



Support ST, SFC, FBD, CFC, LD and IL,
support PLCopen programming specification.

XS series PLCopen standard controller

High performance product | Efficient programming



XINJE WeChat

XINJE

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Trusted Partner in Automation

Industrial intelligent controller



XSA550-W/L
256 axis

CPU	Main frequency	Synchronization period	Operating system
I7-1165G7	2.8GHz	1ms/256 axis	Windows Linux
Capacity		Communication port	
Program 128MB	Data 128MB	EtherCAT*2 Ethernet*4	USB3.0*4 RS232 RS485



XSA530-W/L
256 axis

CPU	Main frequency	Synchronization period	Operating system
I5-1135G7	2.4GHz	1ms/128 axis 2ms/256 axis	Windows Linux
Capacity		Communication port	
Program 128MB	Data 128MB	EtherCAT*2 Ethernet*4	USB3.0*4 RS232 RS485

XSA520-W/L
256 axis



CPU	Main frequency	Synchronization period
I3-1115G4	3.0GHz	1ms/256 axis
Operating system	Capacity	Communication port
Windows Linux	Program 128MB Data 128MB	EtherCAT*2 Ethernet*4 USB3.0*4 RS232 RS485

XSA330-W/L
64 axis



CPU	Main frequency	Synchronization period
J3455	1.5GHz	1ms/32 axis 2ms/48 axis 4ms/64 axis
Operating system	Capacity	Communication port
Windows Linux	Program 128MB Data 128MB	EtherCAT*2 Ethernet*2 USB2.0*2 USB3.0*2 RS232 RS485

XSA230-W/L
64 axis



CPU	Main frequency	Synchronization period
J6412	2.0GHz	250us/4 axis 500us/8 axis 1ms/32 axis
Operating system	Capacity	Communication port
Windows Linux	Program 128MB Data 128MB	EtherCAT*2 Ethernet*2 USB2.0*2 USB3.0*2 RS232 RS485

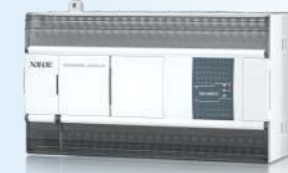
Standard controller

XSLH-30A32
32 axis | Slim type



Main frequency	Synchronization period	Communication port
1.0GHz	1ms/4 axis 2ms/16 axis 4ms/32 axis	CAN*1 EtherCAT*1 Ethernet*1 RS232*1 RS485*1
Capacity		
Program 32MB	Data 32MB	

XSDH-60A32
32 axis | Small-sized type



Main frequency	Synchronization period	Communication port
1.0GHz	1ms/4 axis 2ms/16 axis 4ms/32 axis	EtherCAT*1 Ethernet*1 RS232*1 RS485*1
Capacity		
Program 32MB	Data 32MB	

XS3-26T4
32 axis | Medium type



Main frequency	Synchronization period	Communication port
800MHz	1ms/4 axis 2ms/16 axis 4ms/32 axis	EtherCAT*1 Ethernet*1 RS232*1 RS485*2
Capacity		
Program 32MB	Data 32MB	

XSLH-24A16
16 axis | Slim type



Main frequency	Synchronization period	Communication port
800MHz	1ms/4 axis 2ms/16 axis	EtherCAT*1 Ethernet*1 RS232*1 RS485*1
Capacity		
Program 32MB	Data 32MB	

XSLH-24A8
8 axis | Slim type



Main frequency	Synchronization period	Communication port
800MHz	1ms/4 axis 2ms/16 axis	EtherCAT*1 Ethernet*1 RS232*1 RS485*1
Capacity		
Program 32MB	Data 32MB	

Basic functions

- XS3, XSDH, XSLH support 2-4 high-speed counting channels;
- Supports six programming modes: ST, SFC, FBD, CFC, LD, and IL;
- Support PLCopen programming specification, rich instruction set, and can reference many standard functional libraries;
- The XSA series is equipped with a built-in UPS to ensure the security of user data and equipment;
- The XSA series supports both local visualization and network visualization;
- The XSA series can be operated on either Windows or Linux operating systems.

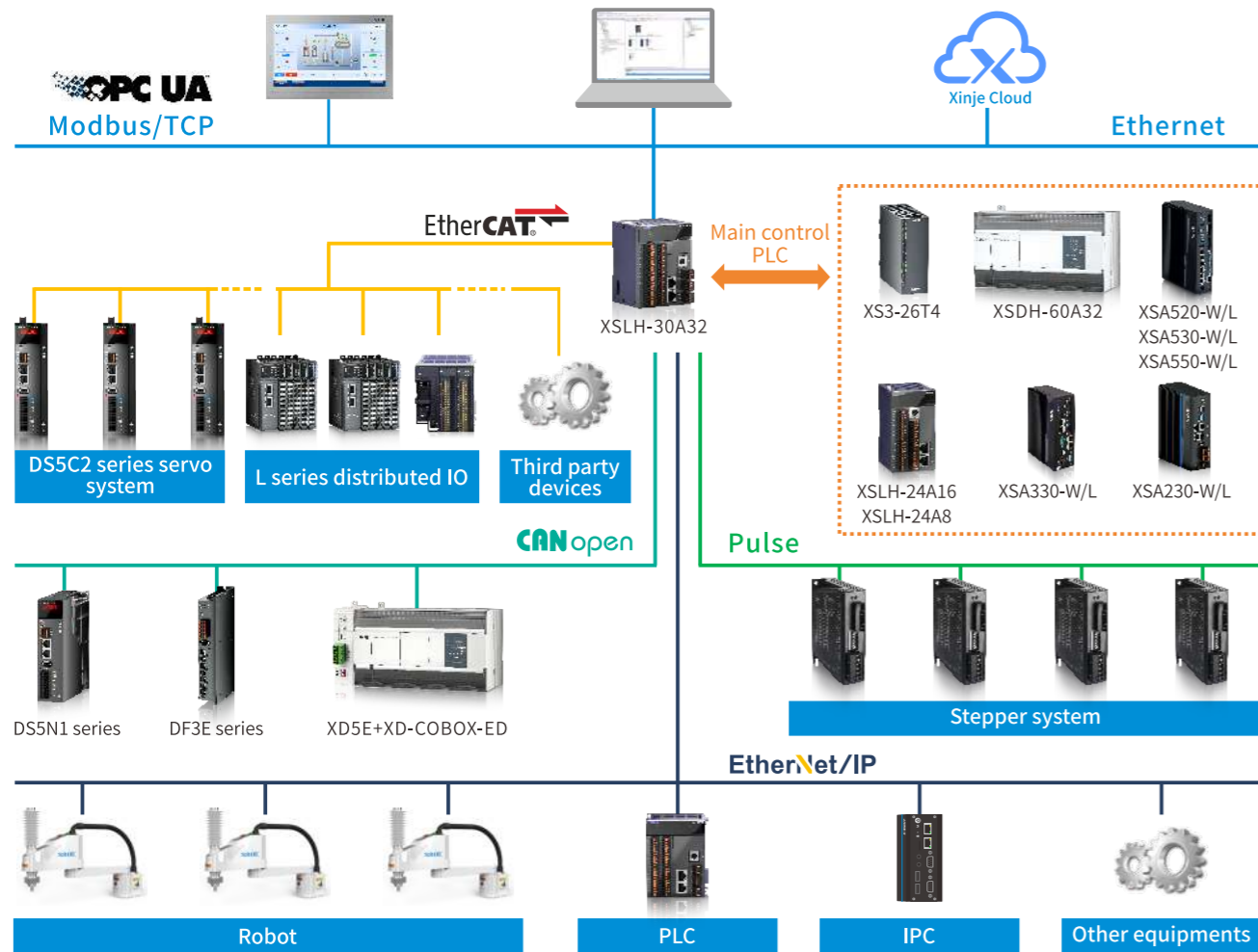
Expansion capability

- XS3, XSDH, XSLH series support local extension of 16 modules and can also be extended through EtherCAT bus.
- XSA series only supports expansion through the EtherCAT bus.

Communication ability






- Supports multiple communication protocols, including Modbus, TCP/IP, EtherCAT, OPCUA, Ethernet/IP.
- XSLH-30A32 supports CANopen communication.

One-stop control system



Excellent EtherCAT control capabilities

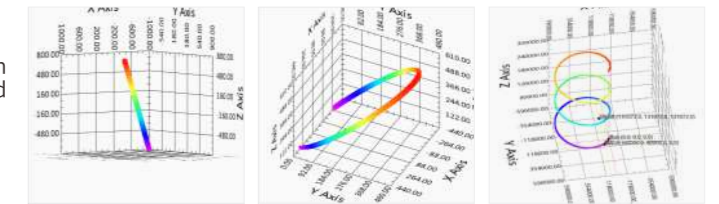
- XS series controllers can communicate with various devices that use the standard EtherCAT protocol, offering a wide range of device types. These include the Xinje LFC3-AP series distributed IO, Xinje LC3-AP series distributed IO, DS5C2 series servo drives, DP3CL series stepper motors, and VH6 series inverters, etc.
- Support complex motion control applications such as axis group, electronic cam, flying shear, CNC, and robotics.

XS3, XSDH, XSLH		XSA		
				
EtherCAT nodes up to 32	Synchronous cycle 1ms/4-axis, 2ms/16-axis, 4ms/32-axis	EtherCAT nodes up to 256	Synchronous cycle up to 500us/128-axis, 1ms/256-axis	Powerful computing capability, equipped with up to Intel®Core™i7 processor

Multi-axis motion bus control

Multi-axis interpolation

Support multi-axis linear, circular, and helical interpolation functions, making it effectively applicable to commonly used multi-axis interpolation platforms.



E-CAM

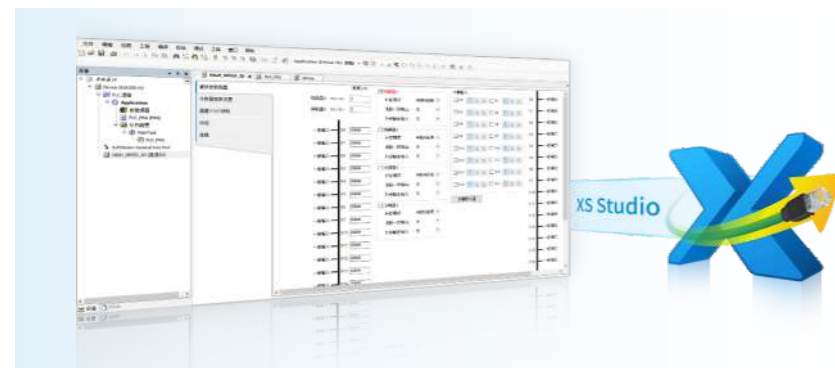
Electronic cam systems replace bulky mechanical cams in machining, offering higher precision and flexibility, which can effectively improve production efficiency. They are now widely used in equipment such as capping machines, pillow packaging machines, blow molding machines, and similar devices.

Support CNC

Support converting CAD image coordinates into G-code, support multiple robot control models.

Support XS studio platform

XS Studio is a programming and configuration software developed by Xinje based on CODESYS V3.5, designed for the XS series. It integrates PLC programming, visualization HMI, device information diagnostics, resource usage monitoring, fieldbus, and motion control functions. It provides a complete environment for configuration, programming, debugging, and monitoring, allowing flexible and powerful handling of IEC languages.



- 1 Powerful PLC software programming tool
- 2 Support IEC 61131-3 standard protocol
- 3 Rich industry libraries and custom library development
- 4 Support almost all mainstream fieldbuses, ensuring communication with each unit's devices
- 5 Provide HMI device data interfaces, enabling communication between third-party clients and the control system
- 6 Support OPC UA technology for cross-platform data transmission required by smart factories and Industry 4.0

Typical applications of XS

The EtherCAT bus features high reliability and real-time performance, allowing for a wide range of applications in the motion control field, such as in the electronics, packaging, chemical, and photovoltaic industries.

Lid and base dual-head forming machine

The equipment is composed of several parts including the Xinje XSA330-W industrial computer, TGM/TGA touch screens, DS5C1 servo drives, vision systems, and robotic arms. The system utilizes a total of 34 physical axes and 4 virtual axes. Additionally, it incorporates remote input/output modules to achieve long-distance signal transmission while ensuring real-time and fast communication. The entire production line employs a full cam control mode, which enhances the flexibility, system stability, and production efficiency. The equipment can achieve a maximum production efficiency of 45-50 units per minute.



Dicing machine

The equipment consists of several components, including the Xinje XSA330-W industrial computer, a display, HMI, servo motors, cameras, and lasers. The system utilizes label communication and includes a total of 34 physical axes, 8 cameras, and 2 lasers. It is capable of cutting two-segment and three-segment battery cells. The efficiency can reach up to 60 pieces per minute.

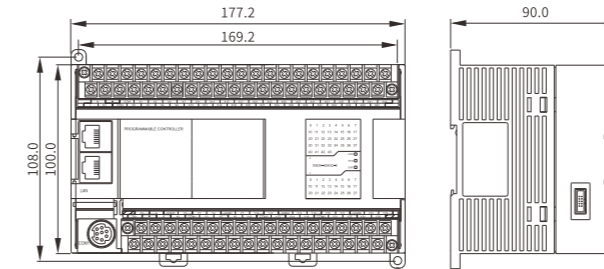


Specifications

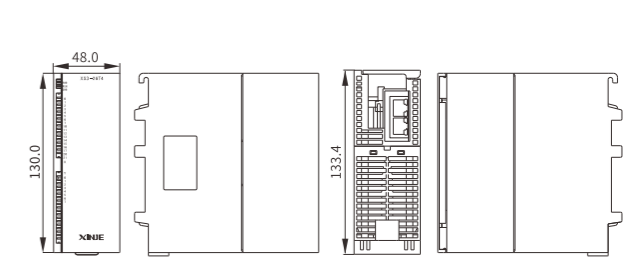
Item		Specification									
Model		XSLH-30A32	XSLH24A16/8	XSDH-60A32	XS3-26T4	XSA-230-W/L	XSA330-W/L	XSA520-W/L	XSA530-W/L	XSA550-W/L	
Programming method		IL, LD, FBD, ST, SFC, CFC									
Program capacity		32MB					128MB				
Data capacity		32MB (including 6MB power-off hold-on)					32MB (including 6MB power-off hold-on)				
Power	Power supply	Rated voltage DC24V		Rated voltage AC220V		Rated voltage DC24V					
	Output power supply	—	—	24VDC±10% Max400mA	—	—	—	—	—	—	—
I/O points	Total points	30 points	30 points	60 points	26 points	6 points	32 points	32 points	32 points	32 points	
	Input points	NPN	14 points: X0~X15	12 points: X0~X13	36 points: X0~X43	18 points: X0~X21	3 points: X0~X2	16 points: X0~X17	16 points: X0~X17	16 points: X0~X17	16 points: X0~X17
		PNP	—	—	—	—	—	16 points: X0~X17	16 points: X0~X17	16 points: X0~X17	16 points: X0~X17
Output points	Transistor	16 points: Y0~Y17	12 points: Y0~Y13	24 points: Y0~Y27	8 points: Y0~Y7	3 points: Y0~Y2	16 points: Y0~Y17	16 points: Y0~Y17	16 points: Y0~Y17	16 points: Y0~Y17	
	Relay	—	—	—	—	—	—	—	—	—	
High-speed input	Encoder input	Single-phase	—	—	—	—	—	2 Channels (Max 1MHz)			
		AB phase mode	—	—	—	—	—	2 Channels (Max 1MHz)			
	OC input	Single-phase	2 Channels (MAX 200kHz)	4 Channels (MAX 200kHz)		—	—	2 Channels (Max 200kHz)			
		AB phase mode	2 Channels (MAX 100kHz)	4 Channels (MAX 100kHz)		—	—	2 Channels (Max 100kHz)			
	Differential signal input	Single-phase	2 Channels (MAX 200kHz)	—	—	4 Channels (MAX 1MHz)	—	—	—	—	—
AB phase mode		2 Channels (MAX 100kHz)	—	—	4 Channels (MAX 1MHz)	—	—	—	—	—	
Expansion capability	Local extension	Right expansion*16 Left expansion*1		Right expansion*16 Left expansion*1 BD board*1		Right expansion*16		—	—	—	—
	Remote extension	Support ECAT remote expansion									
Interruption	External interrupt	10	10	10	6	—	16				
Communication	Communication port	2 *RJ45 ports 1 *CAN 1 *RS232 1 *485	2 *RJ45 ports 1 *RS232 1 *485	2 *RJ45 ports 1 *RS232 1 *485	2 *RJ45 ports 1 *RS232 2 *485	4 *RJ45 (2* EtherCAT, 2* Ethernet) 2 *USB 2.0 2 *USB 3.0 1 *RS232 1 *RS485	4 *RJ45 (2* EtherCAT, 2* Ethernet) 2 *USB 2.0 2 *USB 3.0 2 *RS232 (isolated) BIOS control	6 * RJ45 (2* EtherCAT, 4* Ethernet) 4 * USB 3.0 2 * RS232/RS485 (isolated) BIOS control			
	Communication Protocol	Modbus RTU, Modbus TCP, Ethernet IP, TCP/IP, OPC UA, Free Format and other protocols									
Bus function		EtherCAT, CANopen bus		EtherCAT							
Data power-off hold-on function		Support									
Clock		Support									
RTE Start/Stop Key		—	—	—	—	Support	—	—	—	—	
Motion control function	Single axis motion	Support									
	Axis group motion	Support									
	E-CAM	Support									
	CNC	Support									

Dimension (Unit:mm)

XSDH series

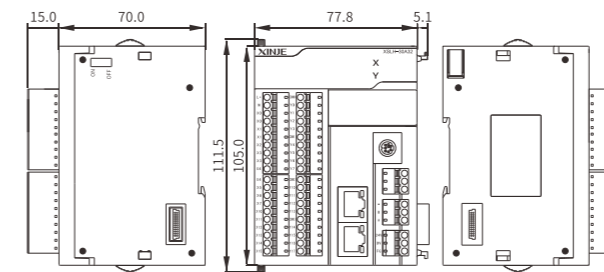


XS3 series

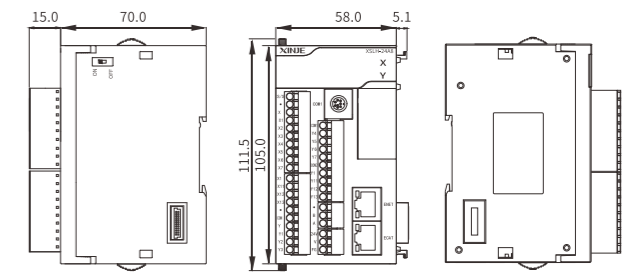


XSLH series

- XSLH-30A32

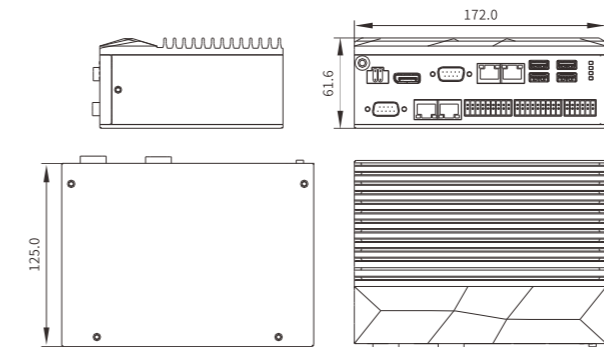


- XSLH-24A16, XSLH-24A8

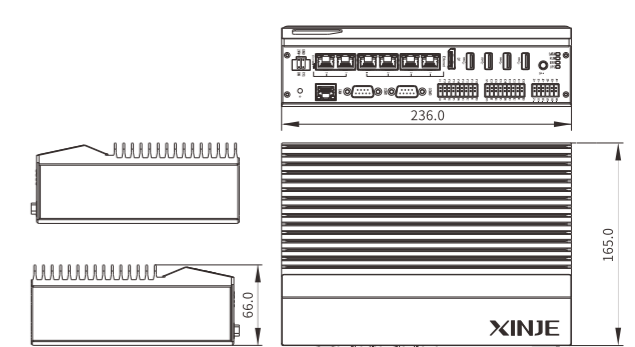


XSA series

- XSA330-W/L



- XSA520-W/L, XSA530-W/L, XSA550-W/L



- XSA230-W/L

