



LX Series PLC Products Catalog



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Production Line

BD Boards



Analog Boards

- LX3V-2DA-BD
- LX3V-2TC-BD
- LX3V-2AD2DA-BD
- LX3V-2PT2DA-BD
- LX3V-2AD-BD
- LX3V-2PT-BD
- LX3V-2TC2DA-BD

Communication Boards

- LX3V-485-2BD
- LX3V-ETH-BD
- LX3V-CAN-BD

LX Series PLC



- LX3V-1212MT/R
- LX3V-1212MR2H
- LX3V-1212MT4H
- LX3V-1616MT/R
- LX3V-1616MR2H
- LX3V-1616MT4H
- LX3V-2416MT/R
- LX3V-2416MR2H
- LX3V-2416MT4H
- LX3V-1410MT/R
- LX3V-1410MR2H
- LX3V-1410MT4H
- LX3V-1412MT/R
- LX3V-1412MR2H
- LX3V-1412MT4H
- LX3V-3624MT/R
- LX3V-3624MR2H
- LX3V-3624MT4H



- LX1S-14MT/R
- LX1S-20MT/R
- LX1S-14MRC/TC
- LX1S-20MRC/TC

Expansion Module

Input Modules



- LX3V 8EX
- LX3V 16EX

Output Modules



- LX3V-8EYR
- LX3V-8EYT
- LX3V-16EYR
- LX3V-16EYT

Analog Modules



- LX3V-4AD
- LX3V-4DA
- LX3V-4TC
- LX3V-4PT
- LX3V-2AD
- LX3V-2DA
- LX3V-2TC
- LX3V-2PT

Other Modules



- LX3V-1WT
- LX3V-2WT
- LX3V-1PG
- LX3V-4LC

Peripheral Equipments

HMI



Servo



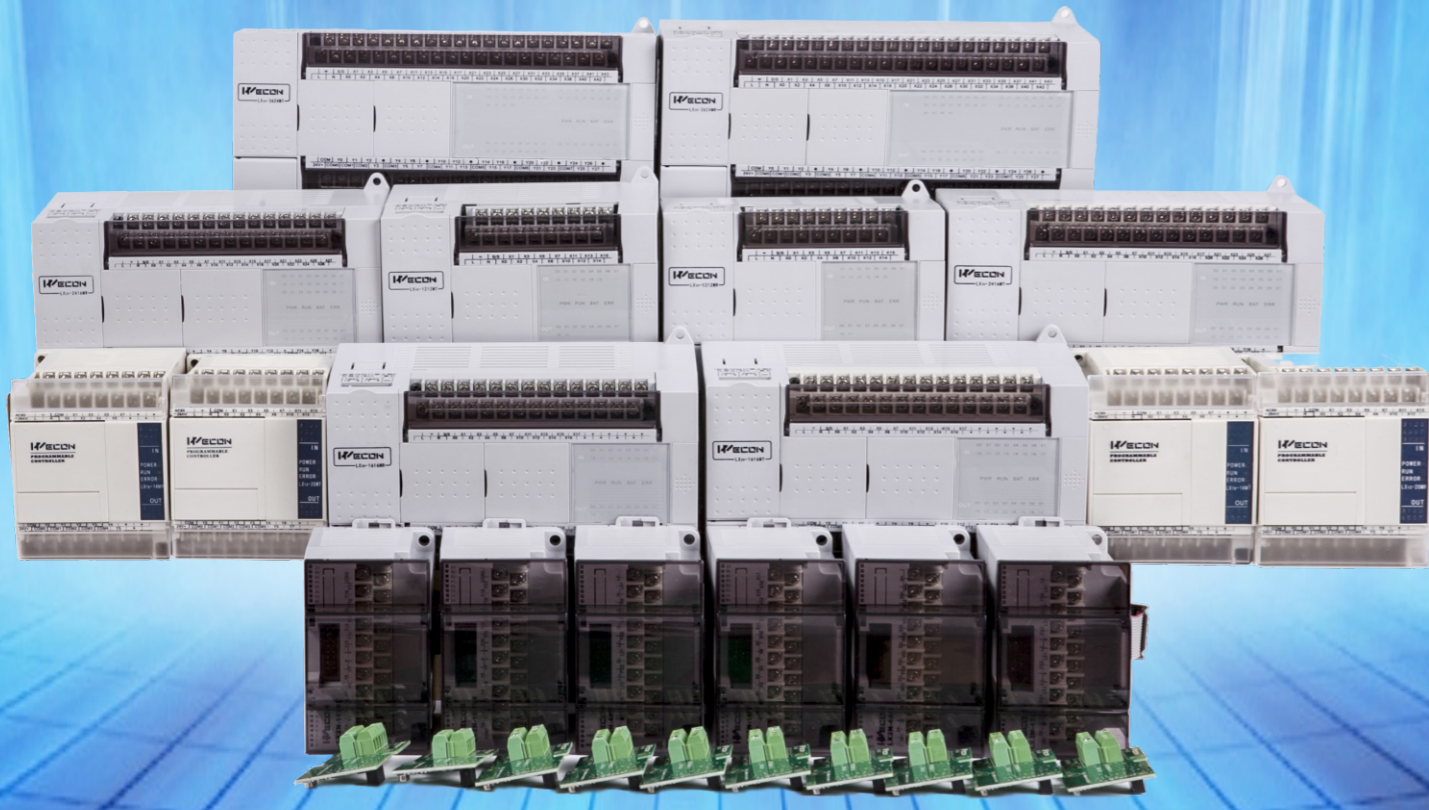
PC



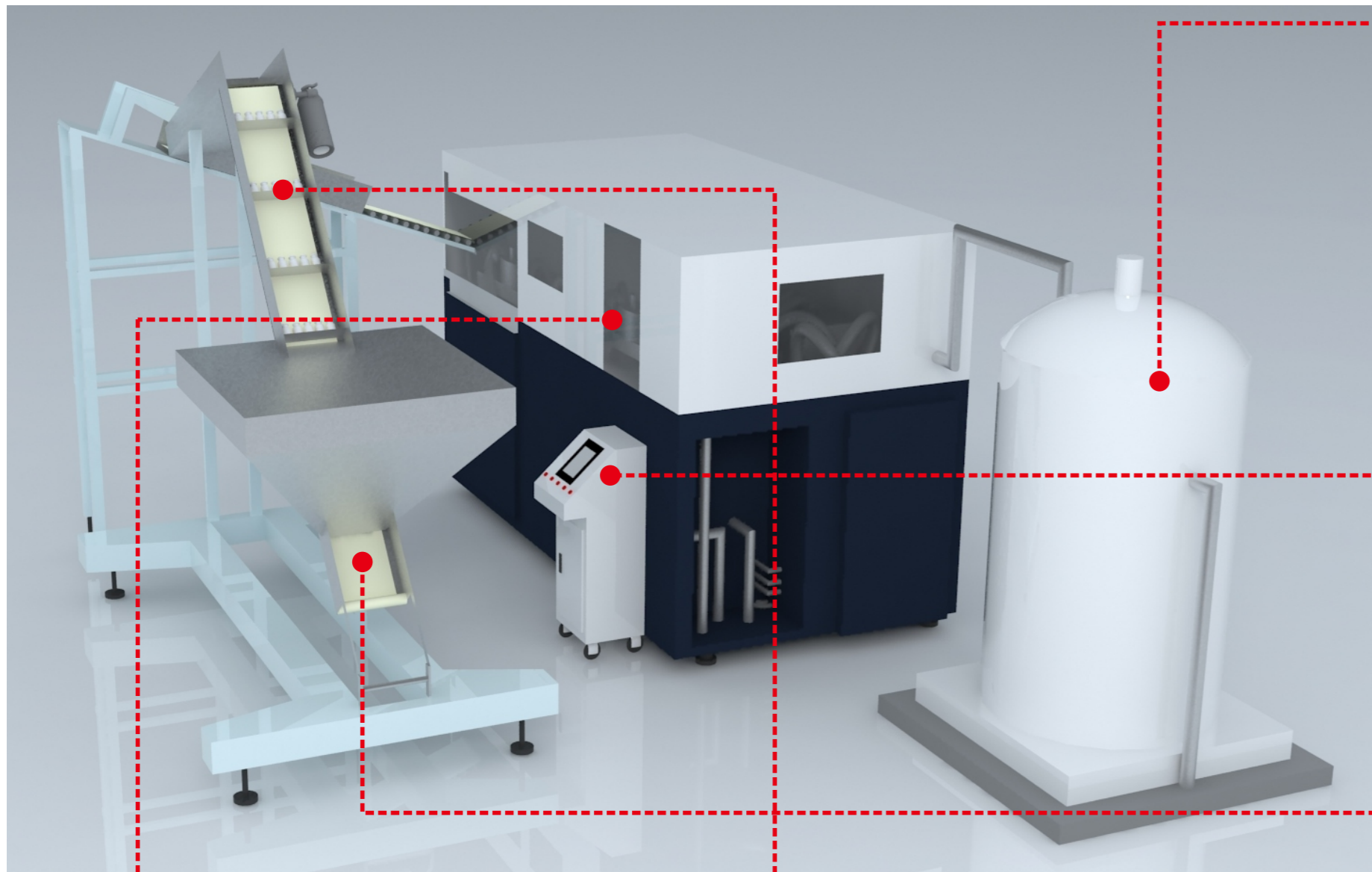
Encoder



Inverter/AC Driver



PLC Features

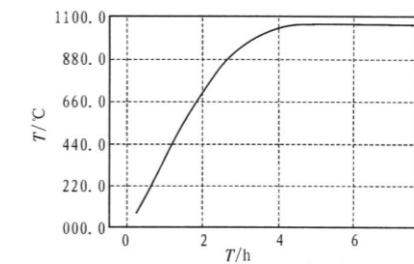


PID



Excellent performance of PID temperature controlling.

- PID auto-tuning
- Quick output respond, high stability, smoothed curve
- Easy parameters adjustment



Interface



USB programming port: download, upload and simulation

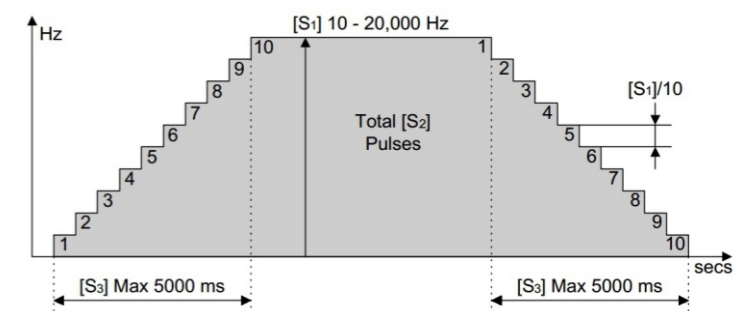
- Exchange data among modules over RS485,RS422
- PLCs interconnections
- Communicate with HMI, PC via WECON PLC protocols
- Extend to 6 serial ports by two BD boards

High Speed Pulse

Maximum 4 channels, Maximum frequency 400KHz



- Support pulse ramp, positioning instruction etc



Kernel Encryption



- Encryption is strong enough to keep your ladder from copying without permission
- Never be cracked

High Speed Counter



- 6 channels high speed counter, 200K*2, 10K*4
- 2 channels AB phase, multiple input
- High speed comparator (32 bit)
- interrupt when reach to set value of comparator

Expansion Module

- **Multiple Module connection**

- a) Analog Module: Maximum:16 modules(requires extended power supply)
- b) I/O Module: Maximum: 8 modules(require extended power supply)

- **AD Module resolution: 16 bits**

- **DA Module resolution: 12 bits**

- **WT Module resolution: 24 bits**

- **PT/TC Module resolution: 14 bits**

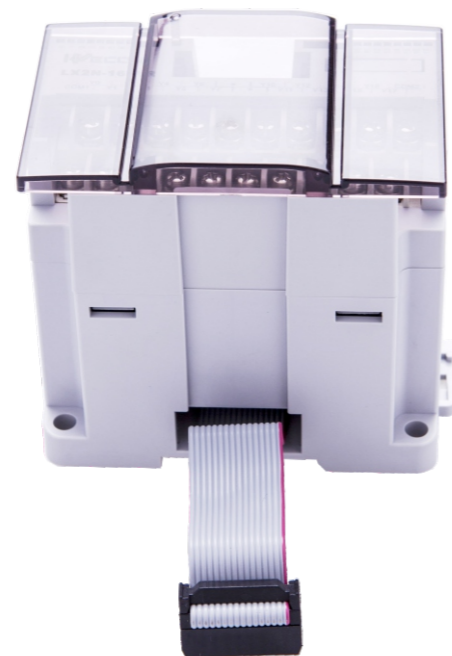
- a) Use with PID instructions
- b) Available sensor for PT Module: PT100, -100 ~ +600(Degree centigrade)
- c) Available sensor for TC Module: K Type, -100 ~ +1200(Degree centigrade)
J Type, -100 ~ +600(Degree centigrade)



LX3V-1WT Weight Module

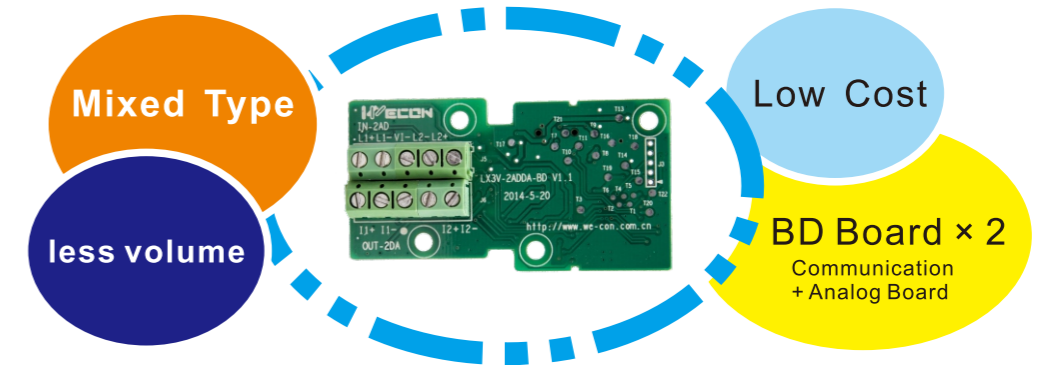
- Computing: set the value of tare, selectable display of net weight or gross weight
- More high frequency, reducing accuracy
- Anti-dither: selectable filter mode and strength
- Validation: get the most accurate weight value

Value	Frequency
0	6.25Hz
1	12.5Hz
2	25Hz
3	50Hz
4	100Hz
5	200Hz
6	400Hz



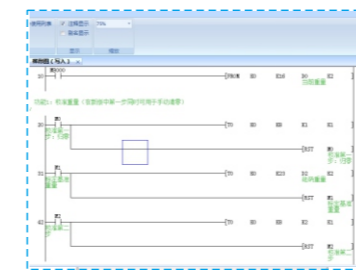
- Reset: reset all parameters to default value
- Checks if it is stable based current configurations
- Checks if it is no-load status based current configurations
- To reduce the interference of temperature changing

BD Board

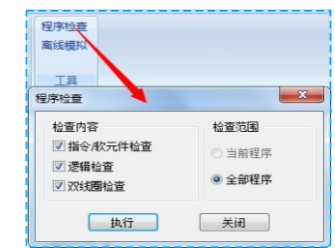


Type	Resolution(Bit)	Input / Output Range	Digital range
DA	12	Output DC: 4~20mA	0~2000
AD	12	Input DC: 4~20mA	0~2000
PT	14	Sensor PT100: -100~+600°C	-1000~6000
TC	14	Sensor K type: -100~+1200°C	-1000~12000
		Sensor J type: -100~+600°C	-1000~6000

PLC Programming Software



Brief UI style



Easy syntax check



Program comparator



Kernel encryption

LX1S/2N Series PLC Naming Rule

LX1S-14 M T C-A 2
 ① ② ③ ④ ⑤ ⑥ ⑦

Item	Description
① Series name	LX1S / LX2N
② Total points	X and Y terminals: 14, 20 etc
③ Main unit	M: PLC Main unit without any expansion modules
④ Output type	T: Transistor / R: Relay
⑤ Extended function	C: COM2 port / 4H: 4 channels high speed pulse output
⑥ Power supply	A: AC 85 ~ 265V
⑦ Instruction set	2: 2N series PLC instruction set

LX3V Series PLC Naming Rule

LX3V-2416 M T 4H-A 2
 ① ② ③ ④ ⑤ ⑥ ⑦

Item	Description
① Series name	LX3V
② Input and output points	First two digits is X points, the other two digits is Y points
③ Main unit	M: PLC Main unit without any expansion modules
④ Output type	T: Transistor / R: Relay
⑤ Extended function	2H: 2 channels high speed pulse output/ 4H: 4 channels
⑥ Power supply	A: AC 85 ~ 265V / D: DC 24V
⑦ Instruction set	Reserved

PLC Main Unit Products List

PLC Model	X	Y	Output Type	Dimension (LxWxH) mm	H S C	H S P O	COM2	Extended BD Board /Module	Power Supply
LX1S-14MR-A	8	6	Relay	75*90*75	2	0	x	x	AC
LX1S-14MT-A	8	6	Transistor	75*90*75	2	2	x	x	AC
LX1S-14MRC-A	8	6	Relay	75*90*75	2	0	√	x	AC
LX1S-14MTC-A	8	6	Transistor	75*90*75	2	2	√	x	AC
LX1S-14MR-A2	8	6	Relay	75*90*75	2	0	x	x	AC
LX1S-14MT-A2	8	6	Transistor	75*90*75	2	2	x	x	AC
LX1S-14MRC-A2	8	6	Relay	75*90*75	2	0	√	x	AC
LX1S-14MTC-A2	8	6	Transistor	75*90*75	2	2	√	x	AC
LX1S-20MR-A	12	8	Relay	75*90*75	2	0	x	x	AC

PLC Main Unit Products List

PLC Model	X	Y	Output Type	Dimension (LxWxH) mm	H S C	H S P O	COM2	Extended BD Board /Module	Power Supply
LX1S-20MT-A	12	8	Transistor	75*90*75	2	2	x	x	AC
LX1S-20MRC-A	12	8	Relay	75*90*75	2	0	√	x	AC
LX1S-20MTC-A	12	8	Transistor	75*90*75	2	2	√	x	AC
LX1S-20MR-A2	12	8	Relay	75*90*75	2	0	x	x	AC
LX1S-20MT-A2	12	8	Transistor	75*90*75	2	2	x	x	AC
LX1S-20MRC-A2	12	8	Relay	75*90*75	2	0	√	x	AC
LX1S-20MTC-A2	12	8	Transistor	75*90*75	2	2	√	x	AC
LX3V-1410MR-A(D)	14	10	Relay	136*107*87	2	0	√	√	AC(DC)
LX3V-1410MT-A(D)	14	10	Transistor	136*107*87	2	2	√	√	AC(DC)
LX3V-1410MT4H-A(D)	14	10	Transistor	136*107*87	2	4	√	√	AC(DC)
LX3V-1410MR2H-A(D)	14	10	Relay	136*107*87	2	2	√	√	AC(DC)
LX3V-1212MR-A(D)	12	12	Relay	136*107*87	2	0	√	√	AC(DC)
LX3V-1212MT-A(D)	12	12	Transistor	136*107*87	2	2	√	√	AC(DC)
LX3V-1212MT4H-A(D)	12	12	Transistor	136*107*87	2	4	√	√	AC(DC)
LX3V-1212MR2H-A(D)	12	12	Mixed	136*107*87	2	2	√	√	AC(DC)
LX3V-1412MR-A(D)	14	12	Relay	136*107*87	2	0	√	√	AC(DC)
LX3V-1412MT-A(D)	14	12	Transistor	136*107*87	2	2	√	√	AC(DC)
LX3V-1412MT4H-A(D)	14	12	Transistor	136*107*87	2	4	√	√	AC(DC)
LX3V-1412MR2H-A(D)	14	12	Mixed	136*107*87	2	2	√	√	AC(DC)
LX3V-1616MR-A(D)	16	16	Relay	175*107*87	2	0	√	√	AC(DC)
LX3V-1616MT-A(D)	16	16	Transistor	175*107*87	2	2	√	√	AC(DC)
LX3V-1616MT4H-A(D)	16	16	Transistor	175*107*87	2	4	√	√	AC(DC)
LX3V-1616MR2H-A(D)	16	16	Mixed	175*107*87	2	2	√	√	AC(DC)
LX3V-2416MR-A(D)	24	16	Relay	175*107*87	2	0	√	√	AC(DC)
LX3V-2416MT-A(D)	24	16	Transistor	175*107*87	2	2	√	√	AC(DC)
LX3V-2416MT4H-A(D)	24	16	Transistor	175*107*87	2	4	√	√	AC(DC)
LX3V-2416MR2H-A(D)	24	16	Mixed	175*107*87	2	2	√	√	AC(DC)
LX3V-3624MR-A(D)	36	24	Relay	221*107*87	2	0	√	√	AC(DC)
LX3V-3624MT-A(D)	36	24	Transistor	221*107*87	2	2	√	√	AC(DC)
LX3V-3624MT4H-A(D)	36	24	Transistor	221*107*87	2	4	√	√	AC(DC)
LX3V-3624MR2H-A(D)	36	24	Mixed	221*107*87	2	2	√	√	AC(DC)

NOTE:

HSC: High speed counter
 HSPO: High speed pulse output
 Mixed: Relay output, transistor for HSPO output
 AC: Alternating current 85V~256V
 DC: Direct current 24V
 Transistor: NPN type

BD Boards Products List

Model	Description
LX3V-2AD2DA-BD	2 channels analog input (4~20mA), 2 channels analog output(4~20mA)
LX3V-2TC2DA-BD	2 channels thermal resistance input, 2 channels analog output(4~20mA)
LX3V-2PT2DA-BD	2 channels thermocouple input, 2 channels analog output(4~20mA)
LX3V-2AD-BD	2 channels analog input (4~20mA)
LX3V-2DA-BD	2 channels analog output (4~20mA)
LX3V-2PT-BD	2 channels thermocouple input
LX3V-2TC-BD	2 channels thermal resistance input
LX3V-485-2BD	Extended COM port (RS485)
LX3V-CAN-BD	Extended CAN function
LX3V-ETH-BD	Extended Ethernet port

PLC Expansion Modules Products List

Model	Description	Model	Description
LX3V-8EX	8 input terminals (X)	LX3V-4AD	4 channels analog input
LX3V-8EYR	8 relay output terminals(Y)	LX3V-4DA	4 channels analog output
LX3V-8EYT	8 transistor output terminals(Y)	LX3V-2AD	2 channels analog input
LX3V-16EX	16 input terminals (X)	LX3V-2DA	2 channels analog output
LX3V-16EYR	16 relay output terminals(Y)	LX3V-4PT	4 channels thermocouple input
LX3V-16EYT	16 transistor output terminals(Y)	LX3V-4TC	4 channels thermal resistance input
LX3V-1WT	1 channel weighing signal input	LX3V-2PT	2 channels thermocouple input
LX3V-2WT	2 channels weighing signal input	LX3V-2TC	2 channels thermal resistance input
LX3V-1PG	1 channel high speed pulse output	LX3V-1PSU	Extended power supply module
LX3V-4LC	4 channels temperature control	-	-

PLC CPU Unit Specification

Item	LX1S Series PLC	LX3V Series PLC
Run Mode	Scan round / Interrupt	
Programming	Instruction List / Ladder	
Total Instructions	Basic instructions: 27	
	Applied instruction: 136+2	

PLC CPU Unit Specification

Item	LX1S Series PLC	LX3V Series PLC
Execute time	Basic instructions: 0.06us	
	Applied instruction: 1~10us	
Steps	2,000 steps	16,000 steps
X Input terminals(Octal)	16 points, X0~X17	256 points, Y0~Y377
Y: Output terminals(Octal)	14 points (Y0~Y15)	256 points (Y0~Y377)
M: Intermediate register	M0~Y511 M8000~M8255	M0~M3071 M8000~M8255
S: State register	S0~S127 S0~S9 S10~S19	S0~S999 S10~S19 S900~S999
T: Timer	100ms	T0~T31 T250~T255(accumulated)
	10ms	T32~T62 T200~T245
	1ms	T62 T246~T249 (accumulated)
C: Counter	16bit plus	C0~C31 C0~C199
	32bit plus-minus	- C200~C234
	32 bit high speed	C235~C255 C235~C255
D: Data register	D0~D255 D1000~D2999 D8000~D8255	D0~D7999 D8000~D8255
V: Indexed addressing register	8 points (V0~V7)	
Z: Indexed addressing register	8 points (Z0~Z7)	
High speed pulse output	2 channels, 200KHz /channel (Y1, Y2), 4 channels extensible (Y1, Y2, Y3, Y4)	
External interrupt	6 points (X0~X5), rising / failing edge pulse supported	
High speed counter interrupt	6 points	
Timer interrupt	3 points	
Latched addresses	Fixed range	Variable range
Storage device	FLASH	
Digital filtering	Digital filtering for all X input terminals	
Serial communication	COM1: RS422	COM1: RS422 or RS485
		COM2: RS485
Extensible interface	RS485	CAN/Ethernet/RS485 (Optional)
Download / Monitor	Serial programming cable	Mini USB cable Serial programming cable

Input / Output Specification

Item		Relay Type	Transistor Type
Output type		-	NPN
X Terminal input		DC 24V±10%	
Output circuit power supply		<AC 250V/ DC30V	DC 5~30V
Insulation		Mechanistic	Optical coupling
LED		Indicate the state of input and output	
Leak current(open circuit)		-	<0.1mA (DC 30V)
Min. load		-	DC 5V / 2mA
Max.load	Resistive	2A/point, 8A/COM port	0.5A/point, 0.8A/COM port, 0.3A/HSPO point
	Inductive	80VA	12W(DC 24V), 7.2W/HSPO point
	General	100W	0.9W (DC 24V)
ON/OFF response time		About 10 ms	<0.2ms, (<5us/HSPO point)

Power Supply Specification

AC Power Supply

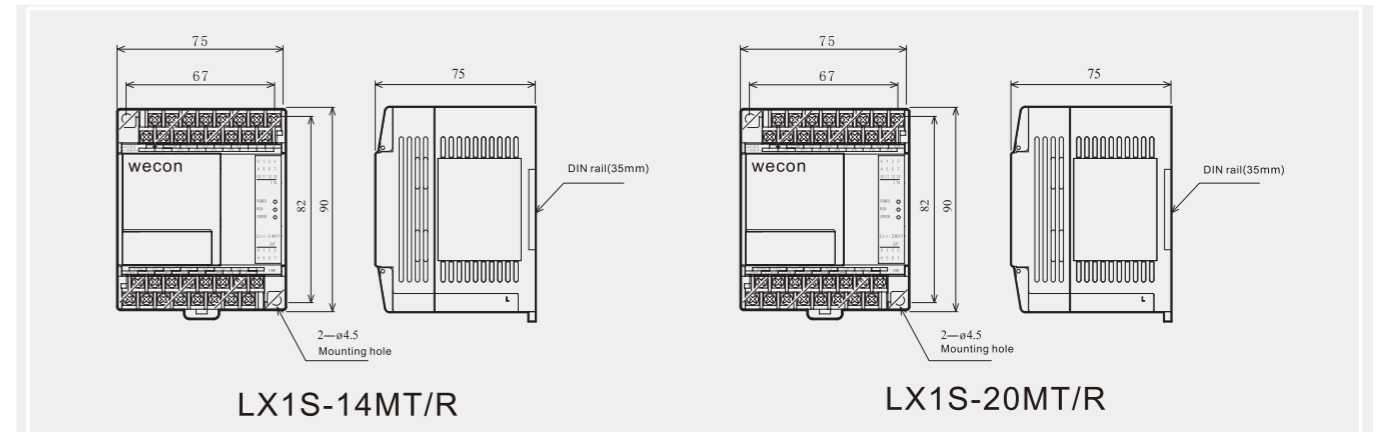
Item		LX1S-14M/20M LX3V-1410M/1212M/1412M	LX3V-1616M/2416M/3624M
Power supply	Rated power	AC 100V~240V, 50Hz / 60Hz	
	Voltage range	AC 86V~265V, 50Hz / 60Hz	
Power outage time		<10ms (continue to work)	
Power fuse		250V / 1A	250V / 3.15A
Rush current		<15A 5ms (AC 100V) <30A 5ms (AC 200V)	
Power consumption		<35W	<60W
Power Output		DC 24V ≤850mA	DC24V ≤700mA

DC Power Supply

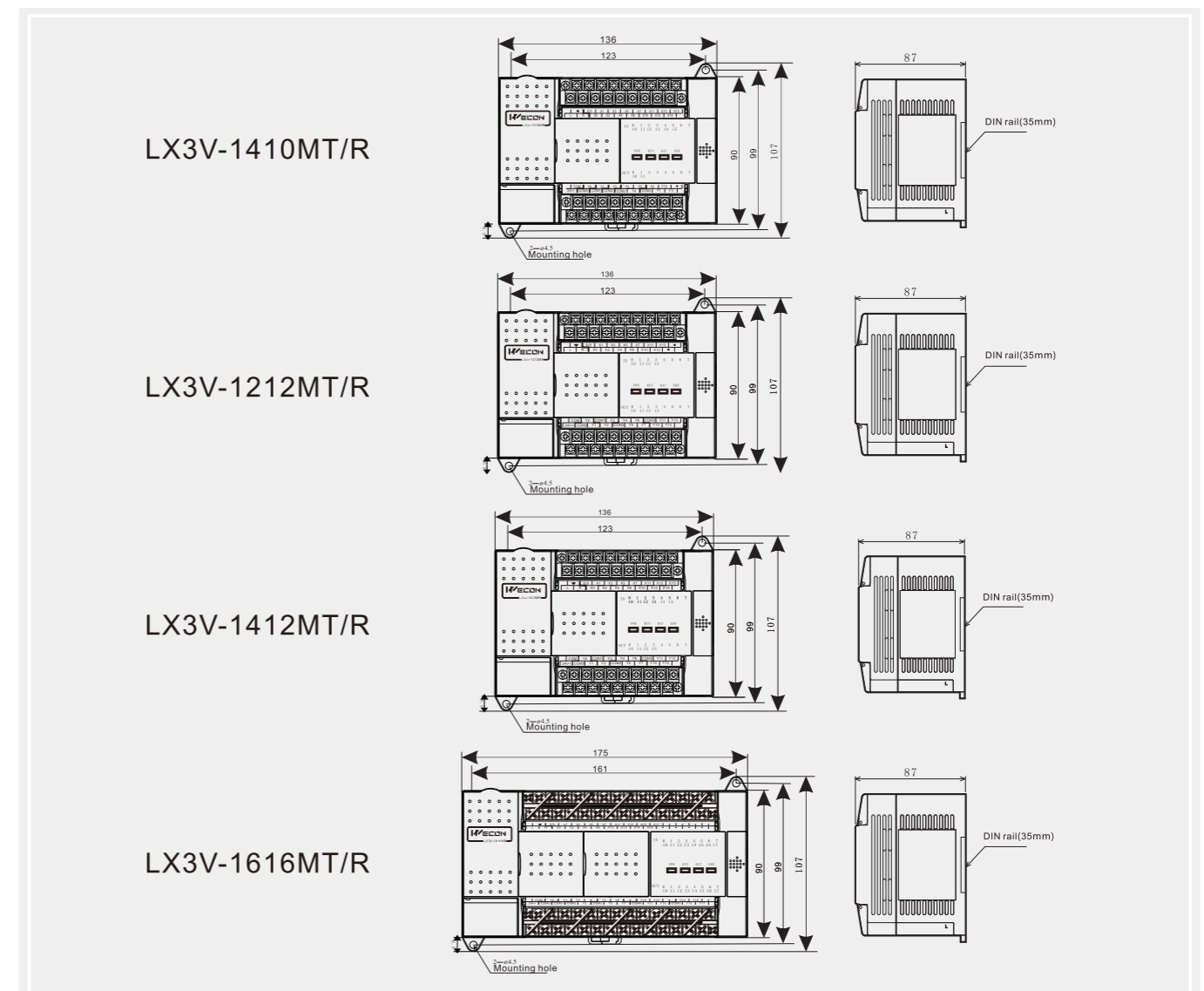
Item	LX3V series PLC
Rated power	DC 24V
Voltage range	DC 24V±10%
Power outage time	<10ms (continue to work)
Power fuse	250V / 3.15A
Rush current	<15A 1ms (DC24V)
Power consumption	<35W (No expansion modules included)

PLC CPU Unit Dimension

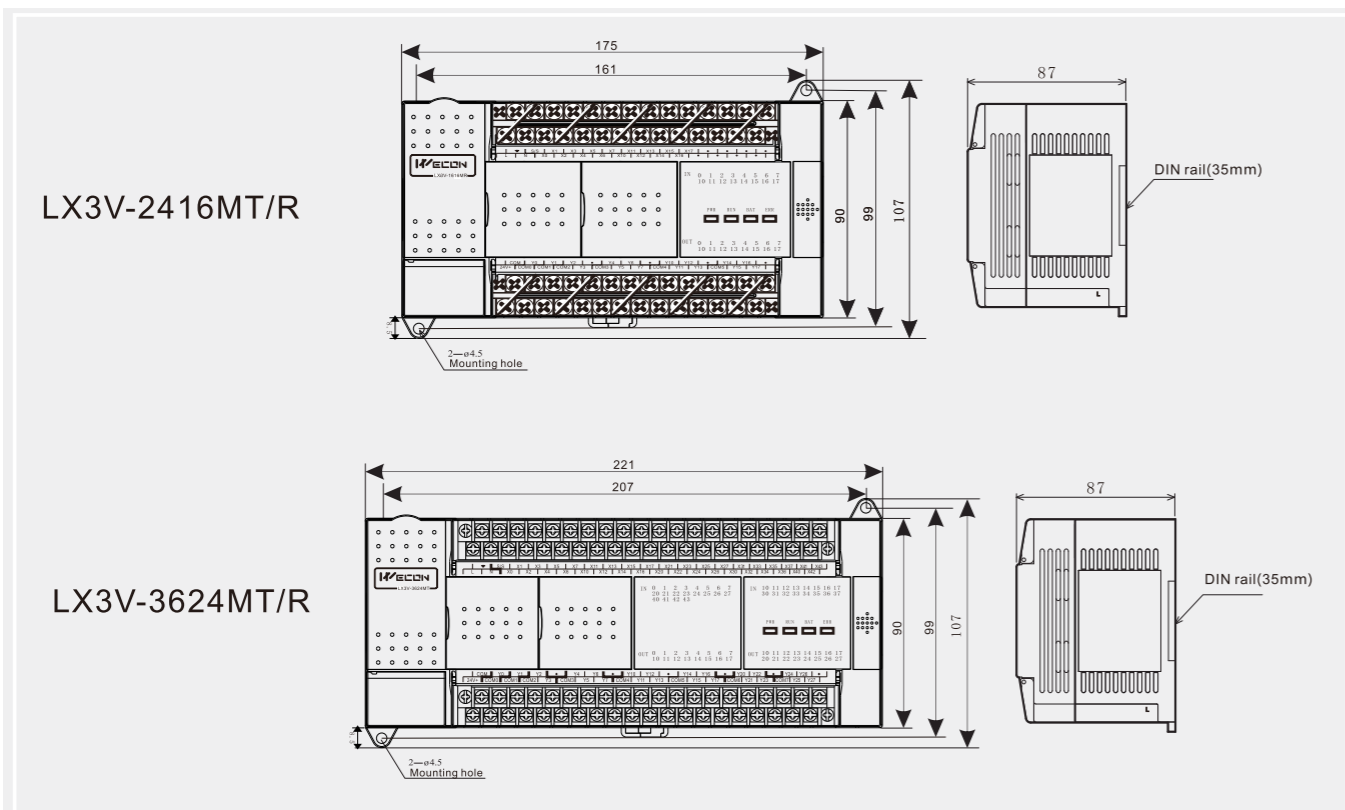
LX1S Series PLC Dimension



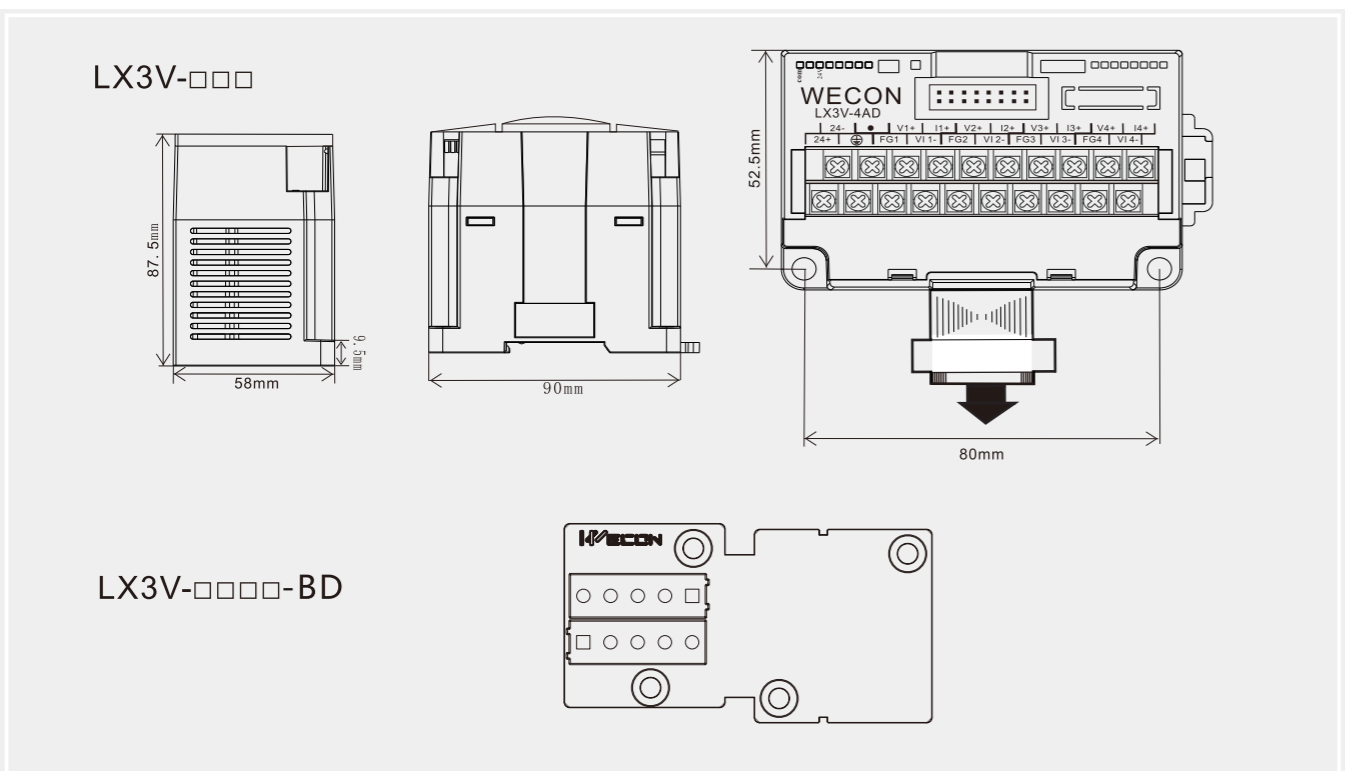
LX3V Series PLC Dimension



PLC CPU Unit Dimension



Expansion Module Dimension



The History of Wecon Company

- 2004.05 - Our entrepreneurs started developing software and hardware of HMI.
- 2005.08 - Launched 5.7 inch Gray HMI
- 2006.03 - Established XIAMEN Wecon Technology Co.Ltd.,
- 2006.06 - 5.7 inch Color HMI released
- 2007.03 - 8 inch true Color HMI released
- 2008.12 - XIAMEN Wecon Technology Co.Ltd. moved to FUZHOU and renamed as FUZHOU Fuchang Wecon Technology Co.Ltd.,
- 2009.03 - 7 inch true Color HMI LEVI-777T released
- 2009.08 - 10.4 inch true Color HMI LEVI-910T released
- 2009.08 - Beijing office established
- 2009.10 - 4.3 inch true Color HMI LEVI-430T released
- 2009.10 - WINCE5.0 version of HMI released
- 2009.11 - Attended "China International Industry Fair" in Shanghai, China.
- 2010.03 - Exported products to Turkey and opened the international market
- 2010.10 - Established department of overseas trade
- 2011.03 - New 7 inch true Color HMI LEVI-777A released
- 2011.05 - 10.2 inch true Color HMI LEVI-102A released
- 2012.08 - LX1S and LX2N series PLC released
- 2012.11 - WECON moved to new factory and office with 1500 square meters
- 2013.04 - LEVI8000 series HMI released, new generation HMI with creative technology
- 2013.06 - LX3V series PLC released
- 2014.03 - WECON established more than 20 offices around China
- 2014.08 - WECON moved to new factory and office with 3000 square meters
- 2014.10 - WECON has distributors or customers over 40 countries on the earth.