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ISO CE FC RoHS









## PRODUCTS CATALOG

**Programmable Logic Controller Human Machine Interface** 



2021 Edition

WECON TECHNOLOGY Co., LTD. All Rights Reserved. HMI/ PLC/ IIoT V-BOX/ Servo/ IPC/ VFD Manufacturer

## About WECON WECON TECHNOLOGY Co.,LTD.

WECON TECHNOLOGY Co.,LTD. is a Chinese high technology company, headquartered in Fuzhou software park, Fujian. We independently develop, manufacture, support and sell Human Machine Interface (HMI), Programmable Logic Controller (PLC), Industrial Panel PC (IPC) and V-BOX for Industrial IoT.

Our products are widely used in Machinery, Metallurgy, Chemical, Oil &Gas and other industries. As of May 1st, 2018, WECON has been authorized 47 patents, including 4 utility patents, 41 software intellectual property patents, and 2 appearance patents.

WECON have over 40 domestic offices in major industrial cities, providing technical and sales services to more than 100 agents and numerous terminals throughout the country. Besides domestic market, WECON also expands International market actively. We export products to more than 120 countries and have many distributors such as India, Turkey, Italy, Poland and so on.

Concept: Easy Control, Easy Life

Values: Specialization, Branding, Internationalization

Mission: Creating value for our customers, staffs, suppliers and society

## Culture

Founded WECON

Establish Foreign Trade Department Awarded as National High-tech Enterprise

Awarded as Fujian Little Giant Enterprise in Science & Technology Launch V-BOX & V-NET IIoT System

2017

Priority into
IoT demonstration platforms
in Fujian

2006

2006-2009

2010

2012

2014

2015

2016

2016

2018

2019

Launch LEVI Series HMI

Launch LX Series PLC

Launch high-end PI Series HMI

Launch Wecon Smart APP

Awarded as Fujian Technology Enterprise

01/26

N PRODUCTS CATALOG

02/30

**Super Size High Resolution** 

## PI8000 SERIES

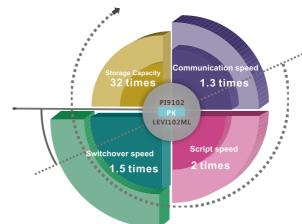
**High-end Configuration** 





#### CORTEX A8 CPU

- Flash 2GB EMMC
- 32GB SD card, 64GB USB Flash Drive supported
- RS232/RS485/RS422 supported
- Ethernet, CANBus, USB2.0 (USB Host; USB Client) port supported



HTML5 as the background language, breaks through the traditional restrictions.



**Exquisite Graphics** 

Rich library of charts ,meters.



#### Multi-language

Up to 8 language that could be displayed on the screen.



#### **External Devices**

Micro-printer, Barcode scanner, WIFI, USB, USB scanner etc.



**Multi-communication Port** 

Up to 5 serial ports, Ethernet port ,CAN protocol, Modbus, over 200 protocols supported.



TFT

16000k colors





**High Definition** 

Full view LCD screen



Cortex A9 1.4GHz

Aluminum Body

All Metal Design, with Nobility



**High Resolution** 

1920 × 1080 pixels

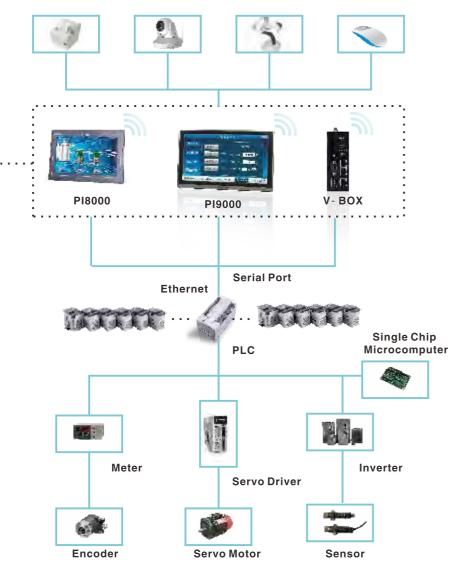


## INTELLIGENT

#### **Cloud Platform**







#### Cloud Monitoring

Wecon Smart App for Android/IOS devices supports multiple users operating simultaneously on PI 8000/9000 Series HMI.





# Water Treatment





## **SECURITY**

#### Cloud Message



**>>>** 

Remote Debug over cloud



In case of emergency, notification could be sent to your mobile and you can deal with it immediately.

Through connection over cloud, PLC and HMI could be connected to PC for online debugging and programming.

#### **Security System**



#### Access Authorization

Access authorization can be set to each button to protect against unauthorized operation or misoperation.

Roles are to be assigned to users to facilitate management.



#### Operation Record

- To record each step of operations from authorized users.
- Timestamp, buttons pressed and depressed, everything would be logged.
- Log files are stored in database format for data analyzation to improve management.



#### Security Managment

- Programmer passwords can protect your project from unauthorized access or reverse engineering.
- Project passwords protect your project files against uploading and running on unauthorized HMIs.



#### Password Security

Project passwords, access passwords, administration passwords and remote passwords are working together to ensure secure access.





## Pl3000ie SERIES

## NEW UPGRADE MORE FLUENT TOUCH

- Front indicator light
- Enhance software security
- Less boot time





Advanced CPU



Faster screen switch



Better communication stability

## **PI3000ie SPECIFICATIONS**

**Basic HMI** 





Model

PI3070ie

PI3102ie

Item		Specifications					
CPU		Cortex A35 1.2GHz					
То	uch Screen	High precision four-wire resistive					
	Screen Size	7 Inch	10.2 Inch				
	Resolution	800*480	1024*600				
Display	Brightness	250 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>				
	Backlight Type	LED					
	Backlight Life Time	50,000	Hours				
	Colors	16,000k colors					
	Flash	128	MB				
Storage	RAM	DDRII 64MB					
SD Card		N	A				
	USB	USB Host: USB 2.0 x 1; USB Client: USB 2.0 x 1					
Dente	Port Number	1 Physical Serial Port					
Ports	Serial Port	COM1: RS232, RS422 / RS485 (2 in 1)					
	Ethernet	N/A					
Perma	anent Calendar	Built-in					
Power	Power Supply	24V DC(12~28V DC)					
1 00001	Power Consumption	< 15W					
	Enclosure	PC+ABS					
Dimension	Dimension(mm)	201.2W*147.2H*39.0D	272.0W*191.0H*41.5D				
<b>D</b> iinonoion	Mountin g Size (mm)	192.0W*138.0H	260.0W*179.0H				
	Weight (KG)	0.52	1.02				
	Protection	IP65 (Fro	nt panel)				
Environment	Temperature	Storage: -20°C~70°C;	Working: -10 °C ~60 °C				
	Humidity	10 ~ 90%RH(N	on-condensing)				
Vibration Resistance		10 ~ 25 Hz (X, Y, Z direction 2G/30 minutes)					
CE	Certification	CE Marked					
FCC	Certification	FCC C	Class A				
Prograr	mming Software	PI St	rudio				
Remote Control		N/A					

## **PI3000i SPECIFICATIONS**

**Basic HMI** 







Model

PI3070i Pi3070i-N

PI3102i

PI3070i-SL PI3070i-N-SL

	Item	Specifications							
	CPU	Cortex A7 528MHz							
To	uch Screen	High precision four-wire resistive							
	Screen Size	7 lr	nch	10.2 Inch	7 Inch				
	Resolution	800*480		1024*600	800*4	180			
Display	Brightness	250 c	:d/m²	350 cd/m <sup>2</sup>	250 cc	d/m²			
ызріау	Backlight Type			LED					
	Backlight Life Time			50,000 Hours					
	Colors		16,000k colors						
	Flash			128MB					
Storage	RAM	DDRIII 128MB							
	SD Card	NA							
USB		USB Host: USB 2.0 x 1; USB Client: USB 2.0 x 1							
	Port Number	1 Physical Serial Port							
Ports	Serial Port	COM1: RS232, RS422 / RS485( 2 in 1)							
	Ethernet	N/A	YES	YES	N/A	YES			
Perma	anent Calendar	Built-in							
Power	Power Supply	24V DC(12~28V DC)							
i owei	Power Consumption	< 8	W	< 10W	< 8W				
	Enclosure		ABS						
Dimension	Dimension(mm)	201.2W*14	7.2H*39.0D	272.0W*190.0H*41.5D	191.2W*137.2H*41.0D				
Billionolon	Mounting Size (mm)	192.0W	138.0H	260.0W*179.0H	172.0W*111.0H				
	Weight (KG)	0.51 /	0.74	1.00 / 1.31	0.52 /	0.74			
	Protection			IP65 (Front panel)					
Environment	Temperature		Sto	rage: -20℃~70℃; Working: -10℃~6	60℃				
	Humidity			10 ~ 85%RH(Non-condensing)					
Vibration Resistance		10 ~ 25 Hz (X, Y, Z direction 2G/30 minutes)							
CE (	Certification			CE Marked					
FCC	Certification			FCC Class A					
Progran	nming Software			PI Studio					
Remote Control		N/A							

## **PI3000 SPECIFICATIONS**

**Basic HMI** 





Model

PI3070N

PI3102H

Item			Specifications					
CPU			Cortex A8 600MHz					
Touch Screen			High precision four-wire resistive					
Screen Size		n Size	7 Inch	10.2 Inch				
	Resol	ution	800*480	1024*600				
Display	Bright	ness	300 cd/m <sup>2</sup>	350 cd/m <sup>2</sup>				
Diopidy	Backlig	ht Type	LE	D				
	Backlight	Life Time	50,000	Hours				
	Col	ors	16,000k	colors				
	Fla	ish	128	MB				
Storage	RA	M	DDRIII	128MB				
	SD Card		Compa	atibl e				
	USB		USB Host: USB 2.0 x 1; USB Client: USB 2.0 x 1					
	Port N	umber	2 Physical Serial Ports					
	Serial	COM1	RS232/RS422/RS485					
Ports		COM2	RS232/RS485					
	Port	COM3	-	-				
	Ethe	ernet	YES					
Perma	anent Calend	lar	Built-in					
Power	Power	Supply	24V DC(12~28V DC)					
1 OWG	Power Co	nsumption	<10	DW .				
	Enclo	osure	AE	SS .				
Dimension	Dimensi	on(mm)	200.1W*146.0H*36.5D	271.8W*190.4H*41.2D				
	Mountin g	Size (mm)	192.0W*138.0H	260.0W*179.0H				
	Weigh	t (KG)	0.6	1.2				
	Prote	ction	IP65 (Fro	nt panel)				
Environment	Tempe	erature	Storage: -30℃~70℃;	Working: -10 $^{\circ}$ C~60 $^{\circ}$ C				
	Humidity		10 ~ 90%RH(Non-condensing)					
	Vibration F	Resistance	10~25Hz (X,Y,Z direction 2G/3D minutes)					
	Certification		CE Ma					
	Certification		FCC C					
	mming Softw	vare	PI St					
Remote Control			N/A					

## **PI8000 SPECIFICATIONS**

**Advanced** НМІ







Model

PI8070

PI8102H

PI8104

	Item		Specifications						
CPU		Cortex A8 600MHz							
Touch Screen		High precision four-wire resistive							
Display		Screen Size	7 Inch 10.2 Inch		10.4 Inch				
	Resolution		800*480	1024*600	800*600				
		Brightness	300 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>					
Бюріаў	Ва	cklig ht Type	LED						
	Bac	klight Life Time		50,000 Hours					
		Colors		16,000k colors					
		Flash		2GB EMMC					
Storage		RAM		DDRIII 512MB					
	SD Card			Compatible					
		USB	USB H	ost:USB 2.0 x 1 USB Client:USB	3 2.0 x 1				
1/0	Serial	COM1	RS232,RS422/RS485						
I/O	Port	COM2		RS232,RS485					
Ports	FUIL	COM3	RS485						
	Ethernet			YES					
		CAN	YES						
Perm	nanent C	alendar	Built-in						
Power	F	Power Supply	24V DC(12-28V DC)						
rowei	Pow	er Consumption	<10W						
		Enclosure		ABS					
Dimension	Di	imension(mm)	200.1W*146.0H*36.5D	271.8W*190.4H*41.2D	298.0W*223.0H*53.5D				
Diffiction	Mou	unting Size(mm)	192.0W*138.0H	260.0W*179.0H	288.0W*212.0H				
		Weight(KG)	0.6	1.2	1.9				
		Protection		IP65 (Front panel)					
Environment	Stora	age Environment	Stora	ge :-30°C ~ 70°C; Working: -10°C	~ 60℃				
	Work	king Environment		10 ~ 90 % RH(Non-condensing)					
Vibration Resistance		ation Resistance	10 ~ 25 Hz (X, Y, Z direction 2G/30 minutes)						
CE	E Certific	atio n	CE Marked						
FC	C Certifi	cation		FCC Class A					
	Softwar	re		PI Studio					
Remote Control		ontrol	Optional						

## **PI9000 SPECIFICATIONS**

High-end НМІ



Model

PI9150

	Item		Specifications				
	CPU		Cortex A9 1.4GHz				
Touch Screen		en	High precision four-wire resistive				
	Screen Size		15 Inch				
	Resolution		1920*1080				
Display	В	rightness	250 cd/m <sup>2</sup>				
Display	Bac	klight Type	LED				
	Backli	ght Life Time	50,000 Hours				
		Colors	16,000k colors				
		Flash	4GB EMMC				
Storage	RAM		DDRIII 512MB				
	SD Card		Compatible				
		USB	USB Host:USB 2.0 x 1 USB Client:USB 2.0 x 1				
I/O	0	COM1	RS232, RS422/RS485				
Ports	Serial	COM2	RS232, RS485				
	Port	COM3	RS485				
	E	Ethernet	YES				
Perma	nent Cal	endar	Built-in				
Power	Pov	ver Supply	24V DC(12-28V DC)				
rowei	Power	Consumption	<20W				
	Е	nclosure	Aluminum				
Dimonolon	Dime	ension(mm)	402.9W*253.2H*47.0D				
Dimension	Mount	ing Size(mm)	394.0W*244.0H				
	We	eight (KG)	3.1				
	Р	rotection	IP65 (Front panel)				
Environment	Storage	e Environment	Storage:-30°C ~ 70°C; Working: 0°C ~ 50°C				
LIMIOIIIICIR	Workin	g Environment	10 ~ 90%RH(Non-condensing)				
	Vibratio	on Resistance	10 ~ 25 Hz (X, Y, Z direction 2G/30 minutes)				
CE	Certificati	on	CE Marked				
FCC	Certifica	tion	FCC Class A				
	Software		PI Studio				
Ren	note Cont	rol	Optional				

## LEVI SERIES SPECIFICATIONS

**Standard** НМІ







Model

LEVI2035T

LEVI2043T

LEVI2043E

LEVI2043E-N

	Item	Specifications								
	Screen Size	3.5 Inch	4.3 Inch	4.3 Inch	4.3 Inch					
	Resolution	320*240	480*272	480*272						
	Colors		260k	colors						
	Brightness		400 cd/m <sup>2</sup>							
	Backlight Type		LED							
	Touch Screen	High precision four-wire resistive								
	Backlight Life Time		50,000 hours							
General	CPU		32-bits 300	MHz RISC						
551,515.	Storage		128M FLASH +	· 128M DDRAM						
	RTC		256KB+rea	I time clock						
	Printer Port		Serial Po	ort Printer						
	USB Port	Micro-USB	USB	Micro	-USB					
	SD Card	-								
	COM1	RS422/RS485								
	COM COM2	RS232								
	COM3									
	Rated Power		< 5W							
	Power Supply	DC24V (12 ~ 28V DC)								
Power	Allowed Power Fail	< 5ms								
	Insulation	>20MΩ 500VDC								
	Withstand Voltage	500V AC <1 minute								
	Enclosure		ABS,	Black						
Dimension	Dimension (mm)	96.0W*81.0H*33.0D	141.4W*85.4H*38.9D	141.0W*86						
	Mounting Size	91.0W* 73.0H	131.0W*79.0H	131.0W	* 78.0H					
	Net / Gross (KG)	0.14/0.26	0.23 / 0.39		/0.30					
	Temperature	Working	Temperature : -10 ~ 60°C ;	; Storage Temperature : -2	0 ~ 70℃					
Environment	Humidity		10 ~ 85%RH (N	lon-condensing)						
	Vibration		10 ~ 25 Hz (X, Y, Z dir	rection 2G/30 minutes)						
	Cooling		Air Co	poling						
Extension	Ethernet	-			YES					
	rotection		IP65 ((Front panel))							
	Certification		CE M							
FCC Certification			FCC Class A							

## **LEVI SERIES SPECIFICATIONS**

Standard HMI





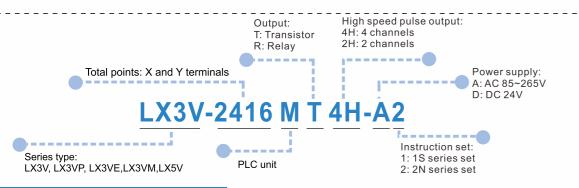
Model

LEVI2070D

LEVI700ML

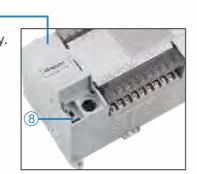
	Item		Specific	cations				
	Scre	en Size	7 Ir	nch				
	Resolution		800*480					
	С	olors	260k colors					
	Brig	phtness	3000	d/m <sup>2</sup>				
	Backl	ight Type	LED					
	Toucl	n Screen	High precision for	our-wire resistiv e				
	Backligl	nt Life Time	50,000	) hours				
General	(	CPU	32-bits 300	MHz RISC				
55.15.13.	St	orage	128M FLASH +	- 128M DDRAM				
	ı	RTC	256	SKB				
	Prin	ter Port	Serial po	ort Printer				
	USB Port		USB Host + USB Client					
	SD Card		-					
	СОМ	COM1	RS422/RS485					
		COM2	RS232					
		COM3	-	-				
	Rate	d Power	< 8W					
	Powe	er Supply	DC24V (12 ~ 28V DC)					
Power	Allowed Power Fail		< 5ms					
	Insulation Resistance		> 20MΩ 500V DC					
	Withsta	and Voltage	500V AC	<1 minute				
	En	closure	Grey, PC+ABS	ABS,Black				
Dimension	Dimens	sion (mm)	201.0W*147.0H*39.0D	201.0W*146.0H*36.0D				
	Mountin	g Size (mm)	192.0W*138.0H	192.0W*138.0H				
	Net / G	Gross (KG)	0.5 /0.74	0.56 /0.80				
	Tem	perature	Working Temperature : -10 ~ $60^{\circ}$ C ;	Storage Temperature : -20 ~ 70 $^{\circ}\mathrm{C}$				
Environment	Hu	ımidity	10 ~ 85%RH (N	lon-condensing)				
	Vibration I		10 ~ 25 Hz (X、Y、Z d	irection 2G/30 minutes)				
	C	ooling	Air co	poling				
ı	Protection		IP65 (Fro	ont panel)				
CE	Certificatio	n	CE M	arked				
FCC	Certification	on	FCC C	Class A				

## PROGRAMMABLE LOGIC CONTROLLER



#### **PLC Introduction**

- 1. Universal Power Supply Design —85~264V AC 50/60 HZ, wide range power supply
- 2. All core components used are from well-known global brands.3. The 'Three layer coating' ensures the reliability in harsh environment.
- 4. Flash memory data storage.
- 5. 200 KHz high speed.
- 6. Com port 600 TVS, static surge protection.
- 7. RS485 communication port ensures the reliability of communication in vibration.
- 8. Reliable and stable high speed USB port for programming download/monitor.



#### **High Speed Pulse Input**



- External high speed pulse input supports Encoder (AB phase) input, pulse + direction mode input; Maximum support for 200 KHz pulse signal input.
- AB phase signal can support configurable frequency settings (i.e. x1, x2 or x4).

#### **High Speed Pulse Output**



- Supports high speed pulse signal output with acceleration and deceleration.
- The acceleration and deceleration time are configurable.
- Pulse modulation output one by one.

## Running Speed ACE-Time DCE-Time Time

#### **Program Encryption**



It prevents users from illegal copy and tamper of the program.

#### Subprogram Encryption

Partial encryption function of the ladder diagram can be realized, and it can encrypt subprograms and interrupts. This function enables protection of important subprogram segment. By choosing the subprogram and setting the password, it can be encrypted. Once it has been encrypted than the subprogram is in "subprogram encryption" state and the encrypted contents will not be displayed.

#### Ladder Encryption Methods

The PLC encryption includes project encryption, upload password and download password. All of those passwords can be used for the entire ladder program.

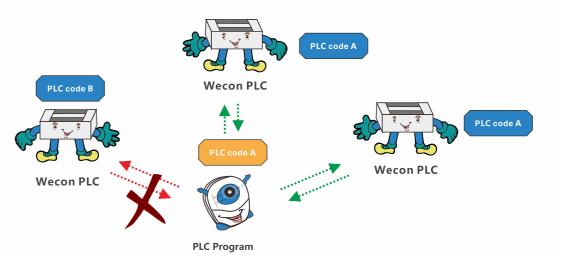
All these kinds of passwords are independent from each other (user need to set password separately during each of these operations), the password can be same or different to ensure copyright of PLC program.



### PROGRAMMABLE LOGIC CONTROLLER

#### PLC Host and Program Encryption

For additional protection of the program, project building can be dedicated to the specified PLC model. PLC identification code and program identification code can be introduced. User can set the program identification code of the project and also can set a PLC identification code for the PLC. So, the software will compare the program identification code and PLC identification code at every attempt of the upload or download of the program and can be executed to only designated PLC.



#### **Modbus Listed Instruction**



In the original MODBUS protocol, users must program RS instruction in ladder. But the editing process is quite cumbersome and imperfect.

With the help of new method (RSUST+RSUST)

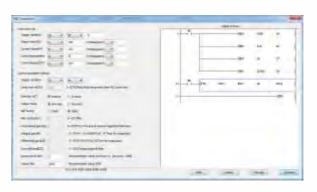
With the help of new method (RSLIST+RSLIST communication list), it becomes easier.



#### **Features of PLC Wizard Function**



- Modules monitor function guides the user to monitor the BFM data in real time. This function reduces customer dependency on module manuals.
- It guides the user to generate the ladder program with the corresponding content (i.e. instruction, modules, BD board, etc.). It saves customer's comprehension time and reduces error which may occur while editing ladder. Also it will help the user to create functioning ladder more quickly.



**PID Operation Wizard Setting** 



LX-4AD Module Wizard Setting

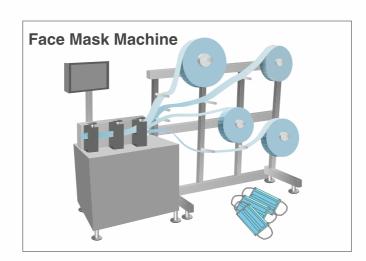
#### **PLC LX3V Series**



- Supports 2 BD modules and more expansion modules, as well as stabler operation.
- USB port supports much higher upload and download speed.
- Support PID control, floating point calculation.

Face mask machine includes main unit, feeder unit, welding unit, packing unit.

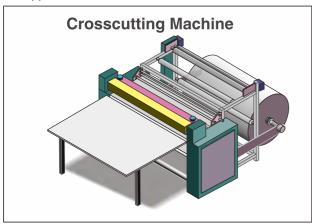
Pressing and slicing, dividing and transferring, earband welding, each part realizes semi-automatic and automated production, which is faster and more stable. The core of the automatic control system is mainly compose d of PLC, HMI, Servo, Stepper motor, photoelectric switch, contactor and relay.



#### **PLC LX3VE Series**



- Up to 4 channels each of 200 KHz high speed pulse outputs are supported, all 4 channels can work simultaneously.
- Supports 32k steps ladder diagram.
- Supports electronic CAM.



Crosscutting machine belongs to carton processing machinery. The crosscutting machine is used in the production line of the corrugated board. It is used for the cutting of the finished cardboard. The technical feature and equipment adjustment status directly affects the accuracy of the finished cardboard's cutting sizes and the appearance of the pressure line.

#### **PLC LX3VM Series**



- Up to 4 channels independent 200 KHz high speed pulse output are supported, 4 channels can be used simultaneously.
- Supports 32k steps ladder diagram.
- Three axis liner interpolation (Y0,YI,Y2) and two axis circular interpolation are supported(Y0,YI).

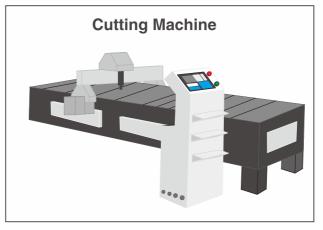
- Supports flying cut and rotary cut.
- Supports jitter pulse output.
- Supports S-type curve to meet special demands.



Side Cutting Machine is a CNC machine for punching of holes in the side of the plate type furniture. It is suitable for horizontal hole machining and horizontal slotting. It has features like, Infrared automatic induction, accurate detection of the hole position, accurate movement distance, low error, simple operation, eliminate the need of skilled workers, convenient and efficient.

- Supports electronic CAM.
- Supports Jitter pulse output.

### **APPLICATION**



Through the linear-circle interpolation function, the cutting machine realizes the multi axis path positioning control, improves cutting efficiency, quality and relieves the working intensity.

#### LX3V-2WT



- 2 channels weighing signal input.
- Hardware 24-bit AD input (2: 24-bit Resolution).
- Support 1~2400 Hz frequency conversion speed.
- Adjustable setting of Digital filter.
- Adjustable setting of Tare weight and Net weight.

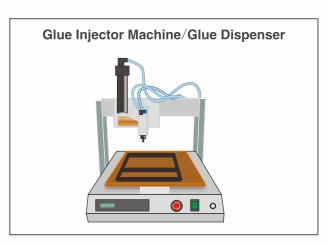
Screw packaging machine is a typical equipment for vibrating plate feeding, screw weighing and packaging. It is difficult to count the actual number of screws dropped down from plate by optical bit counter because of the irregular shape of the object to be weighed. Therefore, it is divided into multistage speed to control the vibration of the feeding plate, it uses the round up and round down (half adjust) to complete counting process. The first part uses the weight measurement, the second part uses the number to compare whether the set weight is achieved.

#### LX3V-4LTC



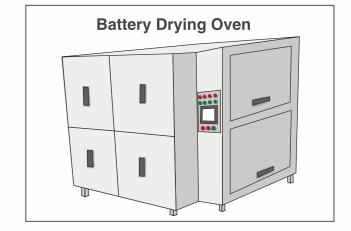
LX3V-4LTC is temperature control module, it has four temperature input ports and four transistor output ports (open collector). It reads data from the thermocouple, and give output value with PID control algorithm.

Battery Drying Oven, its working process includes warming – cooling – vacuum – forcing – nitrogen filling. The project has total 100 processes comprises two different process cycles. Data monitoring, data acquiring, PID Auto-tuning (self-tuning). Measurement of Temperature at different 12 points. There difference in the temperature at upper, lower, middle, center of the oven. So, temperature gradient is there and homogeneity of the oven is affected.



Glue injector machine realizes multi-axis path positioning control through linear arc interpolation function and operate it according to the set path. It can be set to semi-automatic, fully automatic, or adjustment modes.





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#### **LX5V Series PLC**



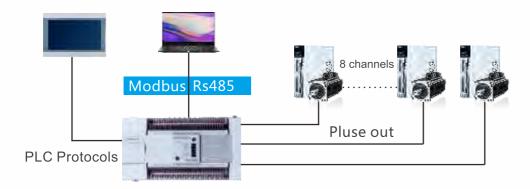
- Faster: 0.01us~0.03us execution speed
- Supports larger program capacity: 48k steps
- Supports the highest baud rate: 921600
- Supports 8 channels external interrupt, and support both rising and falling edges
- Supports 100us high-speed timer interrupt
- Supports up to 100 high-speed counting interrupts
- Supports E-CAM
- Supports electronic gear
- Supports efficient and stable PID and CCPID self-tuning
- Supports IO module and analog module of LX3V series
- Supports BD modules of LX3V series (Communication BD module not supported now)

#### **8 Channels High Speed Pulse Input**

LX5V comes standard with 8 channels high speed counter (HSC0~HSC7 for 8 channels). The maximum counting frequency of the 8 channels single-phase high-speed counter is 150KHZ, and the maximum counting frequency of the 8-channels AB phase high-speed counter is 100KHZ. This high-speed counter is executed by hardware, and will be more efficient and faster.

#### **8 Channels High Speed Pulse Output**

LX5V comes standard with 8 channels high speed pulse output. The maximum output frequency of 8-channels high-speed pulse output is 200KHZ, which can modify the frequency and number of high-speed pulse output during operation(targeted positions). LX5V PLC realize equipment working with high speed, precise and reliable pulse control in a cost-effective way.



#### **More Registers**

- 64KB latch area
- 76KB of data capacity
- Added 128 timers of 0.1ms
- Added 128 timers of 1ms

#### **Software Advantages**

Based on Wecon PLC Editor, LX5V programming software is optimized and upgraded to be easier configuration, clearer program classification and parameter configuration. Multi-segment scanning program, multi-event program, multiple subroutines and multiple interrupt programs are added.

## **EXPANSION MODULE**

#### **PLC EXPANSION MODULE**



#### ■ Multi-module connection:

Support up to 16 modules, 256 input points or 256 output points.

Due to the difference plc model, user need to calculate the power consumption at first.

- DA module resolution :12 bits
- PT/TC module resolution

S-type sensor:-50~+1768	(degree centigrade)
R-type sensor:-50~+1768	(degree centigrade)
B-type sensor:+250~+1820	(degree centigrade)
N-type sensor:-200~+1300	(degree centigrade)
E-type sensor:200~+1000	(degree centigrade)
T-type sensor:-200~+400	(degree centigrade)
J-type sensor: -210~+600	(degree centigrade)
K-type sensor:-200~+1372	(degree centigrade)
Pt100 sensor:-100~+600	(degree centigrade)

- AD module resolution :16 bits
- WT module resolution :24 bits



#### LX3V-8iTC



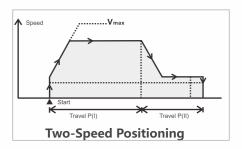
- 8 channels for temperature acquiring; Multiple sensor types are supported; Supports thermocouple types like K, S, E, N, B, T, J and R.
- All 8 channels are isolated each other.
- Built-in cold junction compensation, external cold junction compensation, freezing cold junction compensation method.

## Present value(PV) Temperature setting value (SV) Self-tuning point Self-tuning start Self-tuning Time

#### LX3V-4PGA



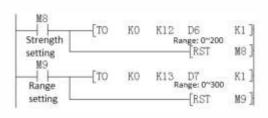
- Supports 4-channel high speed pulse outputs.
- Supports zero point return, JOG, interrupt position and twospeed pulse control.
- Supports S-type acceleration and deceleration.
- Maximum supports for 200k pulse output.
- Interrupt signal, origin signal input.



#### LX3V-2WT



- 2 channels weighing signal input.
- Hardware 24-bits AD input (2: 24-bit Resolution).
- Supports 1~2400 Hz frequency conversion.
- Adjustable setting of Digital filter.
- Adjustable setting of Tare weight and Net weight.
- Zero-tracking can reduce the influence of temperature drift effective.



## **BD MODULE**

Up to 2 BD modules can be connected

PLC Expansion Module (Due to the different power supply tolerances of various PLC, the actual application requires the help of a module calculator)



LX Series PLC

#### Analog BD BOARD



Model	Resolution	Input/Output Range	Data Range
DA	12	Output Current: 4~20mA	0~2000
AD	12	Input Current: 4~20mA	0~2000
PT	14	Sensor:PT100-100~600°C	-1000~6000
TC	14	Sensor:Ktype-100~1200℃	-1000~12000
TC	14	Sensor:Jtype-100~600°C	-1000~6000
DAV	12	Output Voltage:-10~10V	-2000~2000
ADV	12	Input Voltage:-10~10V	-2000~2000

#### Communication Expansion Board





By using LX3VP-ETH-BD, Ethernet port can be added.



- Supports Modbus-Tcp protocol.
- Maximum 8 devices can be connected (no master-slave) to one LX3VP-EH-BD module.

#### **LX3VP-CAN Communication**

( Only some models of 3VP supported [LX-3VP2416 Mix supported] )

- For Good real-time communication, strong correction ability and stable communication.
- Supports CANopen standard protocol DS301 V4.02.
- Supports 16 slave devices when used as master.
- Free configuration by using CANopen network configuration software "CANopen Tool".
- · It works as a master or a slave.

#### **PLC BD Module**



BD Board	Function	BD Board	Function					
LX3V-2ADI2DAI-BD	2 * Analog Input/ Analog Output (4~20mA)	LX3V-2PT-BD	2 * Thermal Resistance Input					
LX3V-2TC2DAI-BD	2 * Thermocouple Input;	LX3V-2PT2ADV-BD	2 * Thermal Resistance Input;					
LX3V-21C2DAI-BD	2 * Analog Output (4~20mA)	LASV-ZP1ZADV-BD	2 * Analog Voltage input(-10v-10v)					
LX3V-2PT2DAI-BD	2 * Thermal Resistance Input;	LX3V-2PT2DAV-BD	2 * Thermal Resistance Input;					
LX3V-2P12DAI-BD	2 * Analog Output (4~20mA)	LAGV-ZF IZDA V-DD	2 * Analog Voltage Output(-10v-10v)					
LX3V-2TC-BD	2 * Thermocouple Input	LX3V-2ADV2DAV-BD	2 * Analog Input/ Output (-10V~10V)					
LX3V-4ADI-BD	4 * Analog Input (4~20mA)	LX3V-2RS485-BD	2 * RS485 Communication					
LX3V-4ADV-BD	4* Analog Input (-10V~10V)	LX3V-ETH-BD	1 * Ethernet Communication					
LX3V-2ADV-BD	2*Analog Voltage Input(-10v-10v)	LX3V-2DAI-BD	2*Analog Current Output(4-20mA)					
LX3V-2ADI-BD	2*Analog Current Input(4-20mA)	LX3V-2DAV-BD	2*Analog Voltage Output(-10v-10v)					
LX3V-2PTS-BD	2* Thermal Resistance Input, Precision >0.1 ℃							

## **LX3V SERIES PLC PRODUCT**

**LX3V Series** 



PLC Model	I/O	Output type	Dimension (mm)	Pulse Counter	Pulse Output	RS485	BD Board	Module	Power Supply
LX3V-0806MR-A1(	D1) 8/6	Relay	75x107x87	2	0	1	1	N/A	AC(DC)
LX3V-0806MT-A1(I	01) 8/6	Transistor	75x107x87	2	2	1	1	N/A	AC(DC)
LX3V-0806MR-A2(	D2) 8/6	Relay	75x107x87	2	0	1	1	N/A	AC(DC)
LX3V-0806MT-A2(I	D2) 8/6	Transistor	75x107x87	2	2	1	1	N/A	AC(DC)
LX3V-1208MR-A1(	D1) 12/8	Relay	75x107x87	2	0	1	1	N/A	AC(DC)
LX3V-1208MT-A1(I		Transistor	75x107x87	2	2	1	1	N/A	AC(DC)
LX3V-1208MR-A2(I		Relay	75x107x87	2	0	1	1	N/A	AC(DC)
LX3V-1208MT-A2(I		Transistor	75x107x87	2	2	1	1	N/A	AC(DC)
LX3V-1208MR2H-A		Mix	75x107x87	2	2	1	1	N/A	AC(DC)
EX3V 1200MINZIT P	12/0	IVIIA	738107867	2	2	-	1	IN/A	AC(DC)
LX3V-1212MR-A(D	) 12/12	Relay	137x107x87	2	0	2	1	YES	AC(DC)
LX3V-1212MT-A(D	12/12	Transistor	137x107x87	2	2	2	1	YES	AC(DC)
LX3V-1212MT4H-A	(D) 12/12	Transistor	137x107x87	2	4	2	1	YES	AC (DC)
LX3V-1212MR2H-A	A(D) 12/12	Mix	137x107x87	2	2	2	1	YES	AC (DC)
LX3V-1412MR-A(D	) 14/12	Relay	137x107x87	2	0	2	1	YES	AC(DC)
LX3V-1412MT-A(D		Transistor	137x107x87	2	2	2	1	YES	AC(DC)
LX3V-1412MT4H-A		Transistor	137x107x87	2	4	2	1	YES	AC(DC)
LX3V-1412MR2H-A		Mix	137x107x87	2	2	2	1	YES	AC(DC)
									,
LX3V-1616MR-A(D	) 16/16	Relay	175x107x87	2	0	2	2	YES	AC(DC)
LX3V-1616MT-A(D)	) 16/16	Transistor	175x107x87	2	2	2	2	YES	AC(DC)
LX3V-1616MT4H-A	(D) 16/16	Transistor	175x107x87	2	4	2	2	YES	AC (DC)
LX3V-1616MR2H-A	A(D) 16/16	Mix	175x107x87	2	2	2	2	YES	AC(DC)
LX3V-2416MR-A(D	) 24/16	Relay	175x107x87	2	0	2	2	YES	AC (DC)
LX3V-2416MT-A(D	) 24/16	Transistor	175x107x87	2	2	2	2	YES	AC(DC)
LX3V-2416MT4H-A	(D) 24/16	Transistor	175x107x87	2	4	2	2	YES	AC (DC)
LX3V-2416MR2H-A	A(D) 24/16	Mix	175x107x87	2	2	2	2	YES	AC(DC)
LX3V-2424MR-A(D		Relay	220x107x87	2	0	2	2	YES	AC(DC)
LX3V-2424MT-A(D)	) 24/24	Transistor	220x107x87	2	2	2	2	YES	AC(DC)
LX3V-2424MT4H-A		Transistor	220x107x87	2	4	2	2	YES	AC(DC)
LX3V-2424MR2H-A	A(D) 24/24	Mix	220x107x87	2	2	2	2	YES	AC(DC)
LX3V-3624MR-A(D	) 36/24	Relay	220x107x87	2	0	2	2	YES	AC(DC)
LX3V-3624MT-A(D)	36/24	Transistor	220x107x87	2	2	2	2	YES	AC(DC)
LX3V-3624MT4H-A	(D) 36/24	Transistor	220x107x87	2	4	2	2	YES	AC(DC)
LX3V-3624MR2H-A	A(D) 36/24	Mix	220x107x87	2	2	2	2	YES	AC(DC)

## **LX3VP SERIES PLC PRODUCT**

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#### **LX3VP Series**



PLC Model	l/O	Output	Dimension	Pulse	Pulse	RS485	CAN	BD	Module	Power
T LE Model	., 0	type	(mm)	Counter	Output	113 103		Board	module	Supply
LX3VP-1208MR-A(D)	12/8	Relay	75x107x87	2	0	1	N/A	1	N/A	AC ( DC )
LX3VP-1208MT-A(D)	12/8	Transistor	75x107x87	2	2	1	N/A	1	N/A	AC ( DC )
LX3VP-1212MR-A(D)	12/12	Relay	137x107x87	2	0	2	N/A	1	YES	AC ( DC )
LX3VP-1212MT-A(D)	12/12	Transistor	137x107x87	2	2	2	N/A	1	YES	AC ( DC )
LX3VP-1212MT4H-A(D)	12/12	Transistor	137x107x87	2	4	2	N/A	1	YES	AC ( DC )
LX3VP-1212MR2H-A(D)	12/12	Mix	137x107x87	2	2	2	N/A	1	YES	AC ( DC )
LX3VP-1412MR-A(D)	14/12	Relay	137x107x87	2	0	2	N/A	1	YES	AC ( DC )
LX3VP-1412MT-A(D)	14/12	Transistor	137x107x87	2	2	2	N/A	1	YES	AC ( DC )
LX3VP-1412MT4H-A(D)	14/12	Transistor	137x107x87	2	4	2	N/A	1	YES	AC ( DC )
LX3VP-1412MR2H-A(D)	14/12	Mix	137x107x87	2	2	2	N/A	1	YES	AC ( DC )
LX3VP-1616MR-A(D)	16/16	Relay	175x107x87	2	0	2	N/A	2	YES	AC ( DC )
LX3VP-1616MT-A(D)	16/16	Transistor	175x107x87	2	2	2	N/A	2	YES	AC ( DC )
LX3VP-1616MT4H-A(D)	16/16	Transistor	175x107x87	2	4	2	N/A	2	YES	AC ( DC )
LX3VP-1616MR2H-A(D)	16/16	Mix	175x107x87	2	2	2	N/A	2	YES	AC ( DC )
LV2VD 2416MD A/D)	24/16	Dalou	175,107,07	2	0	2	Optional	2	YES	AC ( DC )
LX3VP-2416MR-A(D)		Relay	175x107x87				Optional	2		AC ( DC )
LX3VP-2416MT-A(D)  LX3VP-2416MT4H-A(D)	24/16	Transistor	175x107x87	2	2	2	·	2	YES	AC ( DC )
. ,	24/16	Transistor	175x107x87	2	4	2	Optional	2	YES	AC ( DC )
LX3VP-2416MR2H-A(D)	24/16	Mix	175x107x87	2	2	2	Optional	2	YES	AC ( DC )
LX3VP-2424MR-A(D)	24/24	Relay	220x107x87	2	0	2	N/A	2	YES	AC ( DC )
LX3VP-2424MT-A(D)	24/24	Transistor	220x107x87	2	2	2	N/A	2	YES	AC ( DC )
LX3VP-2424MT4H-A(D)	24/24	Transistor	220x107x87	2	4	2	N/A	2	YES	AC ( DC )
LX3VP-2424MR2H-A(D)	24/24	Mix	220x107x87	2	2	2	N/A	2	YES	AC ( DC )
LX3VP-3624MR-A(D)	36/24	Relay	220x107x87	2	0	2	N/A	2	YES	AC ( DC )
LX3VP-3624MT-A(D)	36/24	Transistor	220x107x87	2	2	2	N/A	2	YES	AC ( DC )
LX3VP-3624MT4H-A(D)	36/24	Transistor	220x107x87	2	4	2	N/A	2	YES	AC ( DC )
LX3VP-3624MR2H-A(D)	36/24	Mix	220x107x87	2	2	2	N/A	2	YES	AC ( DC )

## LX3VE&3VM&5V SERIES PLC PRODUCT

#### **LX3VE Series**



PLC Model	I/O	Output type	Dimension (mm)	Pulse Counter	E-CAM	Pulse Output	RS485	BD Board	Module	Power Supply
LX3VE-1412MT-A	14/12	Transistor	137x107x87	2	YES	2	2	1	YES	AC(DC)
LX3VE-1412MT4H-A	14/12	Transistor	137x107x87	2	YES	4	2	1	YES	AC(DC)
LX3VE-1616MT-A	16/16	Transistor	175x107x87	2	YES	2	2	2	YES	AC(DC)
LX3VE-1616MT4H-A	16/16	Transistor	175x107x87	2	YES	4	2	2	YES	AC(DC)
LX3VE-2416MT-A	24/16	Transistor	175x107x87	2	YES	2	2	2	YES	AC(DC)
LX3VE-2416MT4H-A	24/16	Transistor	175x107x87	2	YES	4	2	2	YES	AC(DC)
LX3VE-2424MT-A	24/24	Transistor	220x107x87	2	YES	2	2	2	YES	AC(DC)
LX3VE-2424MT4H-A	24/24	Transistor	220x107x87	2	YES	4	2	2	YES	AC(DC)
LX3VE-3624MT-A	36/24	Transistor	220x107x87	2	YES	2	2	2	YES	AC(DC)
LX3VE-3624MT4H-A	36/24	Transistor	220x107x87	2	YES	4	2	2	YES	AC(DC)

#### **LX3VM Series**



PLC Model	I/O	Output type	Dimension (mm)	Pulse Counter	E-CAM	Inter- polation	Pulse Output	RS485	BD Board	Module	Power Supply
LX3VM-1412MT-A	14/12	Transistor	137x107x87	2	YES	YES	2	2	1	YES	AC(DC)
LX3VM-1412MT4H-A	14/12	Transistor	137x107x87	2	YES	YES	4	2	1	YES	AC(DC)
LX3VM-1616MT-A	16/16	Transistor	175x107x87	2	YES	YES	2	2	2	YES	AC(DC)
LX3VM-1616MT4H-A	16/16	Transistor	175x107x87	2	YES	YES	4	2	2	YES	AC(DC)
LX3VM-2416MT-A	24/16	Transistor	175x107x87	2	YES	YES	2	2	2	YES	AC(DC)
LX3VM-2416MT4H-A	24/16	Transistor	175x107x87	2	YES	YES	4	2	2	YES	AC(DC)
LX3VM-2424MT-A	24/24	Transistor	220x107x87	2	YES	YES	2	2	2	YES	AC(DC)
LX3VM-2424MT4H-A	24/24	Transistor	220x107x87	2	YES	YES	4	2	2	YES	AC(DC)
LX3VM-3624MT-A	36/24	Transistor	220x107x87	2	YES	YES	2	2	2	YES	AC(DC)
LX3VM-3624MT4H-A	36/24	Transistor	220x107x87	2	YES	YES	4	2	2	YES	AC(DC)

#### LX5V Series



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PLC Model	I/O	Output type	Dimension (mm)	Pulse Counter	E-CAM	Pulse Output	RS485	BD Board	Module	Power Supply
LX5V-1616MT-A *	16 / 16	Transistor	175x107x87	8	YES	8	2	2	YES	AC
LX5V -2416MT-A	24 / 16	Transistor	175x107x87	8	YES	8	2	2	YES	AC
LX5V -2424MT-A *	24 / 24	Transistor	220x107x87	8	YES	8	2	2	YES	AC
LX5V -3624MT-A *	36 / 24	Transistor	220x107x87	8	YES	8	2	2	YES	AC

## **PLC SPECIFICATIONS**

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General	<b>&gt;&gt;</b>	General

	LX3V Series	LX3VP Series	LX3VE / 3VM Series	LX5V Series			
Running Mode	Round Scan/ Interrupt						
Programming							
Total Instructions	Basic Instructions: 27 / A	Basic Instructions: 27 / Applied Instruction: 170					
Execute time	Basic Instructi	Basic Instructions: 0.01-0.03u					
System Storage	16K	48K / 512KB					
Download/ Monitoring							
High Speed Pulse Output	2 channels (4 ch	Transistor: 8 channels / 200K					
External Interrupt		100 Channels					
Timer Interrupt		100 Channels, Interruption time (min): 0.1ms					
High Speed Input Single Phase	2 0	8 Channels 150KHZ					
High Speed Input AB Phase	1 channel 100K, f	8 Channels 100KHZ frequency modes:1/2/4 times					
Holding Addresses		Adjus	stable				
Storage		FLA	ASH				
Filter	For all X input terminals						
Serial Port	COM1: RS422 or RS485 COM2: RS485						
Temperature	Working Temperature : $0 \sim 55^{\circ}$ C / Storage Temperature : $-20 \sim 70^{\circ}$ C						
Humidity	5~ 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.						

Outpu	ıŧ
Outpu	



Ite	m	Relay Output	Transistor Output
Output Mode			NPN
Input Power Supply		DC 24V	DC 24V
Output Circuit		<ac 250v="" 30v<="" <dc="" or="" td=""><td>DC 5~30V</td></ac>	DC 5~30V
COM Port Current			<0.1mA ( DC30V )
Insulation		Mechanistic	Optical Coupling
Leak current			0.1mA/DC30V
Min.Load			DC 5V2mA
	Resistive	2A point 8A COM port	0.5A point 0.8A COM port 0.3A HSPO point
Max.Load	Inductive	80VA	12W/DC 24V7.2WHSPO point
	General 100W		0.9W/DC 24V
ResponseTime	ON	<10ms	<0.2ms
i iesponse i ilile	OFF	\ TOTHS	(Pulse out put terminal: <5us)

## **PLC SPECIFICATIONS**

#### **AC Power Supply**



Item	LX3V/LX3VP/LX3VE/LX3VM (<26 I/Os)	LX3V/LX3VP/LX3VE/LX3VM (>26 I/Os)		
Voltage	AC 85~265V 50 ~ 60Hz			
Power Outage Time	10ms			
Rush Current	<15A 5ms / AC 100V; <30A 5ms / AC 200V			
Power Fuse	250V 3.15A	250V 3.15A		
Power Consumption	<35W	<60W		
Power Output	DC 24V 850mA	DC 24V 700mA		

## **DC Power Supply**



Item	LX3V/LX3VP/LX3VE/LX3VM PLC			
Power Supply	DC 24V±10%			
Power Outage Time	10ms			
Power Fuse	250V 3.15A			
Rush Current	<15A 1ms/DC 24V			
Power Consumption	<30w(Not include the external power supply for modules)			

## **EXPANSION MODULE**

#### **PLC Expansion Module**



Module	Specification	Module	Specification
LX3V-8EX	8 Input	LX3V-2WT	2 * Weighting(24-bit)
LX3V-8EYR	8 Relay Output	LX3V-2WT-L	2 * Weighting(18-bit)
LX3V-8EYT	8 Transistor Output	LX3V-4AD	4 * Analog Input
LX3V-16EX	16 Input	LX3V-4DA	4 * Analog Output
LX3V-16EYR	16 Relay Output	LX3V-4PT	4 * Thermal Resistance Input
LX3V-16EYT	16 Transistor Output	LX3V-4TC	4 * Thermocouple Input
LX3V-1WT	1 * Weighting(24-bit)	LX3V-4LTC	4 * TC with Isolation (PID Control)
LX3V-1WT-L	1 * Weighting(18-bit)	LX3V-8iTC	8*Thermocouple Input
LX3V-4PGA	4* pulse generator (Advanced)	LX3V-4PGB	4* pulse generator (Basic)
	16 Input, supports RS485 Modbus		16 Relay Output, supports RS485 Modbus
LCM-16EX	communication	LCM-16EYR	communication.
	4*thermocouple Input, supports RS485 Modbus		2*weighing expansion module, 24-bit
LCM-4TC	communication.	LCM-2WT	resolution, supports RS485 Modbus
			communication.