), 19200bps, 38400bps, 57600bps, 115200bps
Data Type	7 (factory default), 8
Mode	RTU, ASCII (factory default)
Station number	1-255 (factory default 1)

Schedule of other customized type PLC

Model	Function
JC-1624P-1L1T	1. 16DI/24DO (NPN transistor), 12 points for max 200K pulse output, drive motor of 12 units 2. 1-channel temperature acquisition input, support PT100/thermocouple, with PID self-tuning, measuring range 200°C, accuracy error 1°C 3. 1-channel weighing acquisition input, accuracy error ±0.1g 4. Communication interface: RS232/USB, expandable to 256/256 points, applied to packaging
JC-1624P-2S2T	1. 16DI/24DO (NPN transistor), 12 points max for 200K pulse output, drive motor of 12 units 2. 2-channel temperature acquisition input, support PT100, with PID self-tuning, measurement range 200°C, accuracy error 1°C 3. 2-channel SSR solid state output, can control 2-channel AC vibration plate (any 220V load within 500W) 4. Communication interface: RS232/USB, expandable to 256/256 points, applied to packaging
JC-1010P-2T	1. 10DI/10DO(NPN transistor),5 points for max 200K pulse output, drive motor of 5 sets 2. 1-channel temperature acquisition input, support PT100/thermocouple, with PID self-tuning, measuring range 200°C, accuracy error 1°C 3. Communication interface: RS232/RS485, applied to vertical packaging machine
JC-2228P	1. 22DI/28DO (NPN transistor), 2/14 points for max 200K pulse input/output, drive motor of 14 units 2. Communication interface: RS232/RS485/U disk, expandable to 256/256 points, applied to multi-axis motors
JC-8P-9AB	1. 8 groups of 4M AB phase,8 groups of 4M differential output 2. Communication interface: RS485, expandable to 256/256 points, applied to textile traverse
JC-BCMV7	1. 18DI/17DO (15 points relay), 5 points for max 50K pulse input, 1 analog output, voltage range (0-10V) 2. Communication interface: RS485/RS232, exclusive controller for big round machine
JC-0205T-3T	1. 02DI/05DO (NPN transistor), 1 point for maximum 200K pulse output 2. 3-channel temperature acquisition input, support PT100/thermocouple, with PID self-tuning, measurement range 200°C, accuracy error 1°C 3. 2-channel SSR solid state output (drive AC vibrating plate) 4. Communication interface: RS232/RS485, used in dispensing heating device
JC-0406P-2L	1. 04DI/06DO (NPN transistor), 3 points for max. 200K pulse output, drive motor of 3 sets 2. 2-channel weighing acquisition input, accuracy error ±0.1 g 3. 2-channel 3V DC motor output 4. Communication interface: 2-channel RS485, used in packaging machine
JC-1212P-6L	1. 12DI/12DO (NPN transistor), 3 points for 200K pulse output, drive motor of 3 sets 2. 6-channel weighing acquisition input, accuracy error ±0.1 g 3. 7-channel 3V DC motor output 4. 6-channel FWM output, drive DC vibration plate, Imax=10A 5. Communication interface: 1-channel RS485J-channel USB, applied to the combination of scales packaging
JC-1616P-2T	1. 16DI/16DO (NPN transistor), 7 points for max. 200K pulse output, drive motor of 7 units 2. 2-channel temperature acquisition input, support PT100/thermocouple, with PID self-tuning, measurement range 20CTC, accuracy error 1°C 3. 2-channel temperature solid state control output (within 1KW) 4. Communication interface: 1-channel RS232, 1-channel RS485, 1-channel USB interface, applied to packaging machine
JC-2828T-2AI	1. 28DI/28DO (NPN transistor), 2 points for max 200K pulse output, drive motor of 2 sets 2. 2 analog inputs, voltage range (0-10V) 3. Communication interface: 1 channel RS232, 1 channel RS485, 1 channel USB interface, with perpetual calendar
JC-0810P-2S	1. 08DI/10DO (NPN transistor), 5 points for max. 200K pulse output, drive motor of 5 sets 2. Can control 2-channel AC vibration plate (any 220V load within 500W) 3. Communication interface: 1-channel RS232, 1-channel RS485, 1-channel CAN bus, applied to small machines with vibration control
JC-0508P-4L	1. 05DI/08DO (NPN transistor), 4 points for 200K pulse output, drive motor of 4 sets 2. 4-channel weighing acquisition input, accuracy error ±0.1 g 3. 4-channel 3V DC motor output 4. 4-channel PWM output, drive DC vibrating plate, Imax=10A 5. Communication interface: 2-channel RS485, used in multi-scale packaging machine

Compact PLC-JT Series

JT Series PLC

JT compact PLC series provides 14~16 points for mainframe and 8~40 points for digital input/output modules, including mainframe maximum input/output expansion up to 256/256 points. In addition, it can be used with analog input/output expansion module, temperature expansion module and weighing expansion module, it is rich in expansion and is stable in performance to meet various applications.

Technical parameters

Model	Total I/O points	Output Mode	Output amount Rated current	Digital (high speed) Input Points	Digital (high speed) Output Points	Output maximum frequency	Drive Motor	Communication Interface
JT-14T	14 points	NPN	0.3A	8(4)①	6(1)	200khz	1 axis	RS232/RS485
JT-14T2	14 points	NPN	0.3A	8(4)①	6(1)	200khz	1 axis	RS232/RS485*2
JT2-14T	14 points	NPN	0.3A	8(2)	6(1)	200khz	1 axis	RS232/RS485
JT-14R	14 points	Relay	2A	8(4)①	6(--)	200khz	---	RS232/RS485
JT-16T	16 points	NPN	0.3A	8(4)①	8(1)	200khz	1 axis	RS232/RS485
JT3-16T	16 points	NPN	0.3A	8(4)	8(4)	150khz	4 axis	RS232/RS485
JT3-32T8-2E	32 points	NPN	0.3A	16(8)	16(8)	200khz	8 axis	RS232/RS485/USB/Ethernet*2

Note: The maximum frequency of input is 200kh ① means the maximum frequency of high speed input is 50khz.
Note: All compact PLCs have DC24V power input.

Specification \ Model		JT-14T		JT2-14T			JT-14T2	
Supply Voltage		24VDC						
Input form		DC (source type)						
Input Current		DC24V,5mA						
Input Impedance		4.7KΩ						
Input Points		8						
Input Points		X0~X3	X4~X7	X0~X1	X2~X3	X4~X7	X0~X3	X4~X7
Input maximum frequency		50kHz	10kHz	200kHz	50kHz	10kHz	50kHz	10kHz
Input response time	Off→On	<10μs	<20μs	<2.5μs	<10μs	<20μs	<10μs	<20μs
	On→Off	<20μs	<50μs	<5μs	<20μs	<50μs	<20μs	<50μs
Output Point Type		Transistor NPN		Transistor NPN			Transistor NPN	
Output Points		6		6			6	
Output Points		Y0	Y1~Y5	Y0	Y1~Y5		Y0	Y1~Y5
Maximum output frequency		200kHz	10kHz	200kHz	10kHz		200kHz	10kHz
Output response counter time	Off→On	<2.5μs	<20μs	<2.5μs	<20μs		<2.5μs	<20μs
	On→Off	<5μs	<30μs	<5μs	<30μs		<5μs	<30μs

Specification \ Model		JT-16T		JT3-16T		JT3-32T8-2E		JT-14R	
Supply Voltage		24VDC				24VDC		24VDC	
Input form		DC (source type)				DC (source type)		DC (source type)	
Input Current		DC24V,5mA				DC24V,5mA		DC24V,5mA	
Input Impedance		4.7KΩ				4.7KΩ		4.7KΩ	
Input Points		8				16		8	
Input Points		X0~X3	X4~X7	X0~X3	X4~X7	X0~X7	X10~	X0~X3	X4~X7
Input maximum frequency		50kHz	10kHz	200kHz	10kHz	200kHz	10kHz	50kHz	10kHz
Input response time	Off→On	<10μs	<20μs	<10μs	<20μs	<10μs	<20μs	<10μs	<20μs
	On→Off	<20μs	<50μs	<20μs	<50μs	<20μs	<50μs	<20μs	<50μs
Output Point Type		Transistor NPN		Transistor NPN		Transistor NPN		Relays	
Output Points		8		8		16		6	
Output Points		Y0	Y1~Y7	Y0~Y3	Y4~Y7	Y0,Y2,Y4...Ya1 6 (output 8 points for even numbers)	Y1-Y17 (Output point base)	All	
Maximum output frequency		200kHz	10kHz	150kHz	10kHz	200kHz	10kHz	-	
Output response counter time	Off→On	<2.5μs	<20μs	<2.5μs	<20μs	<2.5μs	<20μs	About l0ms	
	On→Off	<5μs	<30μs	<5μs	<30μs	<5μs	<30μs		

Extension **Modules**

Juncauto series expansion modules are mainly divided into standard, customized, and compact models. Digital modules, analog modules, temperature modules, weighing modules, function modules, etc. are available.

Note 1: HE series expansion and JH, JH2, JHM, JH2M series mainframe have the same appearance and color, SE series expansion and JS, JM series mainframe have the same appearance and color, TE series expansion and JT, JT5 series mainframe have the same appearance and color, CE series expansion and JC series mainframe have the same appearance and color.

List of each series of extensions matched with each series of mainframes

Extended Series	Mainframe Series
HE Series	JH, JH2, JHM, JH2M series
SE Series	JS、JE、JC、JM、JEM series
TE Series	JT, JT2, JT3, JT5, JTM, JT5M series
CE Series	JC、J5、JM series

HE Series Expansion

SE Series Expansion

TE Series Expansion

CE Series Expansion

Standard Extension--HE Series

In order to meet the application requirements of more occasions, the mainframe can be equipped with abundant expansion modules. Juncauto's expansion modules are mainly divided into digital input and output expansion modules, analog input and output expansion modules, temperature expansion modules, weighing expansion modules and other major categories. Each type of module has a variety of points, and can be flexibly configured with various I/O scales of the company to achieve higher cost performance.

Note: Only available with the expansion module of mainframes of the Company.

Performance Features

- Input and output are optoelectronically isolated for each channel, with high reliability and strong anti-interference capability.
- Power supply has reverse connection protection and surge absorption function, it can be applied to a variety of working environments.
- The maximum number of digital I/O points is: 256DI/256DO.
- One mainframe can be equipped with 16 expansion modules.

HE series digital volume expansion

Note: For more models, please refer to the product catalog models published on the official website every month.

Digital input expansion

Model	Function	Specification
HE-8X	8 channel digital NPN input	DC24V power supply, no external power supply input point maximum frequency 10Khz
HE-8X-S	8-channel digital NPN/PNP input	
HE-16X	16 channel digital NPN input	
HE-16X-S	16-channel digital NPN/PNP input	
HE-16X2	16 channels digital NPN input,1 RS485 communication	

Digital output expansion

Model	Function	Specification
HE-8YT	8-channel transistor NPN output	DC24V power supply, no external power supply R: Relay output T: NPN type transistor output P: PNP type transistor output R Response time: about 10ms T/P response time: about 50us R Max output current: Max 2A T/P maximum output current: 0.3A per point
HE-16YT	16 channel transistor NPN output	
HE-8YR	8 channel relay output	
HE-16YR	16 channel relay output	
HE-32YT	32 channel transistor NPN output	
HE-32YR	32 channel relay output	

Digital input/output expansion

Model	Function	Specification
HE-8T	4 channels digital input, 4 channels transistor output	DC24V power supply, no external power supply NPN input Maximum frequency of input point 10Khz R: Relay output T: NPN type transistor output P: PNP type transistor output S: NPN/PNP bipolar input None S: NPN input R Response time: about 10ms T/P response time: about 50us R Max output current: Max 2A T/P maximum output current: 0.3A per point
HE-8T(/P)-S	4 channels digital input, 4 channels transistor output	
HE-16T	8-channel digital input, 8-channel transistor output	
HE-16T2	8 channels digital input, 8 channels transistor output, 1 RS485 communication	
HE-16T(/P)-S	8-channel digital input, 8-channel transistor output	
HE-16R	8-channel digital input, 8-channel relay output	
HE-16R-S	8-channel digital input, 8-channel relay output	
HE-32T	16 channel digital input, 16 channel transistor output	
HE-32T(/P)-S	16 channel digital input, 16 channel transistor output	
HE-32R	16 channel digital input, 16 channel relay output	
HE-32R-S	16 channel digital input, 16 channel relay output	
HE-40T	24 channel digital input, 16 channel transistor output	
HE-40T(/P)-S	24 channel digital input, 16 channel transistor output	

HE series HBD board

Model	Function	Specification
HBD-1AI1AOS	1 analog input, 1 analog output	Voltage range: 0V~10V; Current range: 0-20mA
HBD-2AI	Two analog inputs	Voltage range: 0V~10V; Current range: 0-20mA
HBD-2AOS	2 analog output	Voltage range: 0V~10V; Current range: 0-20mA
HBD-2RS485	2-way RS485	Tape isolation
HBD-2TC	Two temperature collection inputs	Two K-type thermocouple temperature acquisition inputs

HE series analog expansion

Performance Features

- High reliability and strong anti-interference capability.
- Power supply has reverse connection protection and surge absorption function, it can be applied to a variety of working environments.

Analog output expansion

Model	Function	Specification
HE-4AI	4 channels analog input	Voltage range: 0V~10V Current range: 0-20mA Resolution: 12bit
HE-4AI2	4 channels analog input,1 channel RS485 communication	
HE-8AI	8 channels analog input	
HE-8AI2	8 channels of analog input,1 RS485 communication	

Analog output expansion

Model	Function	Specification
HE-4AO	4-channel analog output	Voltage range: -10V~10V Current range: 0-20mA; 4-20mA Resolution: 12bit
HE-4AOS	4-channel analog output	Voltage range: 0V-10V Current range: 0-20mA; 4-20mA Resolution: 12bit

Analog input/output expansion

Model	Function	Specification
HE-4AI2AO	4 channels analog input, 2 channels analog output	Voltage range: (Input: 0-5V, 0-10V) (Output: -10V~10V) Current range: (Input/output: 0-20mA; 4-20mA) Resolution: 12bit
HE-4AI2AO2	4 channels analog input, 2 channels analog output, 1 channel RS485 communication	
HE-8AI4AOS2	8 channels analog input, 4 channels analog output, 1 channel RS485 communication	Voltage range: (Input/output: 0~10V) Current range: (Input/output: 0-20mA; 4-20mA) Resolution: 12bit
HE-8AI8AOS2	8 channels analog input, 8 channels analog output, 1 RS485 communication	

Temperature Extension

Model	Function	Specification
HE-2TCY	2 channel temperature input, 2 channel transistor NPN output	Support K-type thermocouple, measuring range 0~900℃, accuracy 1℃
HE-2TCY2	2 channel temperature input, 2 channel transistor NPN output, with RS485	
HE-4TCY	4 channel temperature input, 4 channel transistor NPN output	
HE-4TCY2	4 channel temperature input, 4 channel transistor NPN output, with RS485	
HE-8TC	8 channel temperature input	
HE-8TCY	8 channel temperature input, 8 channel transistor NPN output	
HE-8TCY2	8 channel temperature input, 8 channel transistor NPN output, with RS485	
HE-4PT	4 channels Temperature input	Support PT100, measuring range -50~300℃, accuracy 1℃
HE-4PT2	4 channel temperature input with RS485	
HE-8PT	8 channel temperature input	
HE-8PT2	8-channel temperature input with Rs485	

Weighing Extension

Model	Function	Specification
HE-2L	2-channel weighing input	DC24V power supply, no need for external power supply resolution 24 bits, accuracy: ±1%
HE-4L	4-channel weighing input	DC24V power supply, no need for external power supply resolution 24 bits, accuracy: ±1%

Standard Extension--SE Series

In order to meet the application requirements of more occasions, the mainframe can be equipped with abundant expansion modules. Juncauto's expansion modules are mainly divided into digital input and output expansion modules, analog input and output expansion modules, temperature expansion modules, weighing expansion modules and other major categories. Each type of module has a variety of points, and can be flexibly configured with various I/O scales of the Company to achieve higher cost performance.

Note: Only available with the expansion module of the Company's mainframe.

SE Series Digital Expansion

Performance Features

- Input and output are optoelectronically isolated for each channel, with high reliability and strong anti-interference capability.
- Power supply has reverse connection protection and surge absorption function, it can be applied to a variety of working environments.
- The maximum number of digital I/O points is: 256DI/256DO.
- One mainframe can be equipped with 16 expansion modules.

Digital input expansion

Model	Function	Specification
SE-8XT	8-channel digital input	NPN input DC24V power supply, no need for external power supply Maximum frequency at input point: 10Khz
SE-16XT	16-channel digital input	

Digital output expansion

Model	Function	Specification
SE-8YT	8-channel transistor output	DC24V power supply, no need for external power supply R: Relay output T: NPN type transistor output R response time: approx. 10ms T response time: about 50us R maximum output current: max. 2A T maximum output current: 0.3A per point
SE-16YT	16-channel transistor output	
SE-16YR	16-channel relay output	
SE-32YT	32-channel transistor output	

Digital input/output expansion

Model	Function	Specification
SE-8T	4-channel digital input, 4-channel transistor output	DC24V power supply, no need for external power supply NPN input Maximum frequency at input point 10Khz R: Relay output T: NPN type transistor output R response time: about 10ms T response time: about 50us R maximum output current: max. 2A T maximum output current: 0.3A per point
SE-16T	8-channel digital input, 8-channel transistor output	
SE-16R	8-channel digital input, 8-channel relay output	
SE-32T	16-channel digital input, 16-channel transistor output	
SE-32R	16-channel digital input, 16-channel relay output	
SE-40T	24-channel of digital input, 16-channel of transistorized output	

SE Series Analog Expansion

Performance Features

- High reliability and strong anti-interference capability.
- Power supply has reverse connection protection and surge absorption function, it can be applied to a variety of working environments.

Analog output expansion

Model	Function	Specification
SE-4AO	4-channel analog output	Voltage range: -10V~10V Current range: 0-20mA; 4-20mA Resolution: 12bit
SE-4AOS	4-channel analog output	Voltage range: 0V-10V Current range: 0-20mA; 4-20mA Resolution: 12bit

Analog input/output expansion

Model	Function	Specification
SE-4AI2AO	4-channel analog input, 2-channel analog output	Voltage range: (input/output: -10V~10V) Current range: (input/output: 0-20mA; 4-20mA) Resolution: 12bit
SE-4AI2AOS	4-channel analog input, 2-channel analog output	Voltage range: (input: 0V-5V; 0-10V, output: 0-10V) Current range: 0-20mA; 4-20mA Resolution: 12bit

Temperature Extension

Model	Function	Specification
SE-4TCY	4-channel temperature input, 4-channel transistor NPN output	Support K-type thermocouple, measurement range: 0~900°C, accuracy: 1 °C
SE-4TCY2	4-channel temperature input, 4-channel transistor NPN output with RS485	Support K-type thermocouple, measurement range: 0~900°C, accuracy: 1 °C
SE-8TCY	8-channel temperature input, 8-channel transistor NPN output	Support K-type thermocouple, measurement range: 0~900°C, accuracy: 1 °C
SE-8TCY2	8-channel temperature input, 8-channel transistor NPN output with RS485	Support K-type thermocouple, measurement range: 0~900°C, accuracy: 1 °C
SE-8PT	8-channel temperature input	Support PT100, measurement range: -50~300°C, accuracy: 1°C
SE-2TC-A	2-channel temperature input, 2-channel SSR firmware relay output	Support PT100/K type thermocouple, measuring range: 300°C, accuracy: °C

Weighing Extension

Model	Function	Specification
SE-2L	2-channel weighing input	DC24V power supply, no need for external power supply Resolution 24 bits, accuracy ±1%
SE-4L	4-channel weighing input	DC24V power supply, no need for external power supply Resolution 24 bits, accuracy ±1%

Thyristor output extension

Model	Function	Specification
SE-4S-A	4-channel SSR thyristor output	DC24V power supply, no need for external power supply Drive AC vibration plate within 500W

Standard Extension--**SE** Series

In order to meet the application requirements of more occasions, the mainframe can be equipped with abundant expansion modules. Juncauto's expansion modules are mainly divided into digital input and output expansion modules, analog input and output expansion modules, temperature expansion modules, weighing expansion modules and other major categories. Each type of module has a variety of points, and can be flexibly configured with various I/O scales of the Company to achieve higher cost performance.

Note: Only available with the expansion module of the Company's mainframe.

Performance Features

- Input and output are optoelectronic isolated for each channel, with high reliability and anti-interference capability.
- Power supply has reverse connection protection and surge absorption function, which can be applied to a variety of working environments.
- The maximum number of digital I/O points is: 256DI/256DO.
- One mainframe can be equipped with 16 expansion modules.

TE Series Digital Expansion

Digital input expansion

Model	Function	Specification
TE-8XT	8-channel digital input	NPN input DC24V power supply, no need for external power supply Maximum frequency at input point : 10Khz
TE-16XT	16-channel digital input	

Digital output expansion

Model	Function	Specification
TE-8YT	8-channel transistor output	DC24V power supply, no need for external power supply P: FNP type transistor output T: NPN type transistor output Response time: approx. 50us Maximum output current: 0.3A per point
TE-16YT	16-channel transistor output	
TE-16YP	16-channel transistor output	

Digital input/output expansion

Model	Function	Specification
TE-16T	8-channel digital input, 8-channel transistor output	DC24V power supply, no need for external power supply NPN input Maximum input point frequency 10Khz T: NPN type transistor output T response time: about 50us T maximum output current: 0.3A per point

TE Series Analog Expansion

Performance Features

- High reliability and strong anti-interference capability.
- Power supply has reverse connection protection and surge absorption function, it can be applied to a variety of working environments.

Analog input expansion

Model	Function	Specification
TE-8AI	8-channel analog input	Voltage range: 0V-10V Current range: 0-20mA; 4-20mA Resolution: 12bit

Analog output expansion

Model	Function	Specification
TE-4AO	4channel analog input	Voltage range: -10V-10V Current range: 0-20mA; 4-20mA Resolution: 12bit

Analog input/output expansion

Model	Function	Specification
TE-4AI2AOS	4-channel analog input, 2-channel analog output	Voltage range: (input: 0V-5V; 0-10V,output: 0-10V) Current range: 0-20mA; 4-20mA Resolution: 12bit

Temperature Extension

Model	Function	Specification
TE-4PTY	4-channel temperature input, 4-channel transistor NPN output	Support PT100, measurement range -50~300°C, accuracy 1°C
TE-1AI-1AO	1 channel temperature input, 1 channel analog output	Support K-type thermocouple, measuring range 0~800°C Voltage range: 0~10V

Weighing Extension

Model	Function	Specification
TE-2L	2-channel weighing input	DC24V power supply, no need for external power supply Resolution 24 bits, accuracy ±1%
TE-4L	4-channel weighing input	DC24V power supply, no need for external power supply Resolution 24 bits, accuracy ±1%

Customized Extension--CE Series

CE Series Digital Expansion Modules

Digital input/output expansion

Model	Function	Specification
CE-8T	4-channel digital input, 4-channel transistor output	DC24V power supply, no need for external power supply NPN input Maximum frequency at input point 10Khz T: NPN type transistor output T response time: about 50us T maximum output current: 0.3A per point
CE-16T	8-channel digital input, 8-channel transistor output	

Analog input/output expansion

Model	Function	Specification
CE-4AI2AO	4-channel analog input, 2-channel analog output	Voltage range: (input: 0-10V,output: 0-10V) Current range: 0-20mA; 4-20mA Resolution: 12 bit

Weighing temperature extension

Model	Function
CE-2L2T-D	2-channel temperature acquisition input, support PT100/thermocouple, with PID self-tuning, measurement range 200°C, accuracy error 1°C 2-channel weighing and acquisition input, accuracy error ±0.1g 2-channel 3V DC motor forward and reverse control output 4-channel PWM output (drive DC vibration plate), Imax=10A, with card slot

Weighing temperature extension

Model	Function
CE-2L2T-A	2-channel temperature acquisition inputs, support PT100/thermocouple, with PID self-tuning, measuring range 200°C, accuracy error 1°C 2-channelweighing acquisition inputs, accuracy error ±0.1g 2-channel 3V DC motor forward and reverse control output 4-channel SSR solid state outputs (drive AC vibration plate)

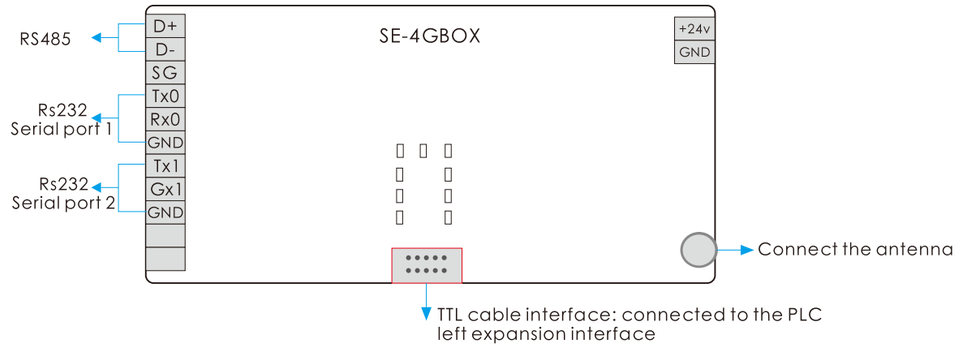
IoT Module

Juncauto series IOT module products make the equipment monitoring and maintenance more convenient and economical. There are mainly WIFI wireless communication module and 4G communication module. Transparent data transmission can be realized. The serial PLC immediately has TCP/IP network interface function, which greatly expands the communication distance of PLC controller. Users can connect the PLC mainframe through the serial port (TTL, RS232, RS485) of the IOT module to realize the function of network access, these modules are widely used in industrial automation, intelligent home appliances, remote control and other fields. These module products are convenient for configuration, are stable and reliable, have strong compatibility, and are suitable for much more, more complex control occasions.

Functional Features

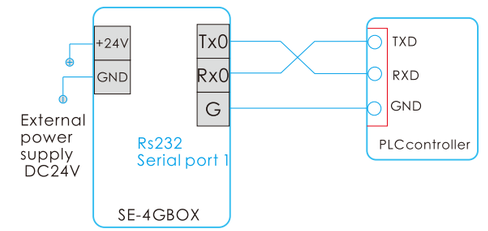
- No port mapping is required to read serial data via ID anytime, anywhere, using advanced P2P gateway penetration algorithms.
- Supports multi-mainframe access, i.e., no confusion when multiple users request data from the device at the same time. Data will be sent to the users with demand in order of priority.
- After P2P is established, it supports remote management, setup, and search for devices, and facilitates configuration of device names, baud rates, etc.
- Support for all-network 4G and wired network access to the Internet, with redundant automatic switching of communication methods.
- It can be used for user-defined protocol devices, Modbus master/slave station devices, and it supports MQTT protocol to connect to major cloud platforms.
- It is simple and has rich interface types: transmissive protocol, plug-and-play, easy to use
- Products include wireless WIFI modules and 4G communication modules.
- It supports automatic reconnection in case of disconnection. After the network connection is disconnected and restored, the IoT module will automatically reconnect to the target.

Pin definition

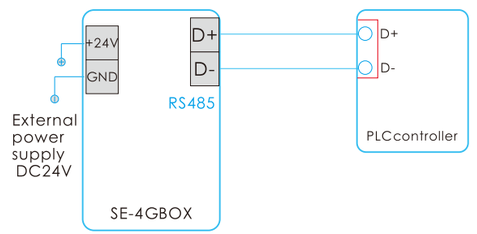


Connection method

■ Rs232 connect



■ Rs485 connect



JUNCAUTO

Motion Controllers

The motion controller is fully self-deve1oped from the core, has a variety of motion control functions and powerful expansibility, supports linear interpolation, circular arc interpolation, spiral interpolation, spatial arc, elliptical interpolation, elliptical spiral interpolation, electronic cam, electronic gear, chasing shear, wheel cutting, synchronous tracking, motion superposition, virtual axis, hardware position latching, position comparison output, continuous interpolation, motion pause, etc at any space, and supports bus expansion of IO and motion axes.

Product Features

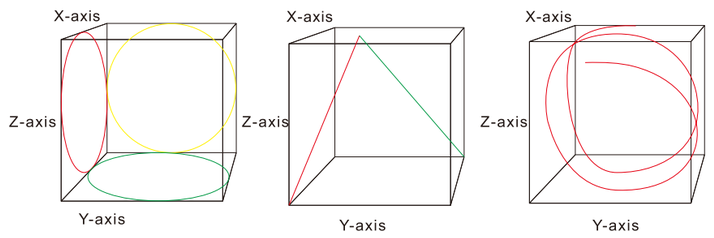
RTEX bus

- Based on the RTEX bus master as the core, the motion controller controls the servo motor to form an efficient and easily operated mechanical-electrical integration platform.
- RTEX network communication protocol based on 100Mbps uses a one-channel pass ring topo1ogy to realize high-speed communication without crosstalk and high transmission efficiency.
- The controllers and drives are connected to each other only by a network cable, reducing wiring costs, avoiding frequency bottlenecks in pulse commands, and providing high immunity to interference.

Multi-axis linkage motion control (pulse)

- Pulse output has a pulse output frequency of up to 200Khz in a single circuit.
- Motion control commands are abundant: homing, positioning, speed control, etc.
- Powerful computing capabilities ensure that the controller is efficient and reliable in handling multi-axis pulse motion control.

Interpolation function



Support circular/elliptical interpolation for XY axis, YZ axis and XZ-axis

Support any linear interpolation of 3D space

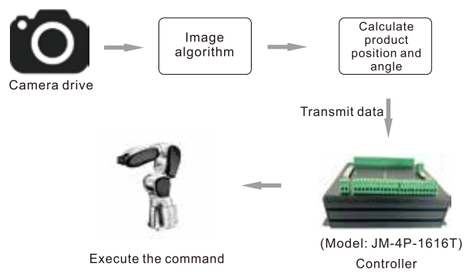
Support spiral interpolation of 3D space

JM Motion Controller

Visual dispensing motion controller

At present, the robot is in the high-speed development stage. The "vision + manipulator" is a typical robot system. Juncauto Company provides built-in offset and rotation algorithms in the motion controller. The camera mainly takes photos of the product. The vision system recognizes the position offset and angular rotation of the product, and this data is transmitted to the motion controller. The motion controller accurately corrects the machining trajectory through the built-in algorithms. This system can replace many manual operations, and has been widely used.

System Applications

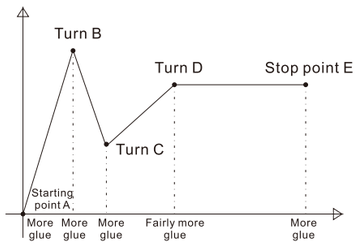


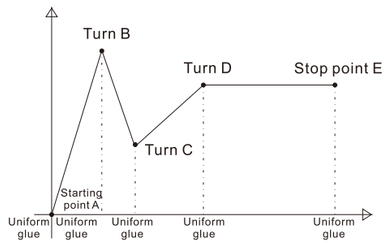
Performance features

- Built-in multiple interpolation algorithms: linear interpolation, circular arc interpolation, spiral interpolation,trajectory foresight, velocity smooth transition, etc at any space.
- Path editing is fast: it can quickly implement common offsets and mirror arrays, etc.
- Tutorial programming supported: Draw lines, arcs, circles, arbitrary polylines, rectangles, isolated points, MARK points, datum points, etc. by means of tutorials.
- Support multiple file formats: Support AutoCAD, precision engraving, CNC and other file formats.
- Embedded software PLC technology: Using PLC programming language, PLC control functions can be implemented for user-friendly programming and function expansion.
- Auto-correcting trajectory: with offset and rotation algorithm, with visual recognition to the offset and rotation angle of the product.
- Product placement at any angle for dispensing.
- Support 4-axis differential output.

Product Advantages

Product Other Brand	Our Product
◆ The size of the glue drop is uneven, especially in the dispensing machine, there is the problem of more glue at the stop point and turn.	◆ Adopt software to driven high speed dispensing valve for dispensing glue, the glue drop size is uniform, it improves the dispensing quality.

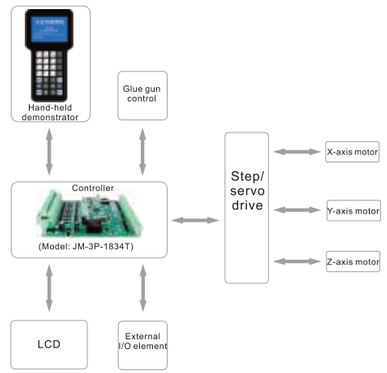




Drip molding motion controller

This controller is suitable for 16-20 colors drip molding machine (dispensing machine), equipped with hand-held demonstrator, through two ways of the demonstration and PC graphics import, with high-performance embedded motion controller as the core, it is integrated with professional drip molding process software control functions, it is applicable to painting, glue dispensing and glue injection processing for a variety of complex graphics in the dispensing industry.

System Applications



Performance features

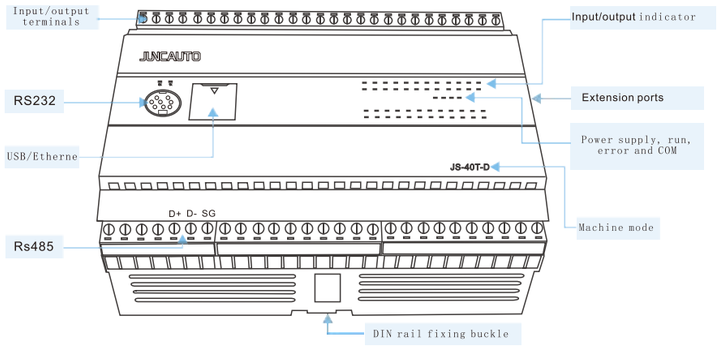
- Built-in multiple interpolation algorithms: linear interpolation, circular arc interpolation, spiral interpolation, trajectory foresight, velocity smooth transition, etc at any space.
- Path editing is fast: it can quickly implement common offsets and mirror arrays, etc.
- Tutorial programming supported: Draw lines, arcs, circles, arbitrary polylines, rectangles, isolated points, MARK points, datum points, etc. by means of tutorials.
- Support multiple file formats: Support AutoCAD, precision engraving, CNC and other file formats.
- Embedded software PLC technology: Using PLC programming language, PLC control functions can be implemented for user-friendly programming and function expansion.
- Product placement at any angle for dispensing.

Support graphics

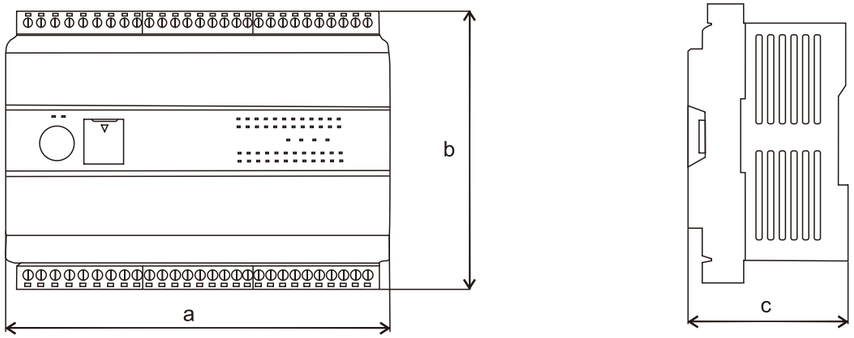
Graphics	Description	Schematic
Isolated Points	Isolated Points	
Straight line	Consists of "straight line start point + straight line end point"	
Circular arc	Consists of "arc start point + arc midpoint + arc end point"	
Full circle	Consists of 4 points: "Start point of the circle + Midpoint of the circle + End point of the circle".	
Spline curve	Consists of n control nodes to fit a smooth path	
Mark Points	Only used to mark the points that will not move. Such points can be used as 2 reference points that can rotate.	
Multi-line segment	Consists of n points of "straight line start point + node + straight line end point", the node can be a straight line midpoint or arc midpoint	

Mainframe size

Introduction to product dimensions and positions of JS/M Series

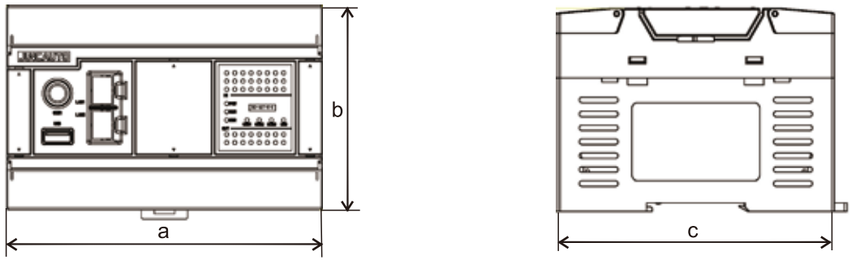


Mounting dimensions



Mainframe	Size (mm)		
	a	b	c
14-16 points	60	110	61
24-40 points	141	110	61
48-68 points	201	110	61

Mounting dimensions of JH/JH2/JHM/JH2M series mainframe



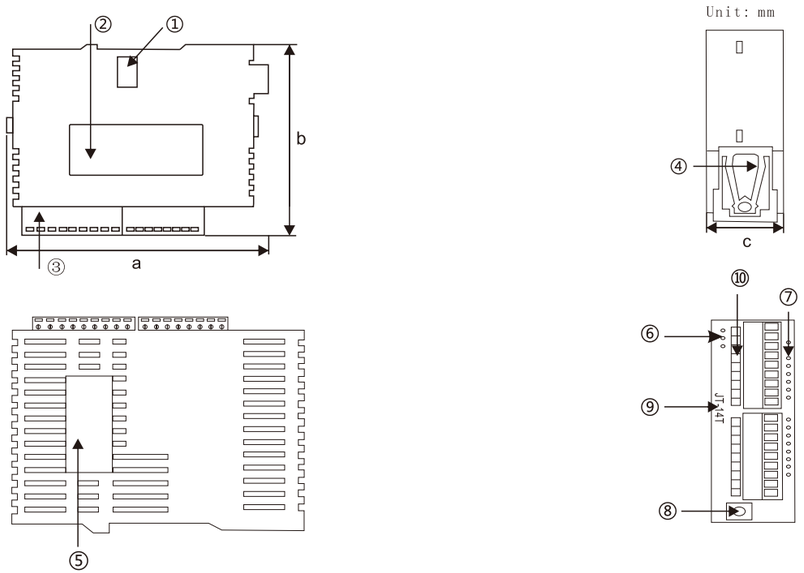
Mainframe	Size (mm)		
	a	b	c
14-24 points	114	100	73
32-40 points	155	100	73
48-60 points	218	100	73

Note 1: For 48-60 points, 2 BD expansion boards for exterior appearance; for 14-40 points, 1 BD expansion board.

Note 2: For 14-24 points, for PLC with Ethernet port, then there is no USB interface; for PLC with USB interface, there is no Ethernet port.

Introduction to product dimensions and positions of JT/JTM series mainframe

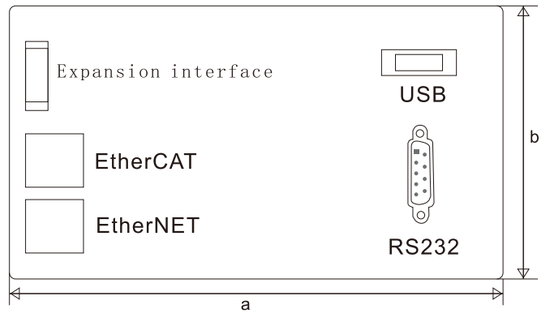
Unit: mm



① Expansion interface	⑥ Power, operation, error indicator light
② Nameplate	⑦ Input/output indicator
③ Input/output terminals	⑧ RS232 interface
④ DIN rail fixing buckle	⑨ Machine model
⑤ Company's logo	⑩ Input/Output silkscreen name

Mainframe	Size (mm)		
	a	b	c
14-16 points	90	60	26

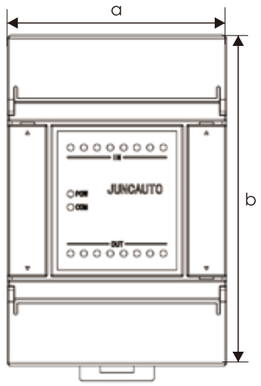
Product dimensions of JE series mainframe

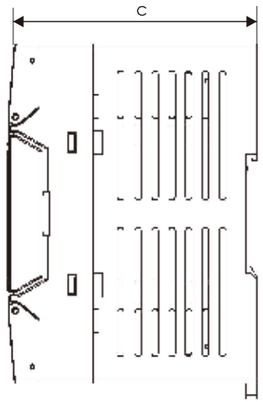


Mainframe	Size (mm)	
	a	b
JE Series	176	90

Expansion Dimensions

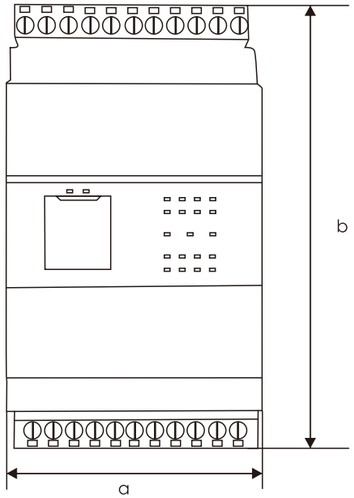
HE Series Expansion Product Dimensions

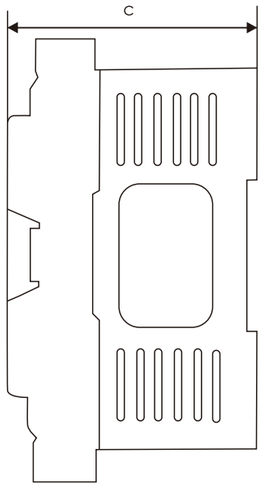




Expansion	size (mm)		
	a	b	c
Digital quantity expansion: 8-16 points Simulation expansion: HE-4AI2AO, HE-4AO, HE-8AO, HE-8AI, HE-2L, HE-4L, HE-2TCY, HE-2TCY2, HE-4TCY, HE-8PT, HE-4PT, HE-4PT2	66	100	73
Number expansion: 24-32 points, HE-8AI4AOS2, HE-8AI8AOS2, HE-8PT2	114	100	73

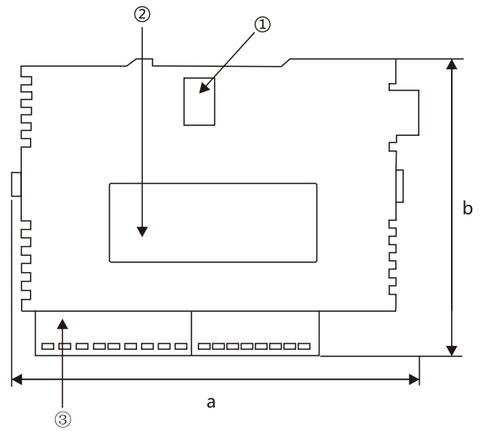
SE Series Expansion Product dimensions

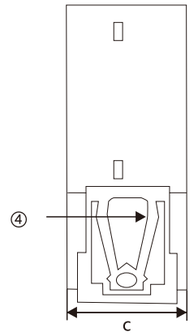


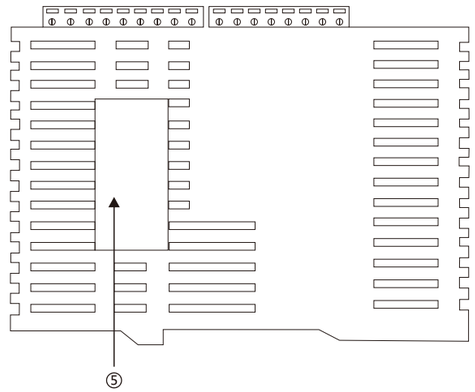


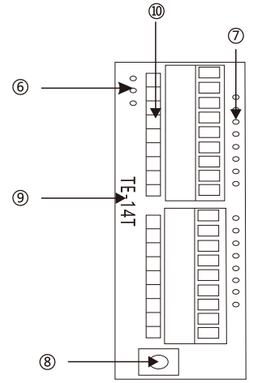
Expansion	size (mm)		
	a	c	b
Digital expansion: 8-16 points Analog Extension:SE-4S-A、SE-4AI2AO、SE-4AO、SE-4AOS、SE-4PT、SE-8PT、SE-2L、SE-4L、SE-2TCY、SE-4TCY、SE-2TC-A	60	60	110
Digital expansion: 32-40 points Analog Extension:SE-8TCY、SE-8TC	141	60	110

Dimensions of TE Series Expansion









□ Expansion interface	⑥ Power, operation, error indicator light
□ Nameplate	⑦ Input/output indicator
③ Input/output terminals	⑧ RS232 interface
④ DIN rail fixing buckle	⑨ Machine model
⑤ Company's logo	⑩ Input/Output silkscreen name

Expansion	Size (mm)		
	a	b	c
8-16 points	90	60	26

PLC Expansion

LED system status self-diagnosis

- POW (24VDC/AC220V power supply indicator light)

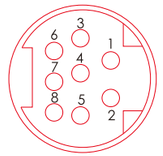
  On: 24VDC/AC220V power supply is normal
  Off: no 24VDC/AC220V power supply
- RUN (Run indicator light)

  On: PLC program runs normally
  Off: PLC program is not running/Insufficient voltage of DC24V (AC220V)
- COM (expansion indicator light)

  On: Successful connect to the expansion module
  Off: not connected/incorrectly connected to the expansion module
- ERR (Run error indicator light)

  Blink: PLC program has run error/or program invalid run
  Off: PLC program runs normally

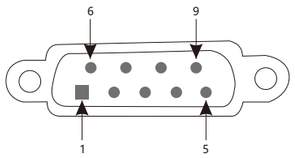
Round port RS232 interface diagram



8-core

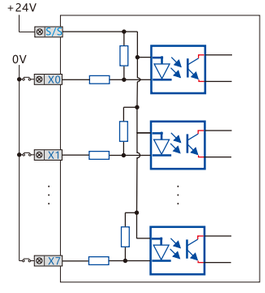
Pin number	Description	Description
5	TXD	Sending data
4	RXD	Receiving data
3	GND	Signal ground
6	GND	Signal ground
8	GND	Signal ground

9-pin RS232 interface diagram



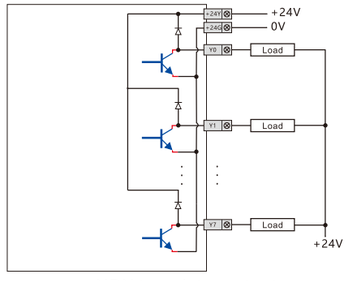
Pin number	Description	Description
2	TXD	Sending data
3	RXD	Receiving data
5	GND	Signal ground
9	GND	Signal ground

Input wiring diagram



NPN input

Output wiring diagram



NPN transistor output

Serial port (RS232/RS485) communication parameter specifications

Category	Parameters
Communication mode	Half Duplex
Baud rate	9600bps (factory default), 19200bps, 38400bps, 57600bps, 115200bps
Data type	7 (factory default), 8
Mode	RTU, ASCII (factory default)
Station number	1-255 (factory default 1)

Naming Rules

Mainframe naming rules

JH-40T-2E-D

Product Series	Product Points	Output Type	Number of Points	Ethernet	Power Supply Type
JS: JS Series mainframe JH: JH series mainframe JH2: JH2 series mainframe JM: JM series mainframe JT: JT series mainframe JC: JC series mainframe	40: 40-point mainframe 32: 32-point mainframe 60: 60-point mainframe 68: 68-point mainframe	T: NPN type transistor P: NPN type transistor R: Relay		E: Ethernet	D: DC A: AC

JH2-40T-E-D

Product Series	Product Points	Output Type	Bus interface	Power Supply Type
JS: JS Series mainframe JH: JH series mainframe JH2: JH2 series mainframe JM: JM series mainframe JT: JT series mainframe JC: JC series mainframe	40: 40-point mainframe 32: 32-point mainframe 60: 60-point mainframe 68: 68-point mainframe	T: NPN type transistor P: NPN type transistor R: Relay	E: EtherCAT	D: DC A: AC

JS-40T-E-D

Product Series	Product Points	Output Type	Ethernet	Power Supply Type
JS: JS Series mainframe JH: JH series mainframe JH2: JH2 series mainframe JM: JM series mainframe JT: JT series mainframe JC: JC series mainframe	40: 40-point mainframe 32: 32-point mainframe 60: 60-point mainframe 68: 68-point mainframe	T: NPN type transistor P: NPN type transistor R: Relay	E: Ethernet C: CAN bus	D: DC A: AC

JS-40T-1AI1AO

Product Series	Product Points	Output Type	Number of Points	Analog	Number of Points	Analog
JS: JS Series mainframe JH: JH series mainframe JH2: JH2 series mainframe JM: JM series mainframe JT: JT series mainframe JC: JC series mainframe	40: 40-point mainframe 32: 32-point mainframe 60: 60-point mainframe 68: 68-point mainframe	T: NPN type transistor P: NPN type transistor R: Relay		Analog input		Analog output

Naming Rules for Extensions

HE-16T

Product Series	Number of Points	Input/Output Type
HE: HE Series Extension SE: SE Series Expansion TE: TE Series Extensions CE: CE Series Extensions		T: NPN type transistor output R: Relay output TC: Thermocouple type temperature input PT: PT100 temperature input L: Weighing input S: SSR thyristor output

SE-4AI2AOS

Product Series	Number of Points	Input Type	Number of Points	Output Type
HE: HE Series Extension SE: SE Series Expansion TE: TE Series Extensions CE: CE Series Extensions		Analog input		Analog output

PLC Expansion

LED system status self-diagnosis

- POW(24VDC/AC220VPower LED)

  bright: 24VDC/AC220VThe power supply is normal
  extinguish: No 24VDC/AC220V power supply

- COM(Expansion LED)

  bright: Successful access to the expansion module
  extinguish: Expansion modules are not accessed/ incorrectly accessed

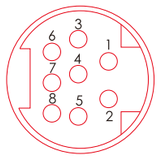
- RUN(Run indicator)

  bright: The PLC program runs normally
  extinguish: The PLC program is not working/DC24V (AC220V) voltage is insufficient

- ERR(Running error indicator)

  Flashing: PLC program running error / or program running illegally
  extinguish: The PLC program runs normally

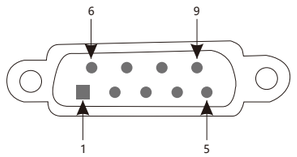
Round port RS232 interface diagram



8 cores

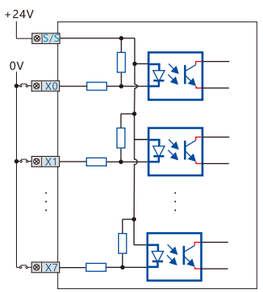
Pin number	description	illustrate
5	TXD	Send data
4	RXD	Receive data
3	GND	Signally
6	GND	Signally
8	GND	Signally

9-pin RS232 interface diagram

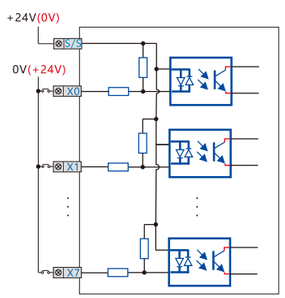


Pin number	description	illustrate
2	TXD	Send data
3	RXD	Receive data
5	GND	Signally
9	GND	Signally

Enter the wiring diagram

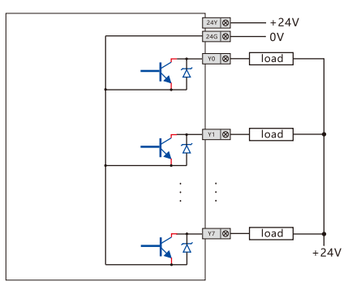


NPN input

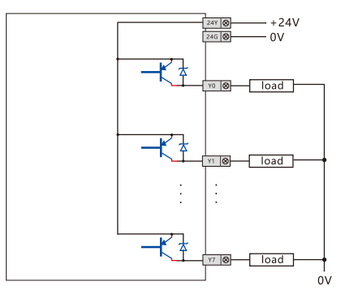


NPN/PNP input

Output wiring diagram



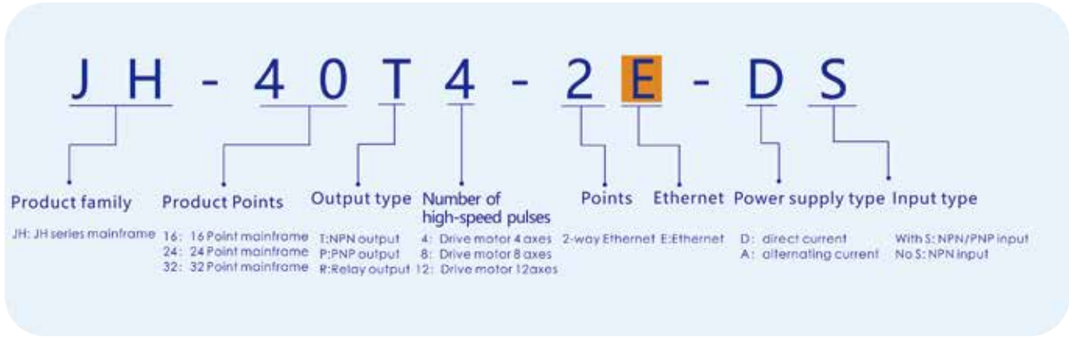
NPN transistor output

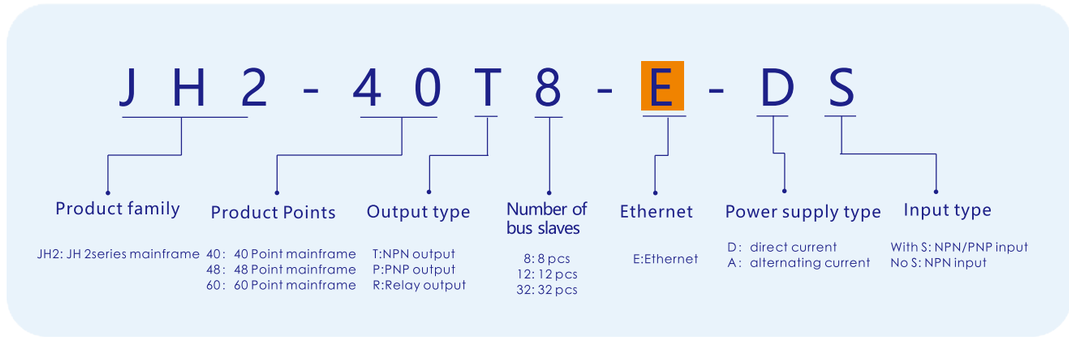


PNP transistor output

Naming Rules

Mainframe naming rules





Extend the naming convention