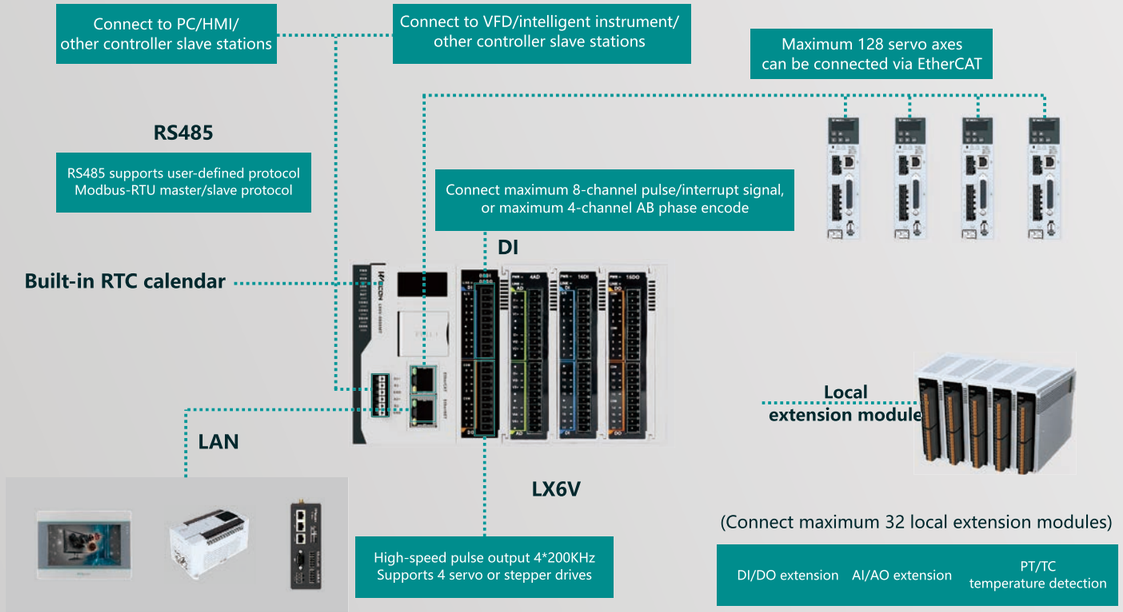
LX6V(6S) Series PLC

Modular EtherCAT PLC

Multi-port, fast communication, brand new product

- Supports EtherCAT and USB TYPE-C
- Supports 61131-3 LD programming mode, free tag protocol, faster and more efficient communication
- Nice appearance of PLC and module





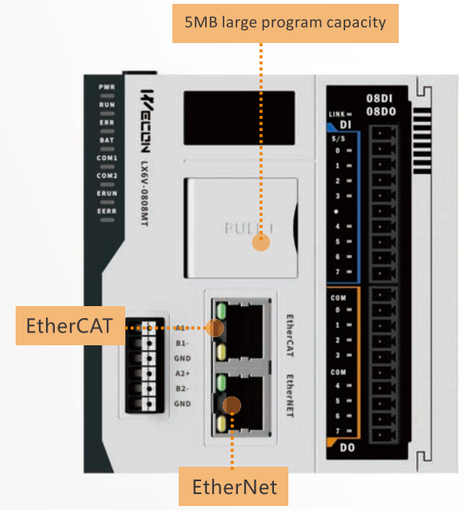
LX6V/LX6S series PLC, small size and large capacity, a new evolution to bus PLC

Software upgrade

- Newly designed overall encryption scheme
- Newly designed free tag protocol
- Compatible with 5V 61131-3 LD program
- Custom FB/FC
- Global variable definition
- EtherCAT configuration
- EtherNet configuration

Capacity upgrade

- 5MB large program capacity
- 512KB latched capacity
- 100KB register capacity
- 5MB free tag capacity



PLC General

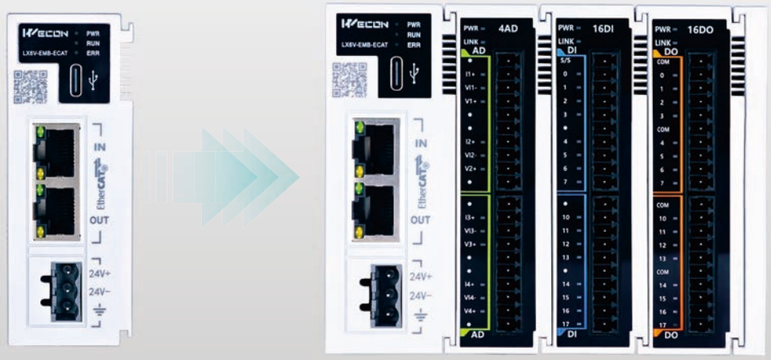
Item	LX6V(LX6S) -0808MT/1616MT
Running Mode	Cycle Scan/ Interrupt
Programming	LD/SFC/ST
Total Instructions	Basic instruction: 29 / Application instruction: 170
Execute time	Basic instruction 0.01-0.02μs
System EMMC	5MB
Download/Monitoring	Programming cable (Port)
	EtherNet
	USB TYPE-C
High Speed Pulse Output	Transistor type 4 channels 200KHz
High speed counter interrupt	100 channels
Timer Interrupt	100 channels, support 0.1ms interrupt
External input interrupt	X0-X7 supports both rising and falling edges
High Speed Input Single	8 channels 150 KHz
High Speed Input AB Phase	4 channels 150K Hz, supports 2 or 4 frequency multiplication
Power-down save	Adjusted by software
Storage	FLASH
Filter	For all the input terminals
Serial Port	RS485, RS485
Temperature	Working Temperature: 0～55℃ / Storage Temperature -20～70℃
Humidity	35～85%RH (Without condensation)
Shock Resistance	JISC0040 Standard
Influence Immunity	Meet the IEC61000-4-4 and GB/T 17626.4 standard: Noise voltage amplitude 1KVP-P, pulse width 10us, period 0.3 s, edge time 5ns, duration 1min.
TF	Support
ETHERNET	Megabit Ethernet(LX6S) / Gigabit Ethernet (LX6V)
ETHERCAT	Up to 128 servo axes

LX6V Coupler

LX6V-EM□-ECAT

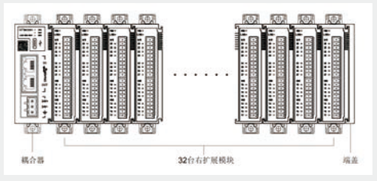
Remote I/O coupler

Based on EtherCAT bus technology
Diversified module types that are faster, more stable and more convenient.
Easily meet various system configurations



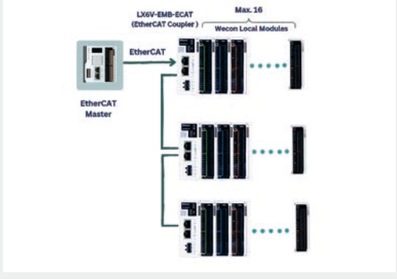
Flexible configuration & more expansion

- Support up to 32 expansion modules;
- The I/O configuration can be adjusted through the software, meeting the various requirements of different cases.



More precision and efficiency

- EtherCAT distributed I/O separates controllers and devices to achieve truly distributed control;



Easy installation

- Tool-free blade mounting;
- Compact structure is more stable;
- Small size and space-saving.



Superior performance

- High-speed bus microsecond response, speed up to 100Mbps;
- Support a large number of I/O node connections to meet high-speed data acquisition and precise control.



Specification

Universal Type



Model	LX6V-EMB-ECAT	LX6V-EMC-ECAT

Item	Specification parameter	
Maximum expansion module	16	32
Rated input voltage	DV 24V±10%，100mA（without expansion module）	
Communication interface	RJ45×2, EtherCAT communication protocol with 100Mbps performance; EtherCAT IN: EtherCAT input port; EtherCAT OUT: EtherCAT output port.	
Transmission distance	Length of communication line between two nodes≤100m	
Transmission medium	Category 5E (cat 5e) cable or above	
Single AP process data	Maximum input and output 1024 bytes	
Synchronous	Minimum 125us	
Allowable instantaneous power-off time	10ms	
Impulse current	≤45A (loaded with maximum module)	
Power protection	Anti-reverse connection protection; overcurrent protection; surge absorption	
Firmware upgrade	Support	
Usage environment	No corrosive, combustible gas, no large amount of conductive dust	
Environment temperature	Operating temperature: -20℃ to 55℃ Storage temperature: -40℃ to 70℃	
Environment humidity	Working humidity: 10% to 90%RH (No condensation) Storage humidity: ≤90%RH (No condensation)	
Altitude	0-2000m	
Installation	Installed on DIN46277 (Width: 35mm) rail by fastener	
Overall size	40.0*92.0*95.0mm	
Available module type	LX6 series expansion module	