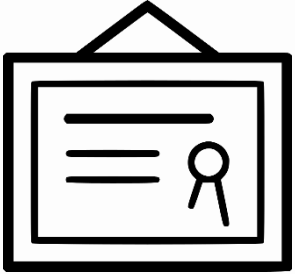




HollySys LE PROGRAMMABLE LOGIC CONTROLLER (PLC) Training

-- Introduction



LE Compact Series Programmable Controller (PLC) is a high performance product which integrates the flexible structure of small PLCs and the powerful capability of medium PLCs.

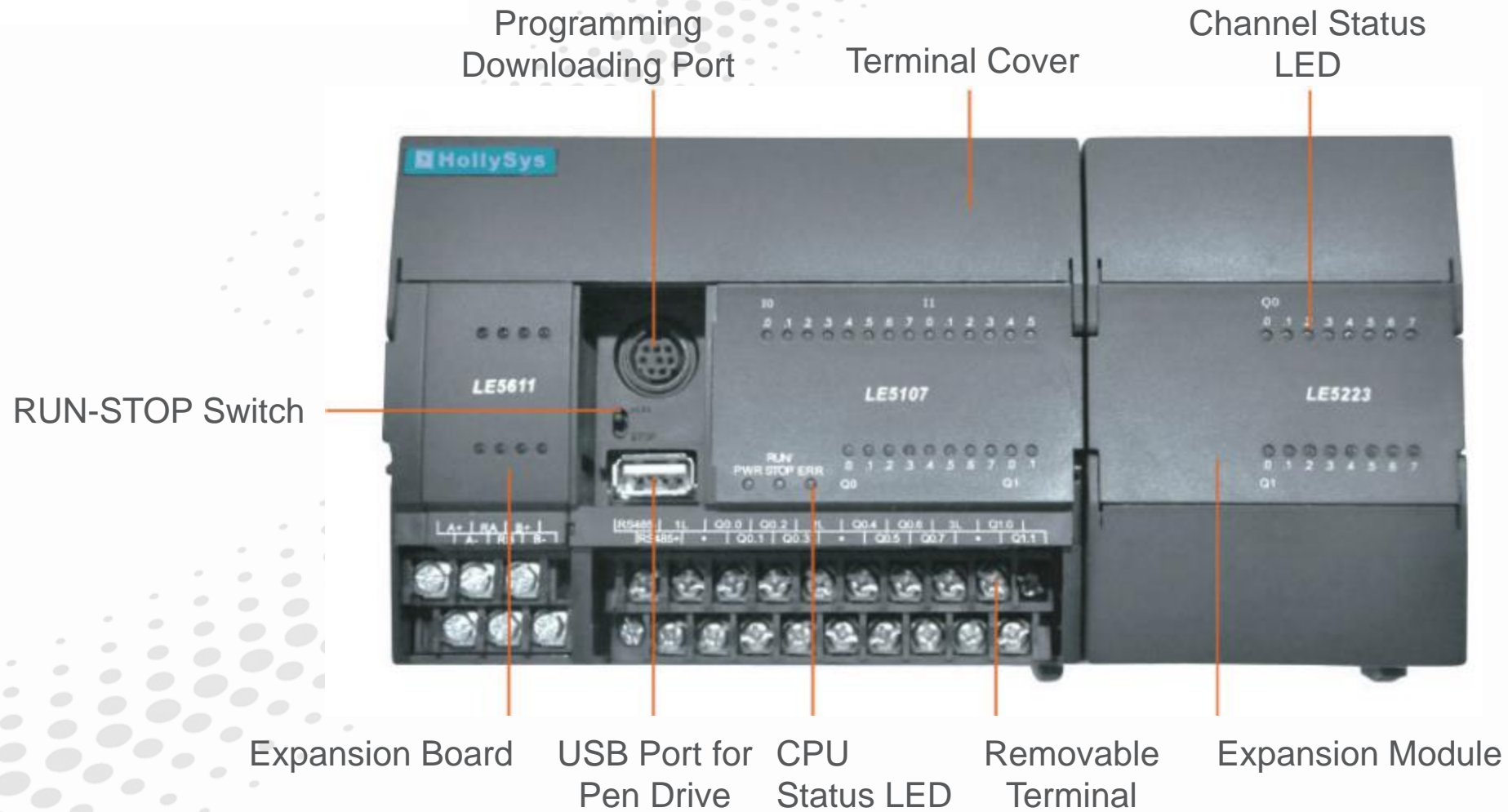


It can be widely used in the constant-pressure water supply, HVAC, textile machinery, packaging machinery, printing machinery, plastic machinery, food machinery and other industries with small and medium-sized process control field



LE Series includes: CPU modules and a wide variety of extension modules, functional boards, accessories.

CPU module can run independently, It is also possible to connect the I/O expansion module when the CPU module I/O point does not meet the system requirements.



1 Powerful Extension Ability

Variety of Expansion Module

Provide a variety of DI, DO, AI, AO, communication modules to achieve economical and practical requirement.

Maximum of 20 Expansion Modules

- Digital IO capacity up to 684 points
- Analog IO capacity up to 162 points

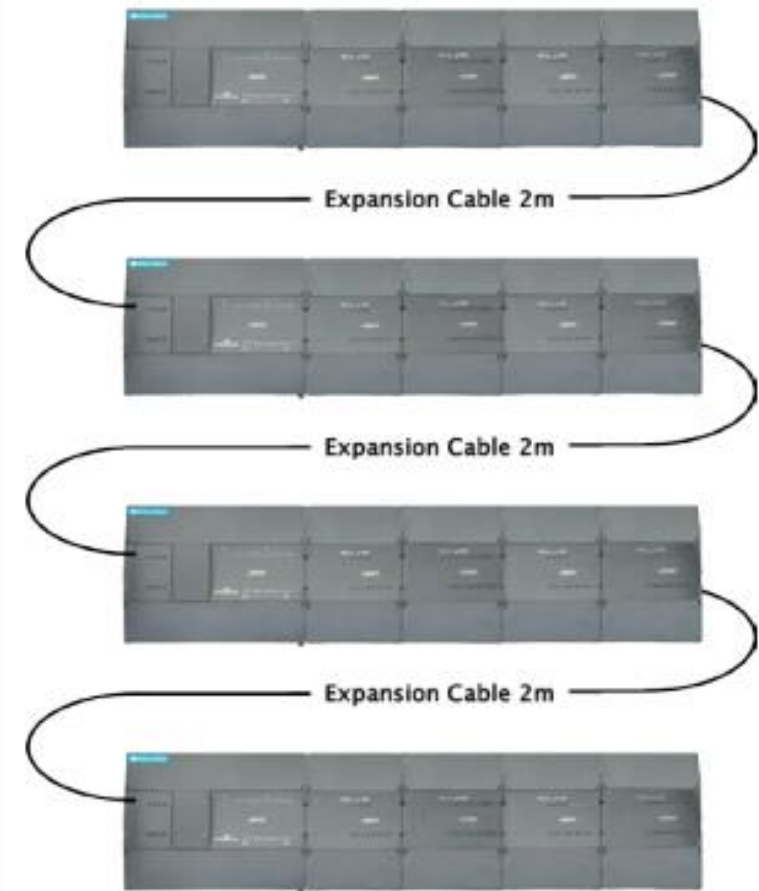


Max 20 Modules.

1 Powerful Extension Ability

Support Extension Cable

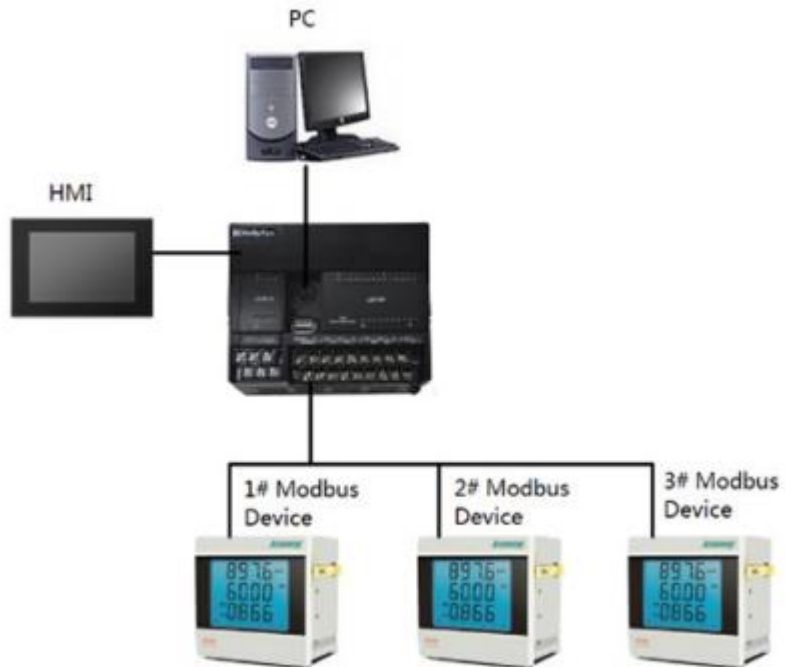
- Extension IO modules can be installed in different cabinets via the extension cables.
- Up to 3 cables per PLC set.



2 Rich COMM Interface & Open Protocol (1 of 3)

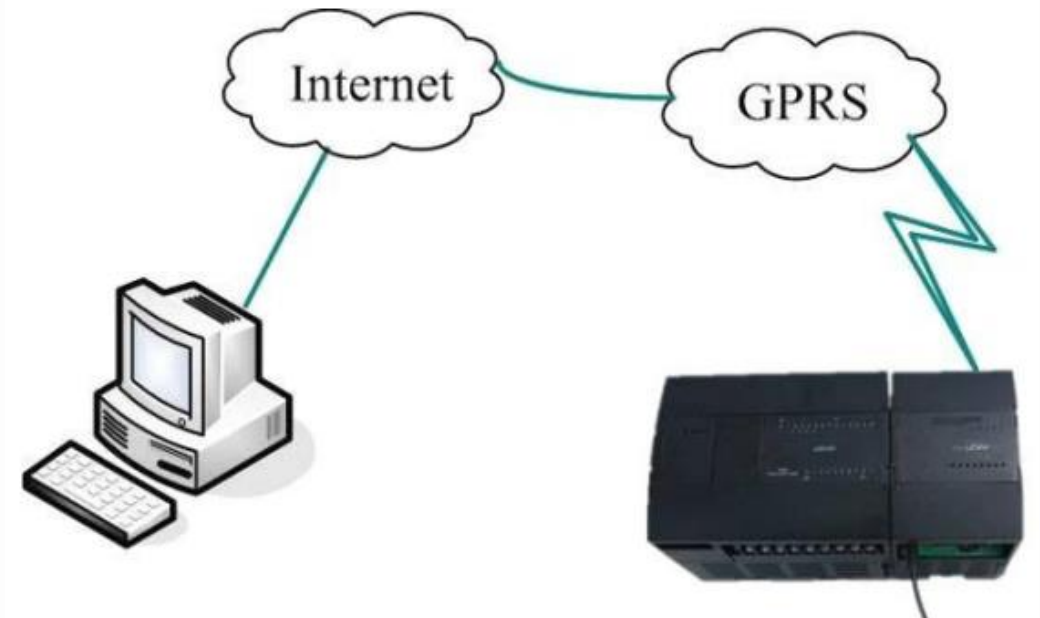
Maximum of 3 Serial Ports

Built-in 2 × RS485 interfaces, 1 × function board for extension of RS485. All RS485 ports support Modbus RTU Master/Slave and Free Port Protocol.



GPRS Expansion Module

GPRS expansion module can be applied to where data collection points are scattered and not suitable to wire cable



2 Rich COMM Interface & Open Protocol (2 of 3)

Support Ethernet Communication & Remote Download

User can download program for LE or remote data monitoring through ethernet expansion module by using LAN or VPN network

Support Profibus-DP Communication

The Profibus-DP expansion module enables LE to communicate with third-party PLCs or devices as Profibus-DP slave station

3 Support USB Data Storage (3 of 3)

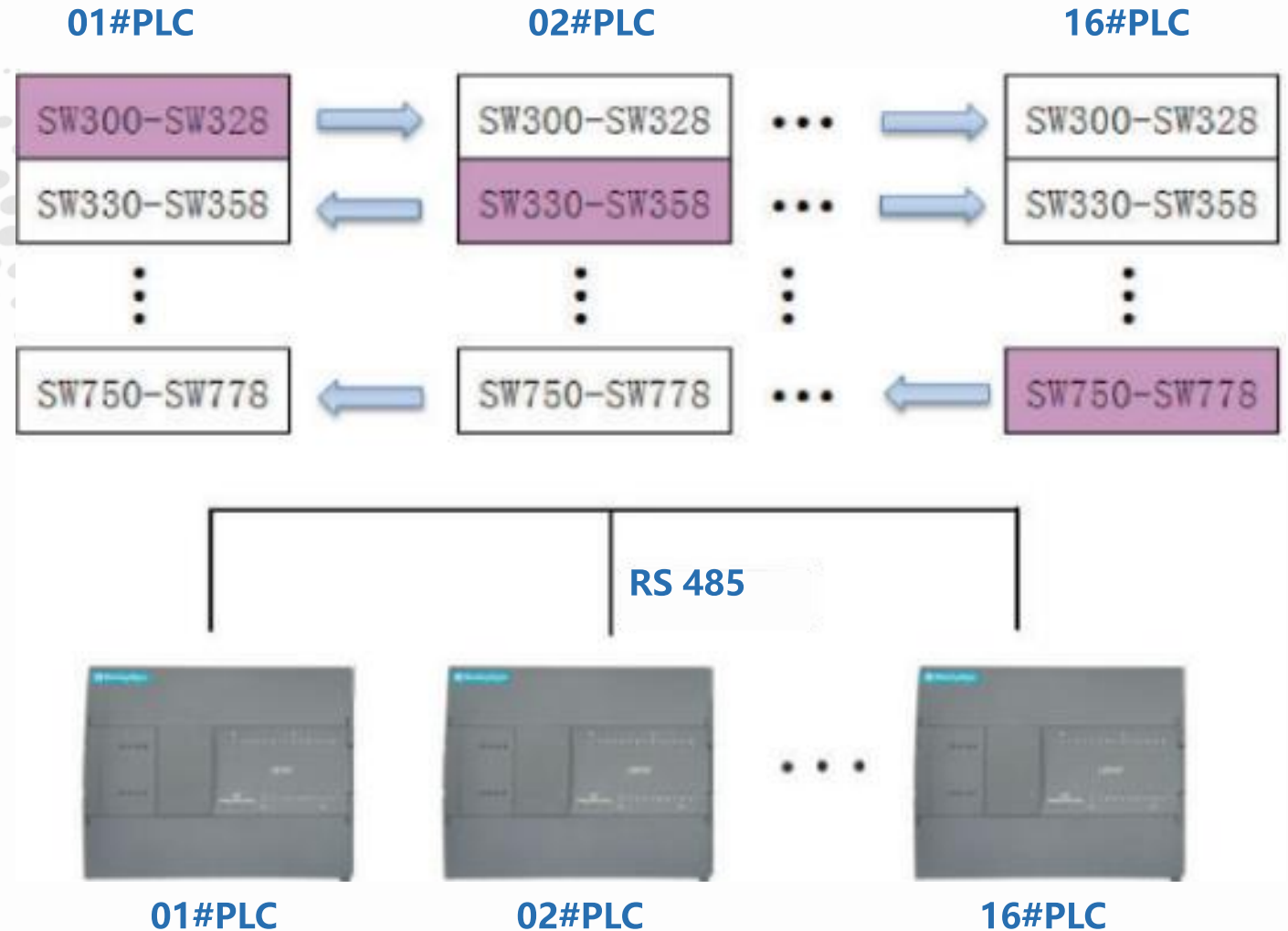
Batch Download of Compiled Program via USB

Batch downloading via USB card can prevent end-user from uploading and decompiling and enhance program confidentiality

4 Machine Interconnection

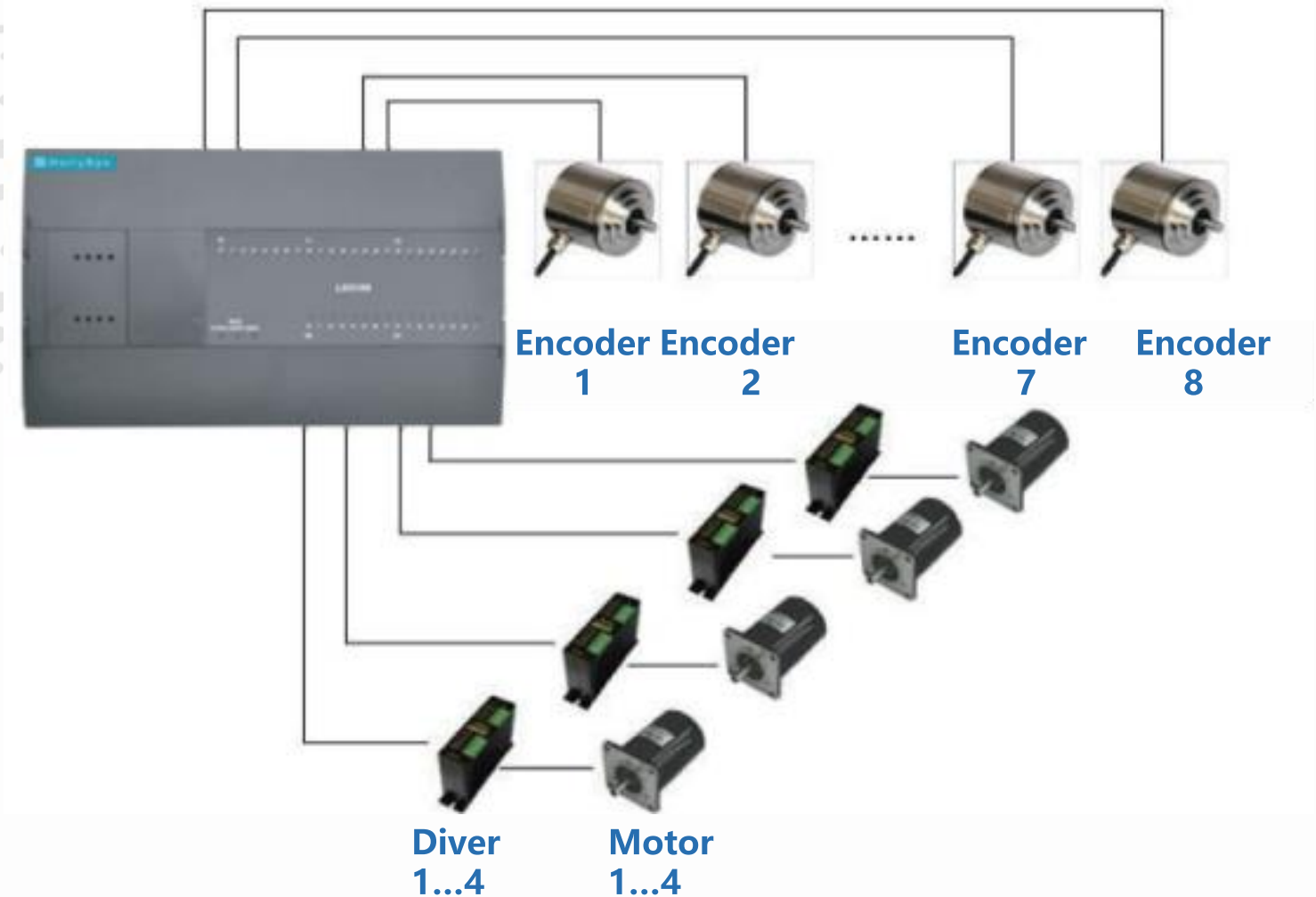
Machine Interconnection with data sharing between CPU

Data exchange between 16 LE CPU(s) established by setting via the built-in RS485 port without the requirement of programming.



5 Powerful Motion Control Ability

Built-in 8 channels
200KHz HSC and 4
channels 100KHz pulse
output



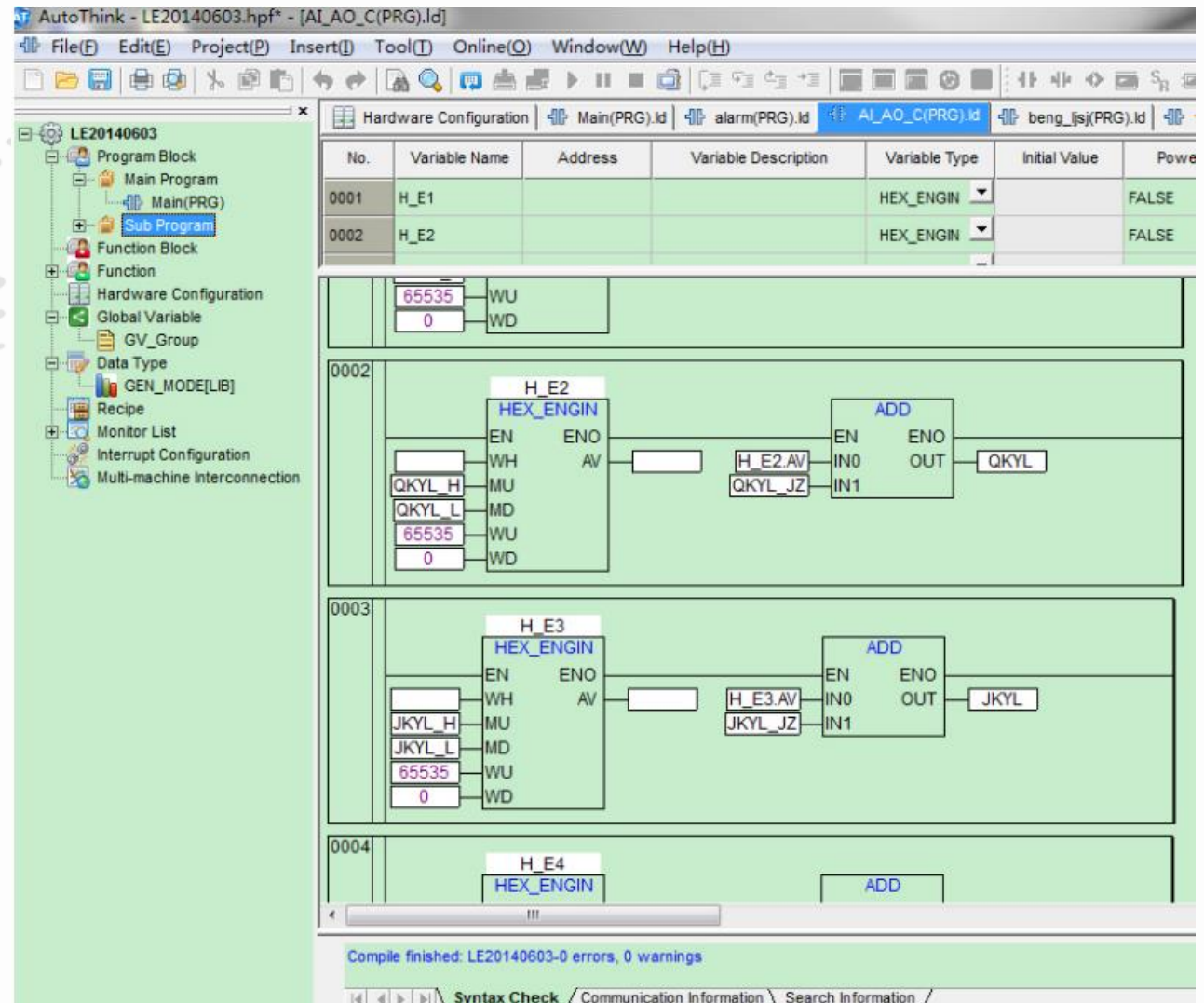
6 Removable Terminal

no need to rewire when
the doing replacement,
avoiding the faults
during wiring and
disconnection, and
saving the time



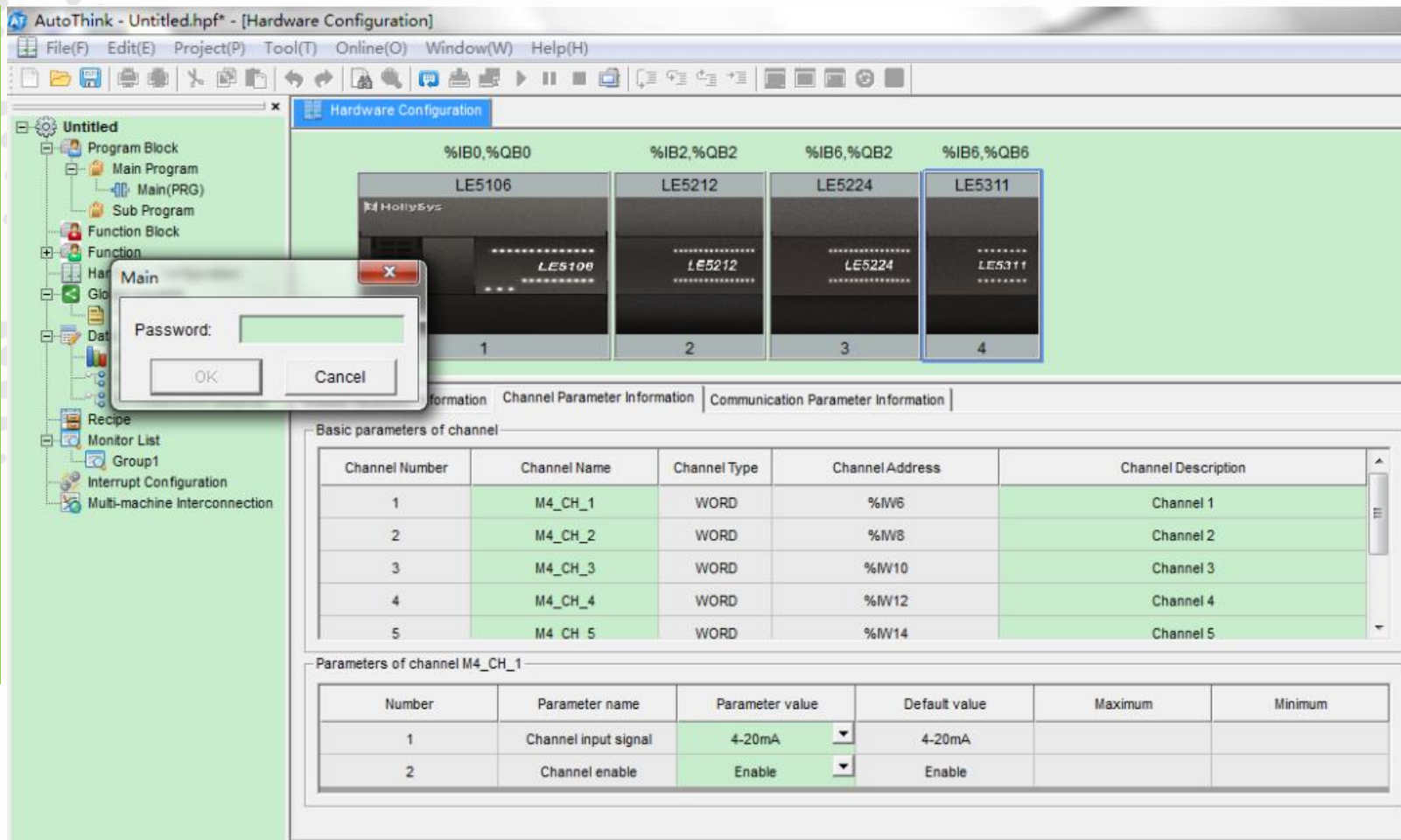
7 Powerfully and User Friendly Engineering Software

- LE programming software AutoThink comply with IEC 61131-3 standard.
- Hardware configuration and calling of function block by simply drag and drop.
- Communication setting is easier and straightforward.



8 Enhanced Program Security

Engineering software supports 6 ~12 bits of password encryption in program, subroutine and library. Not only that, the software also support enabling or disabling of program uploading function to further enhance the program security.



Environmental Specifications	Transportation & Storage	Temperature	IEC 60068-2-1 IEC 60068-2-2	-40°C + 70°C
		Relative Humidity	IEC 60068-2-30	5%°C ~ 95%, Non-condensing
		Dumped and Overturned	IEC 60068-2-31	50mm Fall 4 times, Unwrapped
		Free Fall	IEC 60068-2-32	1m, 5 times, Transport and Package
	Operation Conditions	Working Temperature	IEC 60068-2-1 IEC 60068-2-2	0°C ~ +60 °C
		Temperature Variation	IEC 60068-2-14	5°C ~ 55°C, 3°C/ Min
		Mechanical Shock	IEC 60068-2-27	15G, Duration for 11ms, 6 times per axis
		Sinusoidal Vibration	IEC 60068-2-6	5Hz ≤ f ≤ 9Hz, 3.5 mm Displacement; 9Hz ≤ f ≤ 150Hz, 1G Acceleration
		Level of Mechanical Enclosure	EN60529	IP20

EMC Specifications	All Ports	Electrostatic Discharge	IEC61000-4-2	Contact Discharge 6 KV, Air Discharge 8KV
		Frequency Magnetic Field Immunity	IEC 61000-4-8	30A/m
		Radio-Frequency, Electrmagnetic, Field Immunity Test	IEC 61000-4-8	80MHz~1GHz, 10V/m 1GHz~2.7GHz, 3V/m
		Radio Frequency Sensing Conducted Harassment	IEC 61000-4-6	0.15~80MHz, 3V RMS
	AC System	Voltage Drop or Interruption	IEC 61000-4-11	Each polarity interrupted by 0.5 cycles
		EFT	IEC61000-4-4	2KV
		Surge Transients Immunity	IEC 6 1000-4-5	Line to Ground, 1KV
	Signal	Surge Transients Immunity	IEC61000-4-5	Line to Ground, 1KV
	I/O	EFT	IEC61000-4-4	1kV
Electromagnetic Compatibility		Radiated Interference	IEC 61131-2	30 ~ 230MHz, Quasi-Peak, less than 40dB(μV/m) 230 ~ 1000MHz, Quasi-Peak, less than 47dB(μV/m)
		Conducted Interference	IEC61131-2	0.15 ~ 0.5MHz, Quasi-Peak less than 79dB(μV) 0.5 ~ 30MHz, Quasi-Peak less than 66dB(μV)

Model Type	Model	Description and Specification	Dimension ((mm)
Standard CPU Module	LE5104	14 points I/O CPU module, DC24V power supply, DI 8 × DC24V, DO 6 × transistor output	78 × 97 × 90
	LE5106	24 points I/O CPU module, DC24V power supply, DI 14 × DC24V, DO 10 × transistor output	117 × 97 × 90
	LE5107	24 points I/O CPU module, AC230V power supply, DI 14 × DC24V, DO 10 × relay output	
	LE5107E	24 points I/O CPU module, AC230V power supply, DI 12 × DC24V, DO 8 × relay output, 2×AI (4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V), 2 × AO (4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V)	
	LE5108	40 points I/O CPU module, DC24V power supply, DI 24 × DC24V, DO 16 × transistor output	147 × 97 × 90
Economical CPU Module	LE5107L	24 points I/O CPU module, AC230V power supply, DI 14 × DC24V, DO 10 × relay output, economy	117 × 97 × 90
	LE5109L	24 points I/O CPU module, AC230V power supply, DI 24 × DC24V, DO 16 × relay output, economy	147 × 97 × 90
Function Board	LE5600	RS232 communication expansion board	29 × 62 × 26
	LE5601	RS485 communication expansion board	
	LE5611	2-channel analog input expansion board, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V	
	LE5621	1 channel analog output expansion board, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V	

Model Type	Model	Description and Specification	Dimension ((mm))
Digital Module	LE5210	8-channel digital input module, DI 8 × DC24V input	78 × 97 × 90
	LE5211	16-channel digital input module, DI 16 × DC24V input	78 × 97 × 89
	LE5212	32-channel digital input module, DI 32 × DC24V input	108 × 97 × 89
	LE5220	8-channel digital output module, DO 8 × DC24V transistor output	47 × 97 × 89
	LE5221	8-channel digital output module, DO 8 × relay output	
	LE5223	16-channel digital output module, DO 16 × relay output	70 × 97 × 89
	LE5224	32-channel digital output module, DO 32 × DC24V transistor output	108 × 97 × 89
Analog Module	LE5310	4-channel analog input, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V	70 × 97 × 89
	LE5311	8-channel analog input, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V	
	LE5320	2-channel analog output, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V	47 × 97 × 89
	LE5321	4-channel analog output, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V	70 × 97 × 89
	LE5330	4-channel analog input, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V, 2- channel analog output, 4 ~ 20mA / 0 ~ 20mA / 0 ~ 10V	
	LE5341	4-channel RTD input, Cu50, Pt100 (385), Pt100 (3916)	

Model Type	Model	Description and Specification	Dimension ((mm)
Comm. Module	LE5401	PROFIBUS-DP slave communication module	70 × 97 × 89
	LE5403	Ethernet communication module, supported remote download	
Accessory	LEX5810	485 circular interfaces to USB download cable, 3m	-
	LEX5812	Extension extension cable, 2m	
	LEX5813	485 circular interfaces to USB download cable, 3m	
	LEX5817	LE and HT8000 communication cable, 3m	
	LEA5820	USB memory card for backup	