

FNI ECT-508-105-M

IO Link Master IO Link Master Module User Manual





Content

1 Notes	
1.1. Manual structure	3
1.2. Typography	3
1.3. Symbol	3
1.4. Abbreviation	3
1.5. Deviating views	3
2 Safety	
2.1. Intended use	4
2.2. Installation and startup	4
2.3. General Security Notes	4
2.4. Resistance to aggressive substances	4
3 Getting Started Guide	
3.1. Module overview	5
3.2. Mechanical connection	6
3.3. Electrical connections	6
4 Technical data	
4.1. Size	8
4.2. Mechanical data	8
4.3. Operating conditions	8
4.4. Electrical data	8
4.5. Network port	9
4.6. Function indicator	9
4.7. ECT Node address settings	11
5 Integrated	
5.1 PLC Integration Tutorial	
5.1.1 5.1.1 Omron Sysmac studio integration	12
5.1.2 BECKHOFF TwinCAT Xae integrated	15
5.1.3 Integration of InproShop	20
6 Appendix	22

1 Notes	
1.1 Manual structure	1 1 This manual is organized by organization, so the chapters are
1.1. Manual structure	 1.1This manual is organized by organization, so the chapters are interconnected.
Section 2: I	Basic Security Information.
	Getting Started Guide
Chapter 4:	Technical Data
1.2. Typography The	e following typographic conventions are used in this manual.
	The enumeration is displayed as a list with bullets.
Headword	
• Headword	
Action	Action descriptions are represented by a front triangle. he res lt of the action is represented by an arrow.
	Action description 1
	Action result
	Action description 2
	Step programs can also be displayed numerically in parent
	eses.
	(1) Step1(2) Step2
Grammar number:	(2) Step2
	Decimal numbers are displayed without additional indicators
	(eg 123)
	Hexadecimal numbers are displayed with an additional indi ato r hex (eg: O0hex) or with the prefix "OX" (eg: 0x00)
Cross reference	
	Cross-references indicate where to find additional inform tio
	n on this topic.
1.3.Symbol -	
	Notes
	This symbol indicates a general comment.
	Notice!!
	This symbol indicates the most important safety notice.
1.4. acronym	FNI: FAS Network Interface
	I :standard input
	port
	ECT: EtherCAT EMC
Electromagnetic	Compatibility
	FE: functional ground
	0 standard output port
1.5. Perspecti	ve Deviations The product views and explanations in this manual
may deviate fr	rom the actual product. They are used only left and right to
explain the ma	iterial.

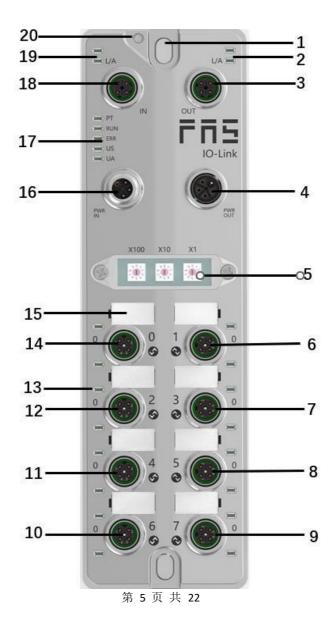


	ual describes as a decentralized input and output module for connectio n industrial network.
d spe ar wit nece rized manu nsurii	ons! art-up should only be carried out by trained an cialized personnel. A qualified individual is one who is famili th the installation and operation of the product and has the ssary qualifications to do so. Any damage caused by unautho operation or illegal and improper use is not covered by the facturer's warranty. Equipment operators are responsible for e ng compliance with appropriate safety and accident preventio ulations.
2.3. General security Debug a	nd check
	ng, you should read the contents of the user manu
The system cannot	efully. be used in applications where the safety of pe el depends on the functionality of the equipment.
intended use	
The manufacturer's caused	warranty coverage and limited liability statement do not cover damage by:
 Unauthorized ta 	mpering
Improper use Handling install:	ation and operation that do not conform to the instructions provided in t
-	er manual
Owner/Operator O	bligations
The o equip	AC Class A compliant product. This device generates RF noise. wner/operator must take proper precautions when using thi ment. This device can only use
only approved cables.	power supply compatible with this equipment, and connect
Fault	
st be	ipment failure cannot be corrected, the operation of the equipment mu stopped in order to
•	cted from possible damage caused by unauthorized use. nly be ensured when the enclosure is fully installed.
2.4. Corrosion resistance	FNI modules generally have good chemical and oil resistan ce characteristics. When used in aggressive media (e.g. h igh concentrations of chemicals, oils, lubricants and coo lants (i.e. very low water content)), these media must be checked before the corresponding application material co mpatibility confirm. If the module fails or is damaged du
Dangerous voltage	e to this corrosive medium, no claim for defects can be c laimed. Precautions! Disconnect all power sources before using the equipment!



Fuyansheng Electronic (Fujian) Co. LTD 3 Getting Started Guide

3.1. Module overview



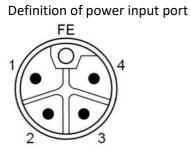
1 Mounting holes	8 Port 5	15 Port Identification Board
2 Network port 2 status indicator	9 Port 7	16 Power input port
3Network port 2	10 Port 6	17 Module indicator
4 Power outlet	11 Port 4	18Network port 1
5 DIP switch	12 Port 2	19Network port 1status indicator
6 Port 1	13 Port Status Indicators	20 Ground connection
7 Port 3	14 Port 0	

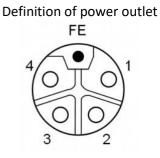


3.2. Mechanical connection The modules are attached using 2 M6 bolts and 2 washers. Isolation pads are available as accessories.

3.3. Electrical connections

3.3. 1 Power interface(L-code)





Pin	Features	Describe
1	Us+	+24V(BR)
2	Ua-*	OV(WH)
3	Us-	OV(BL)
4	Ua+*	+24V(BK)
FE	Functional ground*	FE(yellow-green)

Notes:

 If possible, supply sensor/module power and actuator power separately. Total current <9A, even if the actuator power supply is daisy chained, the total current of all modules is <9A.

2. The FE connection from the housing to the machine must be low impedance and kept as short as possible.

3.3.2 Network Interface(D-code)

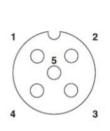
pin	features	
1	Tx+	Send data+
2	Rx+	receive data+
3	Tx-	Send data+
4	Rx-	receive data+

notes: Unused I/O port sockets must be covered with end caps to meet IP67 rating.



3.3.3 I/O-port(A-code)

Port0~Port7 define:

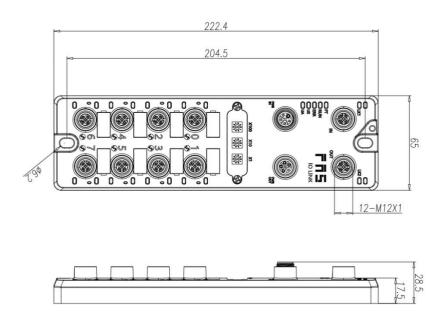


pin	Features
1	+24V (BR)
2	Input Output(White)
3	OV (BL)
4	Input/Output/IOLINK (BK
5	FE

Notes:

- 1. For digital sensor input, please follow the input guidelines of EN61131-2, Type 2.
- 2. The maximum output current of pins 2 and 4 is 2A. The total current of the module is <9A.
- 3. Unused I/O port sockets must be covered with end caps to meet IP67 protect

4.1. Size





4.2 Mechanical data

Shell material	Die-cast aluminum case, pearl nickel plated
Enclosure rating according to IEC 60529	IP67(Only in plug-in or plug-in style)
Power interface	L-Code(male and female)
Input port/output port	M12, A-Code(8* female)
Size(W*H*D)	65mm*222mm*25.8mm
Installation type	2-Through hole mounting
Ground Bus Accessories	M4
weight	Make an appointment670g

4.3. Operating conditions

Operating temperature	-5° C ~ 70° C
Storage temperature	-25° C ~ 70° C

4.4. Electrical data

voltage	18~30V DC, symbol EN61131-2
voltage fluctuation	<1%
Input current when supply voltage is 24V	<130mA

4.5 Network port

port	2 x 10Base-/100Base-Tx	
port connection	M12, D-Code	
IEEE 802.3 Compliant Cable Types	Shielded twisted pair, minimum STP CAT 5/STP	
	CAT 5e	
Data transfer rate	10/100 M bit/s	
Maximum cable length	100m	
Flow control	Half condition/full condition (IEEE 802.3-	
	PAUSE)	

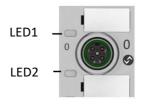
4.6 function indicator

> PT	
HIC RUN	
SHEET ERR	
SHIC US	
AU 200	

PT BLUE EtherCat letter of agreement

PN Communication protocol module status

LED	show	Function		
	green light off	work normally		
RUN	green light flashing 2.5HZ	Pre-running: The device is in a pre- running state		
	green light flashing 1HZ	Safe operation: The device is in safe operation		
	Steady green	Running: The device is running		
	off	Device EtherCAT communication is active		
ERR	Red light flashing 2.5HZ	Invalid configuration		
	Red light flashing 1HZ	local error		
	red double flash	Application watch timeout		
US	green	input voltage is normal		
03	Res light flashing	input voltage is normal (<18 V)		
TTA	green	The output voltage is normal		
UA	Res light flashing	low output voltage (<18 V)		
	Red always on	no output voltage $\ (<11\ V)$		



I/O	State	Features
port		
status		
LED		
1	Closure	The status of Pin4 input or output is 0
1	Yellow	The status of Pin4 input or output is1
1	Red	Port is configured as input: Pin1 overcurrent
		Port configured as output: Pin4 overcurrent
1	Flashing red	Port configured as output: Pin1 overcurrent
1	Green	IO Link connected
1	Flashing	IO Link not connected
	green	
2	Closure	The status of Pin2 input or output is0
2	Yellow	The status of Pin2 input or output is1
2	Red	Port is configured as input: Pin1 overcurrent
		Port configured as output: Pin2 overcurrent
2	flashing red	Port configured as output: Pin1 overcurrent



Network port status

LED	State	Features
IN(L/A)	Flashing green	Data transmission
OUT (L/A)	Flashing green	Data transmission

4.7 EtherCAT node address setting

1. Set by dial code (1~192 or 401~499)

a. Switch to the EtherCAT communication protocol, the X100 dial is the hundreds digit of the address, the X10 dial is the tens digit of the address, and the X1 dial is the ones digit of the address

b. After dialing the code in the power-on state, it needs to be powered on again. 2. Set by PLC

a. Switch to the EtherCAT communication protocol, the X100 dial is 0, the X10 dial is 0, and the X1 dial is 0

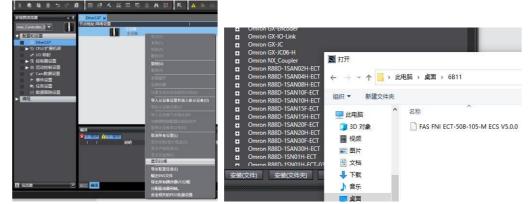
b. Set node address through PLC software

5 Technical data

5.1 PLC integrated

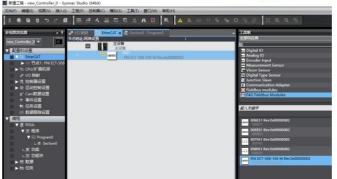
5.1.1 OmronNX1P2 Sysmac Studio integrated 这里, You will see how to integrate this module into an Omron PLC Example, take Omron NX1P2 PLC as an example

Install the ESI file: Configuration and Settings --- EtherECT --- Right-click the main device --- Click to display the ESI library --- Click "Install File" in the pop-up window --- Select the corresponding product ESI file

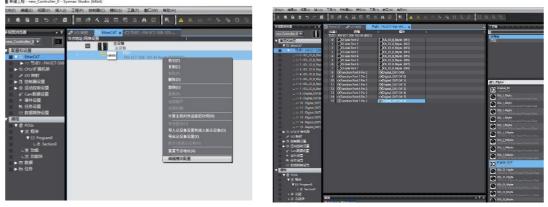


Create a module: Click on the right toolbox---find FAS Fieldbus Modules---select the product model FNI ECT-508-105-M

Double-click the corresponding product to add it to the main device



Module slot data (IOLINK mode): Right click on the module — select edit module configuration — drag the required data into the module slot — if the slave station has an output signal, open the master station PIN2 — Click on I/O Mapping — Give Digital Output Mapping_Output Pin 2 a variable — Set Output Pin 2, the port that uses output signals in the program, to 1 — the configuration is successful!



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ne_Centroller_0 V	TI NC ▼ § EtherCATH/DBACTI	RUE R/W ROUGHED		new Controller Q * US bittle new Complex Q			
5-2410-2 (10)							
V 29 EtherCAT	Digital Output Mapping_Output Pin 4_7100_01	W ARRAND.7] OF BOOL		▼ 20 EtherCAT			
▼ <= 15 #1 : FNIECT-508	Digital Output Mapping_Output Pin 2_7100_02	W ARRAND.7] OF BOOL	e1	► <: 13.41 : FNJ ECT-508 3			
L = 0:10L03,8by	Digital input Mapping_Input Pin 4_6100_01	R ARRAY[0,7] OF BOOL		▶ © CPU/が展初端			
L = 1:10L/0.8.89	Digital Input Mapping_Input Pin 2_6100_02	R ARRAV(0.7) OF BOOL		Isla			
L C 2: DigitaLIN(M3		R ARRAY[0.7] OF BOOL					
	Digital Input Mapping Actuator Shatdown Pin 2_6100_04	R ARRANID7] OF BOOK		6 3308427			
L C 3 : Digital_N(M4	Digital Input Mapping_Sensor Supply Short Circuit_6100_05			4 Constitution			
L C 4 : Digital (IN/MS	Digital Input Mapping_Device Status_6100_06	R ARRANGO.7] OF BOOL					
L C 3 : Digital_N(M6			Timout	▶ 非印2篇 al[4]			
L C 6:Digital_IN(M7		R USINT	Timeout	■ E 任务设置 〇〇			
L C 7 : Digital_N(M8			Imeout	日日の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日			
L C 8: Digital_CUTI/v	IO Link Device State_Status Of IO-Link Port 3_6110_04	R USINT	Termout	101 AU			
L C 9 : Digital_OUT(N	IO-Link Device State_Status Of IO-Link Port 4_6110_05	R USINT	Timeout	¥ () 2004			
L C 10 : Digital IN/M	KO-Link Device State_Status Of IO-Link Port 5_6110_06	R USINT R USINT	Imeout	¥ ≤ 22/4			
L C 11: Detai INM	IO-Link Device State, Status Of ID-Link Port 6, 6110, 97 IO-Link Device State, Status Of ID-Link Fort 7, 6110, 08	R USINT R USINT	meau	V E Program0			
L C 12: DigtwijNM		K USINT	Emeral	Section 2 - Section 2			
L C 13: Digital UNIM							
L C 13: Digita (NM 124				L S MARK			
				した Vinite Lange			
► STORY THE STORY				▼ 和 任务			
IO Stat				🗸 🖿 Primary Task			
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► O (E2100-000 188)	7 Digital IN						

Module I/O Variables: Digital Output Mapping_Output Pin 4 Digital Output Mapping_Output Pin 2 Digital Input Mapping_Input Pin 4 Digital Input Mapping_Input Pin 2 Digital Input Mapping_Actuator Shutdown Pin 4 Digital Input Mapping_Actuator Shutdown Pin 2 Digital Input Mapping_Sensor Supply Short circuit Digital Input Mapping_Device Status

数字输出映射_输出引脚 2 数字输入映射_输入引脚 2 数字输入映射_输入引脚 2 输入引脚 4 短路检测 输入引脚 2 短路检测 输入引脚 1 引脚 3 短路检测 设备过程输入状态

1 /			Equi	pment I	Process	Input S	tate Fi	inctiona	1
byte	Function Description	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
0	Standard IO input O= no signal 1=have no	Port7 Pin4	Port6 Pin4	Port5 Pin4	Port4 Pin4	Port3 Pin4	Port2 Pin4	Portl Pin4	PortO Pin4
1	Standard IO input O= no signal 1=have signal	Port7 Pin2	Port6 Pin2	Port5 Pin2	Port4 Pin2	Port3 Pin2	Port2 Pin2	Portl Pin2	Port0 Pin2
2	<pre>short circuit detection (Pin4 overcurrent) 0= no overcurrent 1= overcurrent</pre>	_	-	-	-	Port3 Pin4	Port2 Pin4	Portl Pin4	PortO Pin4

3 short Port3 Pin2 Port2 Pin2 Port1 Pin 3 detection Port2 Pin2 Port1 Pin (Pin2	2 Port0 Pin2
3 circuit detection (Pin2 overcurrent) 0= no signal	
(Pin2 overcurrent) 0= no signal	
overcurrent) 0= no signal	
) 0= no signal	
signal	
1=have	
signal	
short Darte Diel	1 Port0 Pin1
4 circuit Port7 Port6 Pin1 Port5 Pin1 Port4 Pin1 Port3 Pin1 Port2 Pin1 Port1 Pin	l Portu Pini
detection	
(Pin1	
overcurrent	
) 0= no	
signal	
1=have	
signal	
IOLink Port7 Port6 Port5 Port4 Port3 Port2 Port1	Port0
5 communication	
status	
0=unconnected	
1=connected	

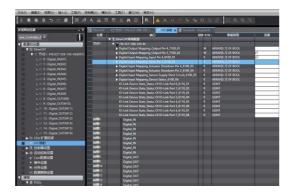
6	i	IOLink PD efficient O= prohibit 1= Enable	Port7	Port6	Port5	Port4	Port3	Port2	Port1	Port0
7		module status	_	_	_	Usovervo ltage	Ua overvolt age	overvo ltage	Us undervol tage	Ua undervol tage

Module slot data (common IO mode): right click on the module ---- select edit module configuration ---- drag the required data into the module slot (0~7: Pro0~7 PIN4 pin function, 8~15: Pro0~7 PIN2 pin function) --- click I/O mapping --- set the input and output variables of PIN2 and PIN4 pins of the port

2种(F) 機模(E) 模器(V) 插入(I) 工程(P) 投制器(C) 模拟(S) 工具(T)	2日(W) 和助(H)	文件(F) 編曲(E) 投版(V) 補人(I) 工程(P) 8		
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ABERTADIA WOLCOMENTALIA WOLCOMENTA	N (C1548-16)-	the second of the second	All Antice State Stat	Table T

As shown above, Pro0~7 PIN4 is the input setting, and Pro0~7 PIN2 is the output setting, that is, in the I/O var iable

Digital Output Mapping_Output Pin 2 Digital Input Mapping_Input Pin 4 Fill in the variables and then program in the program ---- Configuration is complete!



5.1.2 In BECKHOFF TwinCAT XAE 5.1.2 In BECKHOFF TwinCAT XAE

Add PLC path: Right-click the TwinCAT icon in the lower right corner to open Edit Routes



Click Add...; Add Route (Add Route Dialog)

oute	Connected	AmsNetId	Address	Туре	Comment

Broadcast Search-select PLC(CX-3D0A4)-Add Route

Enter Host Name / IP:				Refresh Status		Broadcast Search
Host Name Connected CX-3DB0A4	Address 169.254.196.80	AMS NetId 5.61.176.164.1.1	TwinCAT 3.1.4024	OS Version Win CE (6.0)	Fingerpi EE34BAI	rint F81AC3E868A08891DBA
	CX-3DB0A4		Rout	e Name (Remot	e): [> DESKTOP-6GGGT9H
Route Name (Target): AmsNetId: Transport Type:	5.61.176.164.1 TCP_IP	~	Tar O O	get Route Project Static	L	DESKTOP-6GGGT9H Remote Route None / Server Static
AmsNetId: Fransport Type: Address Info: O Host Name IP	5.61.176.164.1 TCP_IP 169.254.196.80 Address	0	Tar O O	get Route Project Static Temporary		DESKTOP-6GGGT9H Remote Route None / Server Static Temporary
Route Name (Target): AmsNetId: Transport Type: Address Info:	5.61.176.164.1 TCP_IP 169.254.196.84 Address 5	~	Tar O O	get Route Project Static		DESKTOP-6GGGT9H Remote Route None / Server Static

 $\label{eq:entropy} \mbox{Enter the default password "1" - click OK to complete adding the PLC path$

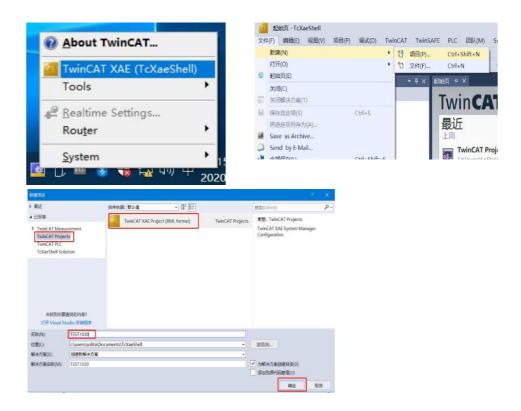
Add Remote Route			
Secure ADS (TwinCA Self Signed Certificat Check Fingerprint: Compare with:	,	-9397D0BBBB9871	D12202DE429EA0810C0E
Shared Certificate Au			Ignore Common Name
Remote User Credentials	Administrator	Password:	歌码 1 •

Add device configuration file: FAS FNI-ECT-508-105 (provided by FAS) Copy the file to the following path to complete the configuration file addition: C:\TwinCAT\3.1\Config\I0\EtherCAT

and the second second second	herCAT						-	
文件 主克	共交	五會						~ (
+	> 10	B時 > 本地磁盘 (C:) > TwinCAT > 3.1 >	$Config \Rightarrow Io \Rightarrow EtherCA$	т		~ 0	搜索*EtherCAT*	P
		en °	修改日期	***	大小			
🖈 快速访问		# Beckhoff EPP7xxx	2019/11/25 11:36	XML 3276	2.215 KB			
周示 🔜	*	Beckhoff EPP9xxx	2019/10/15 14:54	XML 文档	197 KB			
- 下戦	38	Beckhoff EPx9xx	2019/11/19 8:25	XML文档	629 KB			
司 文档	10	Beckhoff LO1xxx	2015/11/12 14:24	XML 文档	22 KU			
- 四片	1	Beckhoff EQ2xxx	2016/11/23 10:42	XML 3288	73 KB			
	10	Beckhoff EQ3xxx	2016/11/22 11:22	XML 3288	1.386 KB			
FREE FEE		Beckhoff ER1xxx	2016/11/21 15:46	XML XRS	165 KB			
🥩 网络		Beckhoff ER2xxx	2016/11/21 14:32	XML文档	259 K8			
		Beckhoff ER3xxx	2017/6/9 13:35	XML文档	1,177 KB			
		# Beckhoff ER4xxx	2016/11/22 12:58	XML文档	318 KB			
		Beckhoff ER5xxx	2016/3/14 11:52	XML 328	273 KB			
		Beckhoff ER6xxx	2016/3/14 11:52	XML XR	494 KB			
		Beckhoff ER7xxx	2019/2/14 8:50	XML 3285	2,717 KB			
		Beckhoff ER8xxxx	2016/3/14 11:52	XML 文档	207 KB			
		Beckhoff EtherCAT EvaBoard	2015/2/4 12:57	XML 文档	72 KB			
		Beckhoff EtherCAT Terminals	2015/2/4 12:57	XML 文档	53 KB			
		Beckhoff FB1XXX	2017/5/24 12:26	XMI. 3289	49 KB			
		Beckhoff FCxxxx	2015/2/4 12:57	XML S288	21 KB			
		Beckhoff FM3xxx	2018/6/29 15:05	XML 文档	367 KB			
		Beckhoff ILxxxx-8110	2015/2/4 12:57	XML文档	8 KB			
		# FAS CTEU-ECT V4.6.0	2020/10/10 10:01	XML 文档	14 KB			

New Construction:

Open TwinCAT XAE software---File-New-Project---select TwinCAT XAE Projectenter name-OK



Select target system:

SYSTEM-Choose Target System-slect PLC(CX-3DBOA4)-OK

W决方案资源管理器 → 🖡	X TEST1030 @ X
C () () () () () () () () () () () () ()	Ceneral Settings Additional Files Ceneral Settings Additional Files Choose Target Choose Target Coore Coor Coor Coor Coor Coor Coor Coo
	Connector Timeou (s) 4 👳

add module:

Pull down the IO option-DEVICES-SCAN; search for the master station, select Device $2\,(\mbox{EtherCAT})\,-\mbox{OK}$



Module slot data (IOLINK mode):

Find the module FNI-ECT-508-105-M under the resource manager, select Slots, select the required slot data for configuration, slots 0^7 are PIN4 functions, slots 8^15 are PIN2 functions

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uild 4024.7 (Loaded) • 🚦 🔛 🧧 🚺 🕏 沁 🛞 🔍 %	TwinCAT Project27 • <local></local>		led2 •	1 / *	(日):2:19	0 6 8 6	0.0.	
◎ ▲ 部・ ◎・ 部 ▶ - 解決方案的原言理論(Ctrl+;) ・ ・			tartup CoE - Online Online		20			
GVL+ GVL+ MAIN (PRG) VISUs Herask (PlcTask2) MAIN	 IO-Link Port 0 IO-Link Port 1 IO-Link Port 2 IO-Link Port 3 IO-Link Port 4 	IOL_IO_8_8byte IOL_IO_8_8byte IOL_IO_8_8byte IOL_IO_8_8byte IOL_IO_8_8byte	0x0000130B 0x0000130B 0x0000130B 0x0000130B 0x0000130B	×	ID Digital_IN OLL_1byte IOL_12byte IOL_14byte IOL_16byte	0x00001102 0x00001103 0x00001104	Digital-IN IO-Link 1 Byte Input Process Data IO-Link 2 Byte Input Process Data IO-Link 4 Byte Input Process Data IO-Link 6 Byte Input Process Data	
€ Unitiled2tmc € Unitiled2Instance SAFETY SAFETY SAFETY	 IO-Link Port 5 IO-Link Port 6 IO-Link Port 7 IO-Link Port 7 IO Function Port 0 Pin 2 	IOL_IO_8_8byte IOL_IO_8_8byte IOL_IO_8_8byte Digital_OUT	0x00001308 0x00001308 0x00001308 0x00001201		 IOL_I_8byte IOL_I_10byte IOL_I_16byte IOL_I_24byte 	0x00001107 0x00001108	IO-Link 8 Byte Input Process Data IO-Link 10 Byte Input Process Data IO-Link 16 Byte Input Process Data IO-Link 24 Byte Input Process Data	
ANALYTICS A Devices A Devices 2 (EtherCAT) Image	IO Function Port 1 Pin 2 IO Function Port 2 Pin 2 IO Function Port 3 Pin 2 IO Function Port 4 Pin 2 IO Function Port 5 Pin 2	Digital_OUT Digital_OUT Digital_OUT Digital_OUT Digital_OUT	0x00001201 0x00001201 0x00001201 0x00001201 0x00001201		IOL_I_32byte IO Digital_OUT IOLO_1byte IOL_O_2byte IOL_O_4byte	0x00001201 0x00001202 0x00001203	IO-Link 32 Byte Input Process Data Digital-OUT IO-Link 1 Byte Output Process Data IO-Link 2 Byte Output Process Data IO-Link 4 Byte Output Process Data	
Image-Info ✓ SyncUnits ✓ SyncUnits ✓ Inputs ✓ Outputs ✓ ProOCtrl	IO Function Port 5 Pin 2 IO Function Port 6 Pin 2 IO Function Port 7 Pin 2	Digital_OUT Digital_OUT	0x00001201 0x00001201 0x00001201		 IOL_0_4byte IOL_0_6byte IOL_0_8byte IOL_0_10byte IOL_0_16byte 	0x00001205 0x00001206 0x00001207	IO-Link 4 Byte Output Process Data IO-Link 6 Byte Output Process Data IO-Link 8 Byte Output Process Data IO-Link 10 Byte Output Process Data IO-Link 16 Byte Output Process Data	

Module slot PIN2 data setting:

If the slave station module has output signal access, the master station module PIN2 must be opened, and assigned in the program ----- configuration is complete! When the variable Output PIN2 is set to 1, PIN2 is enabled; when it is set to 0, PIN2 is disabled

之件(F) 編編(E) 视图(V) 项目(P) 生成(B) 调试(D)	TwinCAT TwinSAFE PLC 团队(M) Scope 工具(T
0-0 10-0-0 H = - C - C	- Release - TwinCAT RT (x64) - ▶ 附加
Build 4024.7 (Loaded) 👻 🚽 🔛 🔟 🖉 🛠 🌾 🎯	TwinCAT Project27 - <local></local>
	# × TwinCAT Project27
○ ○ ☆ ☆ - 'o - # 🖋 🗕	Name
要素解决方案资源管理器(Ctrl+;)	🔎 - 📕 Output Pin 2
👂 🛄 Inputs	Dutput Pin 4
Outputs	
Erm0Ctrl	
Frm0WcCtrl	
DevCtrl	
InfoData	
 Box 1 (FNI ECT-508-105-M) 	
Digital Input Mapping	
IO-Link Device State	
🧉 🝓 Digital Output Mapping	
Output Pin 4	
🔺 📂 Output Pin 2	
Cutput Pin 2[0]	
Output Pin 2[1]	
Cutput Pin 2[2]	
Cutput Pin 2[3]	
Output Pin 2[4]	
Output Pin 2[5]	
Output Pin 2[6]	
Output Pin 2[7]	
Module 1 (IOL_IO_8_8byte)	
 Module 2 (IOL_IO_8_8byte) 	
 IO-Link Input process data mappi IIO-Link Output process data map 	

Module slave station data setting (COE setting): Find the module FNI-ECT-508-105-M under the resource manager and click COE-On-line

1-		····		
E	8100:0	IO-Link Service Data Port.0		> 6 <
	8100:01	Index	RW	0x0041 (65)
	8100:02	Subindex	RW	0x00 (0)
	8100:03	Length	RW	0x02 (2)
	8100:04	Data	RW	FF FF 00 00 00 00 00 00 00
	8100:05	Control	RW	0x00 (0)
	8100:06	Error Code	RO	0x0000 (0)
E	8110:0	IO-Link Service Data Port.1		> 6 <
E	8120:0	IO-Link Service Data Port.2		> 6 <
E	8130:0	IO-Link Service Data Port.3		> 6 <
E	8140:0	IO-Link Service Data Port.4		> 6 <
E	8150:0	IO-Link Service Data Port.5		> 6 <
E	8160:0	IO-Link Service Data Port.6		> 6 <
E	8170:0	IO-Link Service Data Port.7		> 6 <

- 8100: 0 :master Pro O Port Data Settings
- 8110: 0 :master Pro 1 Port Data Settings
- 8120: 0 :master Pro 2 Port Data Settings
- 8130: 0 :master Pro 3 Port Data Settings
- 8140: 0 :master Pro 4 Port Data Settings
- 8150: 0 :master Pro 5 Port Data Settings
- 8160: 0 :master Pro 6 Port Data Settings
- **8170: 0** :master **Pro 7** Port Data Settings

Set parameters and data according to the manual of the slave station moduleIndex: index Subindex: sub-index Length: Data length BYTE Type (When reading or writing, fill in the data length first) Data: data mapping Control: 1= read 2= to write Error code: error code IOLINK slave station configuration (this function is online configuration, the slave station and the master station should maintain normal communication)

(1) When you need to configure the IOLINK slave station, you should write to set Pin4 as the IOLINK function, and write Control 2 to complete the configuration of the slave station;

Note that the input value of Index and Subindex is decimal, and the input and output value of Data is hexadecimal;

(2) Commonly used indexing functions of FAS slaves:

Example: a. Input and output configuration: Index =65, Subindex=0; the following figure is an example of slave station configuration:



For example: the DI/DO requirement of the slave station module is full output (FFFF) Index=65 (from the station manual) Subindex=0 Length=2 Data=FFFF Contex=1=2 - Fortex

Control=2 →Enter

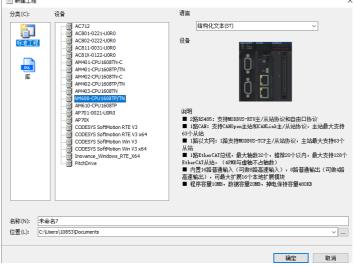
The writing is successful, and the module configuration becomes full output

5.1.2 In Huichuan AM600-CPU1608TP/TN integrated

Here you will see an example of how to integrate this module into Inproshop, taking AM600-CPU1608TP/TN PLC as an example:

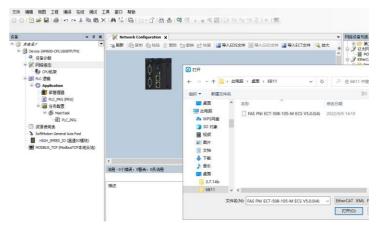
Add new project:

Select the corresponding PLC model for the new project

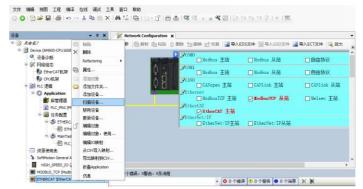


Add module:

Double-click the network configuration----click to import ECT file----select the master station description file FNI-ECT-508-105-M

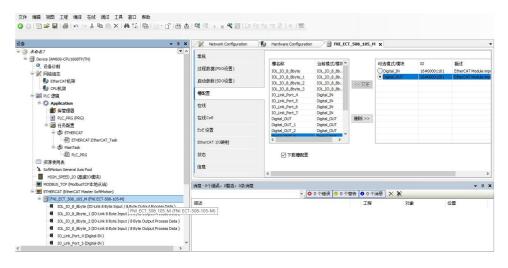


Click PLC----check the EtherCAT master station----choose the device on the left side ------right click ETHERCAT-----scan the device



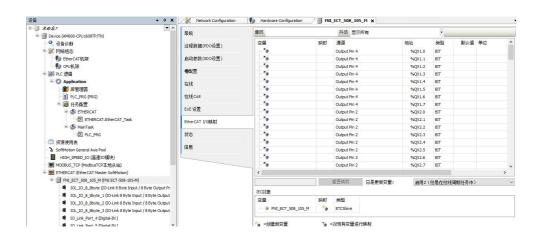
Module slot data:

Double-click the left device frame module FNI-ECT-508-105-M ------Slot configuration -----Select the required slot data to configure Slot 0^7 is PIN4 function Slot 8^15 For PIN2 function



Module slot PIN2 data setting

If the slave station module has output signal access, the PIN2 of the master station module must be opened, and assigned in the program----- configuration is complete! When the variable Output PIN2 address is set to 1, PIN2 is enabled; when set to 0, PIN2 is disabled



6 appendix

${\bf 6.1.}$ Included materials FNI ECT contains the following components

• I/O-blocks

4 blind plugs M12

- Ground busbar
- Thread M4x6
- 20 tags

6.2. order code

	FNI MPL-50x-105-N
FAS Network Interface	
Various industrial communication protocols —	
Features	
506= IP 67 IO-Link master module, 8 IO-Link ports Port4~7 no 10 out	puts
508 = IP 67 IO-Link master module, 8 IO-Link ports	
Version —	
105 = show version	
Mechanical parameters	
M = die-cast zinc housing	
Data transmission: 2xM12xl female thread	
Power Connection: Male/Female (L-Code)	
Sensor connection: 8 x M12xl female thread	

 $6.3\ {\rm ordering}\ {\rm information}$

Product order code	order code
FNI ECT-506-105-M	006B31