

Economical PLC

L01S Series

- 100kHz high-speed pulse output & 100kHz high-speed counting input.
- Master unit supports I/O expansion, up to 192 Points (64 Embedded + 128 Expanded).
- Multiple interfaces to meet various needs: 1× USB, 1× RS232, 2× RS485
- Supports Modbus RTU/ASCII and Free-Port communication protocols
- Flexible analog capability: Built-in analog I/O in some units to make it much more cost-effective
- Supports USB flash drive upload and download (under development). Also includes remote maintenance functionality.



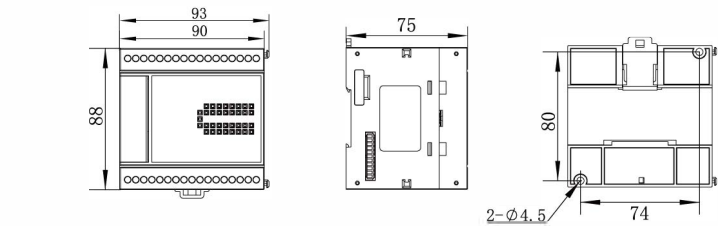
Specifications

Model	L01S-16M	L01S-24M	L01S-32M	L01S-40M	L01S-48M	L01S-64M	
Dimension	93*88*75mm		143*88*75mm		210*88*75mm		
Mounting Dimension	74*80mm		124*80mm		194*80mm		
Mounting Method	Fixed hole (φ4,5mm) installation and 35mm standard din rail installation						
Power Supply Voltage	AC220V(-15%~20%)						
Grounding	The wire gauge used for grounding must not be smaller than that of the power supply wire. (When using multiple PLCs simultaneously, be sure to use single-point grounding.)						
Operating/Storage Environment	Operating: temperature between 0°C and 55°C, relative humidity between 5% RH to 95% RH, pollution degree 2 Storage: temperature between -25°C to 70°C, relative humidity between 5% RH to 95% RH						
Insulation Resistance	5 MΩ or more						
No-load Power Consumption	1.2W						
Full-load Power Consumption	MT/2.4W; MR/2.88W		MT/2.8W; MR/3.5W		MT/3.1W; MR/3.9W	MT/3.8W;MR/4.8W	
DI/DO Points	8DI/8DO (Y0/Y1 fixed MT)	14DI/10DO (Y0/Y1 fixed MT)	16DI/16DO (MT or MR, no mix)	24DI/16DO (MT or MR, no mix)	24DI/24DO (MT or MR, no mix)	32DI/32DO (MT or MR, no mix)	
Digital Input Level	Passive NPN or PNP, common terminal isolation; input voltage: 24VDC±10%						
Digital Output Level	Output MT: low level NPN, COM connect to negative potentia. Output MR: normally open dry contact						
Digital Output Type & Load	Transistor MT: 0.5A/point, 2A/4 points COM; voltage: 12VDC-36VDC Relay output load: 2A/point, 4A/4 points COM; voltage: DC24V or AC220V						
High-speed Counting Input	Single-phase 6 channels 100 kHz, or AB-phase 2 channels 100 kHz. (When Y3 is used for high-speed pulse output, X5 cannot be used for high-speed counting but can be used as standard input.)						
High-speed Pulse Output	MT output: conventional 4 channels/Y0-Y3 100kHz (L01S-48MT/64MT: 8 channels/Y0-Y7 100kHz); L01S-16/24MRT output: 2 channels/Y0-Y1 100kHz (When X5 is used for high-speed counting, Y3 cannot be used for high-speed pulse output but can be used as standard output.)						
Analog	Points	Maximum 4AD 2DA	No analog	Maximum 4AD 2DA	No analog	Maximum 8 AD 8DA (6 channels optional)	Maximum 4AD
	Input	①2 channels voltage 0-10V + 2 channels current 0-20mA ②2 or 4 channels thermocouple (AD4 as cold junction) ③2 or 4 channels PT100 ④4 channels voltage 0-10V ⑤4 channels current 0-20mA Select one from five options. Note: Thermocouples support types E, K, S, T, and J (including negative temperatures).	/	①2 channels voltage 0-10V + 2 channels current 0-20mA ②2 or 4 channels thermocouple (AD4 as cold junction) ③2 or 4 channels PT100 ④4 channels voltage 0-10V ⑤4 channels current 0-20mA Select one from five options. Note: Thermocouples support types E, K, S, T, and J (including negative temperatures).	/	Fixed 2 channels voltage 0-10V + 2 channels current 0-20mA 4 channels optional: ②2channels voltage 0-10V + 2 channels current 0-20mA ②4 channels thermocouple (AD4 as cold junction) ③2 or 4 channels PT100 ④4 channels voltage 0-10V ⑤4 channels current 0-20mA Select one from five options. Note: Thermocouples support types E, K, S, T, and J (including negative temperatures).	①2 channels voltage 0-10V + 2 channels current 0-20mA ②2 or 4 channels thermocouple (AD4 as cold junction) ③2 or 4 channels PT100 ④4 channels voltage 0-10V ⑤4 channels current 0-20mA Select one from five options. Note: Thermocouples support types E, K, S, T, and J (including negative temperatures)
	Output	Fixed 1 channel voltage 0-10V + 1 channel current 0-20mA	/	Fixed 1 channel voltage 0-10V + 1 channel current 0-20mA	/	Fixed 1 channel voltage 0-10V + 1 channel current 0-20mA	/
Communication Port	Comes with 2 programming ports (1 x Type-C USB port; 1 x RS232 programming port which interface terminal is an 8-hole mouse head female socket 2 x RS485 port by default, supporting Modbus RTU/ASCII/, free port protocols, etc.						
Programming Software	VTool Pro						

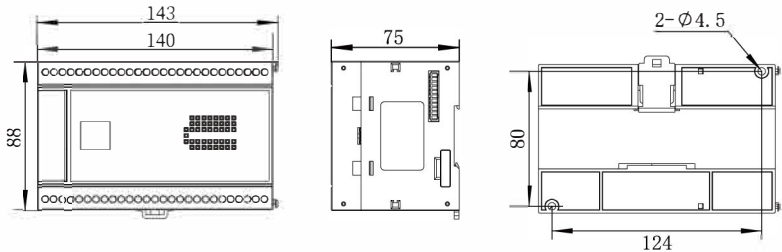
Outline Dimensions (Unit: mm)

Economical PLC

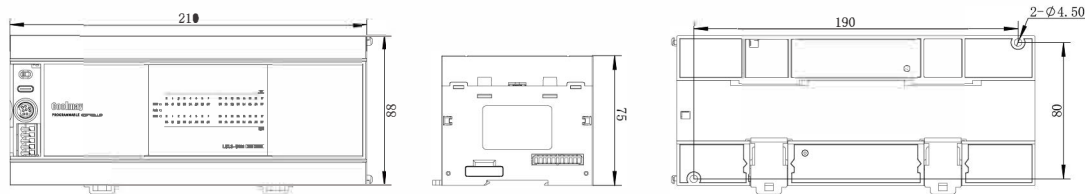
L01S-16M/24M



L01S-32M/40M



L01S-48M/64M



Standard PLC

L02S Series

- Scalable Expansion: Up to 31 expansion modules | Max. I/O: 1024 points
- High-speed Pulse Output: 6 axes at 200kHz + 2 axes at 100kHz
- Built-in CAN Bus: CANopen and free-form CAN protocol
- Advanced Motion Control: Multi-axis linear/circular interpolation, G-code, and electronic cam.
- Upgraded VTool Software: User-friendly interface to enhance programming efficiency.
- Multi-Language Programming: Commands, Ladder Diagram (LD), and Sequential Function Chart (SFC).



Specifications

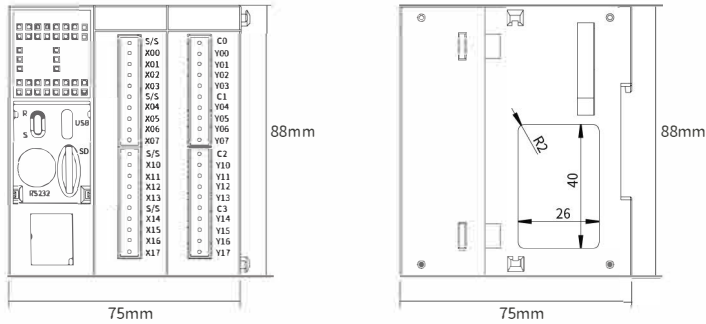
Model	L02S-24M	L02S-32M
Dimension	75*88mm	75*88mm
Mounting Method	35MM Standard Din Rail Mounting	
Power Supply Voltage	DC24V(-15%~20%)	
Operating/Storage Environment	Operating: temperature between -20°C ~ 55°C(no condensation), relative humidity between 5% RH ~ 95% RH (no moisture condensation) Storage: temperature between -25°C~70°C, relative humidity between 5% RH ~95% RH(no moisture condensation)	
No-load Power Consumption	1.2W	1.2W
Full-load Power Consumption	MT/2W MR/4W	MT/2W MR/4W
DI/Do points	12DI/12DO	16DI/16DO
Digital Input Level	Passive NPN or PNP, common terminal isolation; input voltage: 24VDC±10%	
Digital Outout Level	Output MT: Low-level NPN, COM connect to negative potential. Output MR: Normally open dry contact	
Digital Output Type & Load	Transistor MT: 0.5A/point, 2A/4 points COM; voltage: 12VDC-36VDC Relay MR: 2A/point, 4A/4 points COM	
High-speed Counting Input	Single-phase 8 channels 100kHz or dual-phase 3 channels 60kHz (When Y1 is used for high-speed pulse, X6 and X7 cannot be used for high-speed counting but can used as standard input.)	
High-speed Pulse Output	Master Unit MT Output: 8 channels total, Y0-Y5 at 200kHz, Y6-Y7 at 100kHz. (When X6 and X7 are used for high-speed counting, Y1 cannot be used for high-speed pulse output but can be used as standard output.)	
Analog Point	4AI 4AO	/
AI Type	Comes with 2 voltage 0-10V + 2 current 0-20MA	/
AO Type	Comes with 2 voltage 0-10V + 2 current 0-20MA	/
Program Capacity	32K	
Ethernet	MODBUS TCP, Ether Net/IP (under development)	
CAN Communication	1 channel of CANOPEN	
Programming Language	LD, SFC, FB function(LD)	
Serial Port	Come with 3 communication ports: 1 x RS232 port, 2 x RS485 port by default	
Programming Port	1 x Type-C USB port	
Programming Software	VTool Pro	

Module List

L02S Module	Model
Host Module	L02S-32MT, L02S-32MR, L02S-24MT, L02S-24MR, L02S-24MP
Digital Input Module	L02S-8EX, L02S-16EX, L02S-32EX
Digital Input/output Module	L02S-16ET, L02S-16ER, L02S-32ET
Digital Output Module	L02S-8EYT, L02S-8EYR, L02S-16EYT, L02S-16EYR, L02S-16EYP, L02S-32EYT
Analog Module	L02S-4AD, L02S-4DA
Temperature Module	L02S-4RTD, L02S-4TC, L02S-4NTC
Weighing Module	L02S-2LC
Power Supply Module	L02-60P
Communication Interface Module	L02-EIP

Outline Dimensions (Unit: mm)

L02S-32MT/L02S-32MR/L02S-24MT/L02S-24MR/L02S-24MP (Under development)



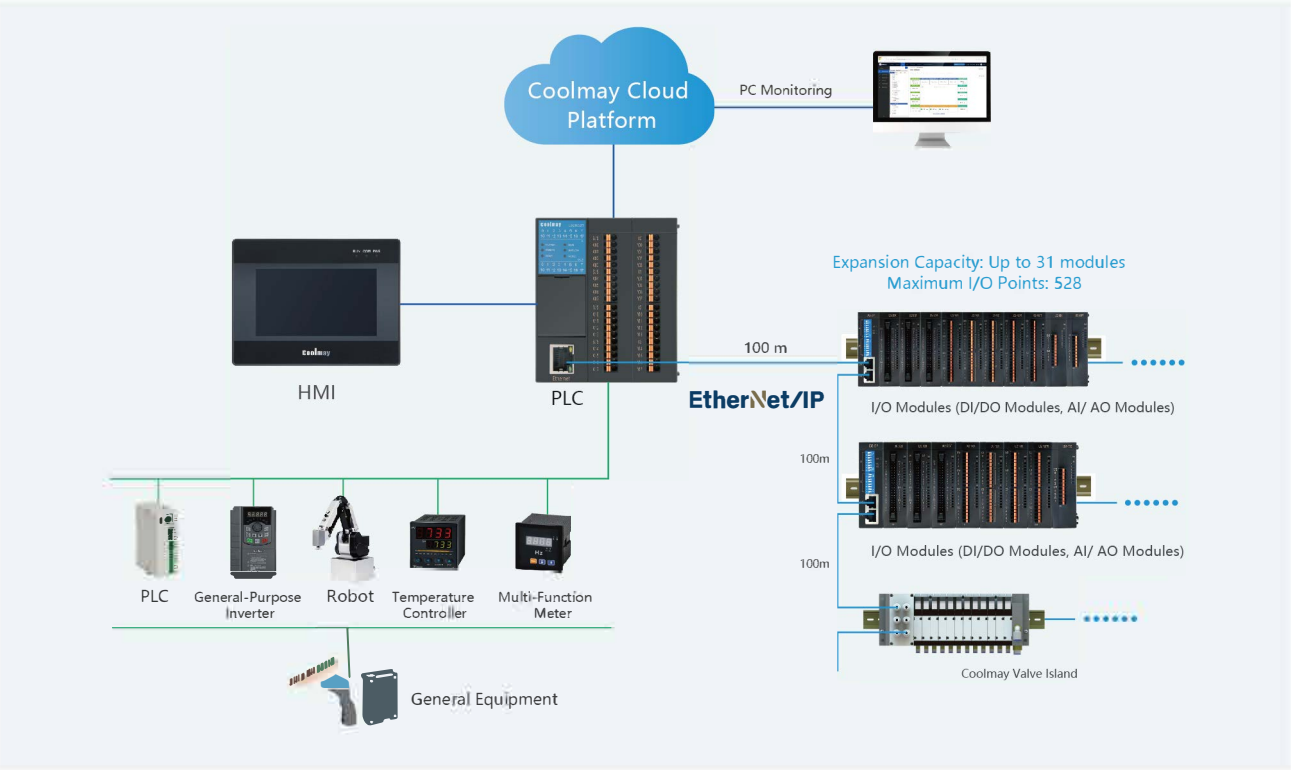
L02S Series Modules

Communication Interface Module

- Standard Protocol: EtherNet/IP for multi-slave cascading
- Integrated Switch: Ethernet ports with built-in switching function
- Interoperability: Supports networking with PLCs, configuration software, and host computers.
- Scalability: Submodule expansion and remote firmware updates
- Accessibility: Remote monitoring capabilities



System Topology



Expansion Modules

Applicable to L01S and L02S series PLCs



Specifications

DI Module	L02S-8EX	DC24V, 6mA, 8 inputs, push-in terminal block
	L02S-16EX	DC24V, 6mA, 16 inputs, push-in terminal block
	L02S-32EX	DC24V, 6mA, 32 inputs, Ejector Header terminal block
DO Module	L02S-8EYT	30VDC, 2A/point; 2A/4points COM. 8 outputs, transistor outputs, push-in terminal block
	L02S-8EYR	Below AC220V/DC30V, 2A/point; 4A/4points COM. 8 output points, relay outputs, push-in terminal block
	L02S-16EYT	30VDC, 2A/point; 2A/4points COM. 16 outputs, transistor outputs, push-in terminal block
	L02S-16EYP	30VDC, 2A/point; 2A/4points COM. 16 outputs, MOSFET PNP outputs, push-in terminal block
	L02S-16EYR	Below AC220V/DC30V, 2A/point; 2A/4 points COM. 16 outputs, relay outputs, push-in terminal block
DI/DO Module	L02S-32EYT	30VDC, 2A/point; 2A/4points COM. 32 outputs, transistor outputs, Ejector Header terminal block
	L02S-16ET	DC24V, 6mA, 8 inputs; 30VDC, 2A/point; 2A/4 points COM. 8 outputs, transistor outputs, push-in terminal block
	L02S-16ER	DC24V, 6mA, 8 inputs; below AC220V/DC30V, 2A/point; 2A/4 points COM. 8 output s, relay outputs, push-in terminal block
AI Module	L02S-4AD	4 channels analog input, 16-bit resolution(Selectable: 0~10V, 0~5V, 0~20mA, 4~20mA)
	L02S-4DA	4 channels analog output, 16-bit resolution (Selectable: 0~5V, 0~10V, 0~20mA)
	L02S-4AD2DA	4 channels analog input, 16-bit resolution(Selectable: 0-10V, 0-5V, 4-20mA, 0-20mA) 2 channels analog output, 16-bit resolution(Selectable: 0-5V, 0-10V, 0-20mA)
Temperature Module	L02S-4RTD	4 channels 2-wire or 3-wire RTD temperature sensing Sensor type: PT100 Resolution: 0.1°C/0.1°F(16-bit converter) Temperature Range: -200 to 500°C
	L02S-4TC	4 channels thermocouple temperature sensing Sensor types:J,K,S,T,E Resolution: 0.1°C/0.1°F(16-bit converter) Temperature Range: K: -240 to 1370°C/ T: -240 to 400°C/ S: -50 to 1690°C/ J: -120 to 1200°C/ E: -120 to 1000°C
	L02S-4NTC	4 channels thermistor temperature sensing Sensor type: NTC10K (default 3435) Resolution: 0.1°C/0.1°F(16-bit converter) Temperature Range: -50 to 210°C
Weighing Module	L02S-2LC	2 channels 4-wire load cell Characteristic values: 1, 2, 4, 6, 20, 40, 80 mV/V Accuracy error: 1/10,000 ADC resolution: 23 bits
	L02S-60P	100-240VAC, 50/60Hz AC Input, 24VDC/2A
Power Supply Module	L02-100P	100-240VAC (withstand 300VAC surge for 5S without damage), 24VDC/4.15A
	L02S-EIP	Dual RJ45 100Mbps Ethernet ports with built-in switching function, EtherNet/IP for multi-slave cascading

Outline Dimensions (Unit: mm)

L02S-EIP

