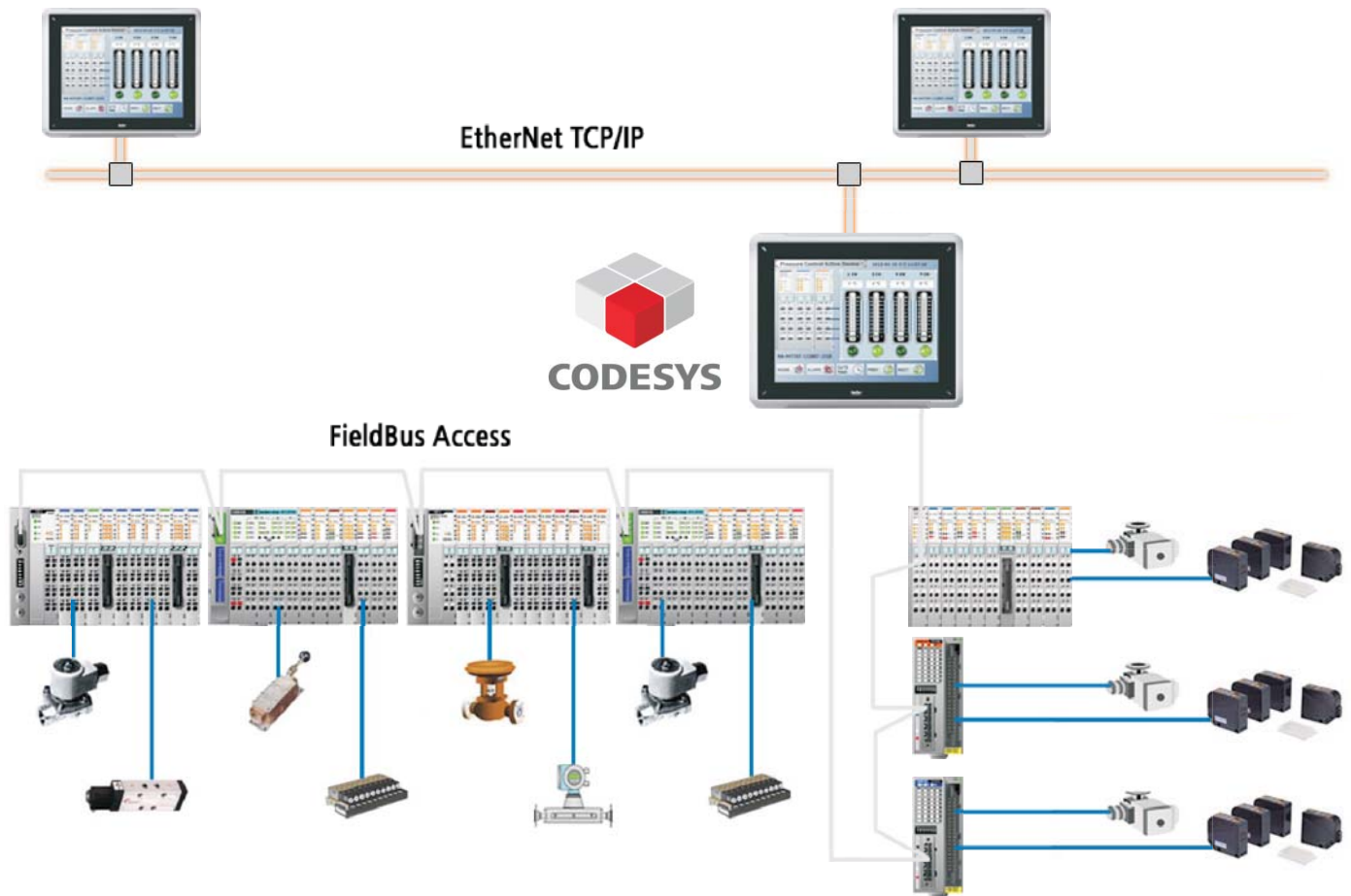




FnIO S-Series | Supports various industrial protocols



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Convenience

- Considered Design for User.
- Compact Size : We applied Ultra-small size RTB(Removable Terminal Block) and maximized the convenience for users during their wiring connection and modification.
- High Density Module : Many Points that you can use and Simple Wiring Connection due to 16points Header Type Connector.

Economical

- In case of adopting this system, Users can notice their cost reduction from their Maintenance, Replacement of module, Wiring connection and etc.

Stability

- The connection between modules can be maximized by using Pin Slide Way for Stable System Configuration.
- We adopted U-Processor to perform powerful diagnostic function.

Certificate



FnIO S-Series (Slice Type)



- First Slice Type FieldBus IO
- The smallest compact System configuration in the world
- The most reasonable price for compact System configuration in the world
- Removable Terminal Block designed for user convenience
- FieldBus Type : DeviceNet, PROFIBUS, CANopen, CC-Link, EtherNet, ModBus, EtherNet/IP, PROFINET, EtherCAT, Programmable IO, CC-Link IE

New Platform Network Adapter

Remote IO

DeviceNet
NA-9111/9112



PROFIBUS
NA-9122



CANopen
NA-9161



CC-Link
NA-9131



EtherCAT
NA-9286/9386



MODBUS RS232
NA-9171



MODBUS RS485
NA-9173



PROFINET
NA-9187



EtherNet/IP
NA-9188



MODBUS TCP/IP
NA-9189



DeviceNet
NA-9211/9212



PROFIBUS
NA-9222



CANopen
NA-9261



CC-Link IE Field
NA-9285



PROFINET
NA-9287



EtherNet/IP
NA-9288



MODBUS/TCP
NA-9289



Programmable I/O
NA-9371



Programmable I/O
NA-9372



Programmable I/O
NA-9373



Digital Input
ST-1xxx



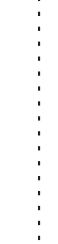
Digital Output
ST-2xxx



Analog Input
ST-3xxx



Analog Output
ST-4xxx



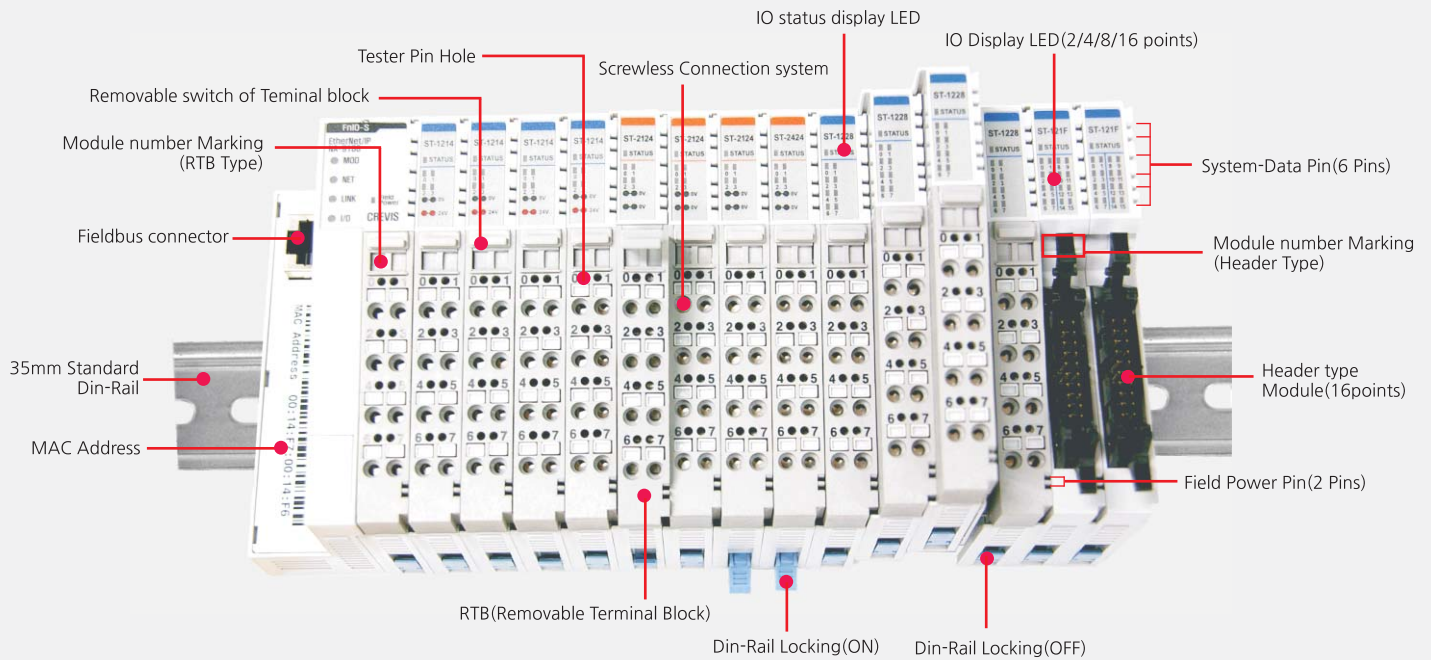
Special Module
ST-5xxx



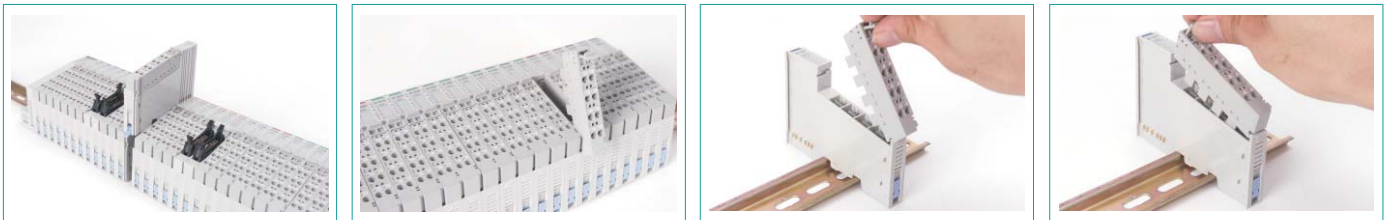
Power Module
ST-7xxx



Features



RTB (Removable Terminal Block)



- Whole terminal block can be combined and removed for the convenience of its maintenance.
- There is a locking switch on the RTB for the easy combination and easy removal.
- Easy combination and easy removal for IO modules on the din rail through One Touch Locking Switch.

The hole for Test Pin, Switch for the address, Field Power & System Power



- After wiring, checking the input or output value.
- Rotary Switch for setting up the address,
- Safety from the vibration and shock due to the pin sliding type.



FnIO S-Series

The Network Adapter Module of FnIO S-series consists of various International standard networks, such as DeviceNet, PROFIBUS DP/V1, CANopen, CC-Link, CC-Link IE EtherCAT, Modbus, EtherNet/IP, PROFINET, Programmable I/O etc. With this module user can design according to their system and equipment.


Network Adapter Modules

	DeviceNet NA-9111/9211	Premium DeviceNet NA-9112/9212	PROFIBUS NA-9122/9222	CANopen NA-9161/9261	CC-Link NA-9131	CC-Link IE NA-9285
Communication Type						
Max. Network Node	64 Node	64 Node	100 Station	99 Node	42 Node	120 Node
I/O Data size	Input : 32 bytes Output : 32 bytes	Input : 252 bytes Output : 252 bytes	Input : 128 bytes Output : 128 bytes	Input : 64 bytes Output : 64 bytes	System area: 16point RX/RX: 112point RWw/RWw: 16point	Input : 252 bytes Output : 252 bytes
Baud Rate	100M : 500Kbps 250M : 250Kbps 500M : 125Kbps Auto baud	100M : 500Kbps 250M : 250Kbps 500M : 125Kbps Auto baud	9.6K(1.2km) ~ 12 Mbps(100m)	Synchronized PDO transmission 10K/20K/50K/ 100K/125K/250K/ 500K/800K/1Mbps	156/625/2500/5000 10000 Kbps	1000Mbps
Bus Connection	5 Pin open-style connector	5 Pin open-style connector	9 Pin D-Sub connector	5 Pin open-style connector	5 Pin open-style connector	2 x RJ-45

	EtherCAT NA-9286/9386	MODBUS RS232 NA-9171	MODBUS RS485 NA-9173	PROFINET NA-9187/9287	EtherNet/IP NA-9188/9288	MODBUS TCP/IP NA-9189/9289
Communication Type						
Max. Network Node	Up to 65,534 EtherCAT	1 Node	64 Node	Limited by EtherNet Spec.	Limited by EtherNet Spec.	Limited by EtherNet Spec.
I/O Data size	Input : 252 bytes Output : 252 bytes	Input : 252 bytes Output : 252 bytes	Input : 252 bytes Output : 252 bytes	Input : 252 bytes Output : 252 bytes	Input : 252 bytes Output : 252 bytes	Input : 252 bytes Output : 252 bytes
Baud Rate	100 Mbps	1200/2400/4800/ 9600/19200/38400/ 57600/115200bps	1200/2400/4800/ 9600/19200/38400/ 57600/115200bps	100 Mbps	10/100 Mbps	10/100 Mbps
Bus Connection	2 x RJ-45	9 Pin D-Sub connector	5 Pin open-style connector	2 x RJ-45	RJ-45 / 2 x RJ-45	RJ-45 / 2 x RJ-45


Digital Input Modules

- There are DC 5V, DC 12V, DC 24V, DC 48V, AC 110V and AC 220V input modules.
- Each modules have different points from 4 points to 16 points, Especially 16 points module was developed through the high technology of CREVIS and a differentiated product compared with previous products of competitors.
- It will give users a good profit as well.

	Type	Model	Specification
	DC5V	ST-1114	Digital Input 4 Points, Sink, Terminal, 5Vdc
		ST-111F	Digital Input 16 Points, Sink, 20P Connector 5Vdc
		ST-1124	Digital Input 4 Points, Source, Terminal, 5Vdc
		ST-112F	Digital Input 16 Points, Source, 20P Connector 5Vdc
	DC12~24V	ST-1214	Digital Input 4 Points, Sink, Terminal, 12V / 24Vdc
		ST-1218	Digital Input 8 Points, Sink, Terminal, 12V / 24Vdc
		ST-121F	Digital Input 16 Points, Sink, 20P Connector, 12V/24Vdc
		ST-1224	Digital Input 4 Points, Source, Terminal, 12V / 24Vdc
		ST-1228	Digital Input 8 Points, Source, Terminal, 12V / 24Vdc
		ST-122F	Digital Input 16 Points, Source, 20P Connector, 12V/24Vdc
	DC48V	ST-1314	Digital Input 4 Points, Sink, Terminal, 48Vdc
		ST-131F	Digital Input 16 Points, Sink, 20P Connector 48Vdc
		ST-1324	Digital Input 4 Points, Source, Terminal, 48Vdc
		ST-132F	Digital Input 16 Points, Source, 20P Connector 48Vdc
	AC110V	ST-1804	Digital Input 4 Points, 120Vac (AC 85V ~ 132V)
	AC220V	ST-1904	Digital Input 4 Points, 240Vac (AC 170V ~ 264V)

Digital Output Modules

- Digital Output Modules are available in Sink Type, Source Type, Relay and Triac Type from 2 points to 16 points.
- There are 4/8/16 points of DC 24V/0.5 Type and 16 points of DC 24V/0.5A type.
- DC 24V/2A for the large current can be used without Relay.
- It has Diagnostic module to check wrong parts of output.

	Type	Model	Specification
	DC5V	ST-2114	Digital Output 4 Points, TTL Inverting, Terminal, 5Vdc / 20mA
		ST-2124	Digital Output 4 Points, TTL Non- Inverting, Terminal, 5Vdc / 20mA
	DC24V	ST-221F	Digital Output 16 Points, Sink, 20P Connector, 24Vdc / 0.5A
		ST-222F	Digital Output 16 Points, Source, 20P Connector, 24Vdc / 0.5A
		ST-2314	Digital Output 4 Points, Sink, Terminal, 24Vdc / 0.5A
		ST-2318	Digital Output 8 Points, Sink, Terminal, 24Vdc / 0.5A
		ST-2324	Digital Output 4 Points, Source, Terminal, 24Vdc / 0.5A
		ST-2328	Digital Output 8 Points, Source, Terminal, 24Vdc / 0.5A
		ST-2414	Digital Output 4 Points, Sink, Terminal, Diagnostics, 24Vdc / 0.5A
		ST-2424	Digital Output 4 Points, Source, Terminal, Diagnostics, 24Vdc / 0.5A
		ST-2514	Digital Output 4 Points, Sink, Terminal, Diagnostics, 24Vdc / 2A
		ST-2524	Digital Output 4 Points, Source, Terminal, Diagnostics, 24Vdc / 2A
		ST-2614	Digital Output 4 Points, Sink, Terminal, 24Vdc / 2A
		ST-2624	Digital Output 4 Points, Source, Terminal, 24Vdc / 2A
	Relay	ST-2742	Relay Output 2 Points, Terminal, 240Vac / 2A, 24Vdc/2A
		ST-2744	Relay Output 4 Points, Terminal, 240Vac / 2A, 24Vdc/2A
		ST-2748	Relay Output 8 Points, Terminal, 240Vac / 2A, 24Vdc/2A
		ST-2792	Relay Output 2 Points, Terminal, 240Vac / 2A, Manual Type
	Triac	ST-2852	Triac Output 2 Points, 12V ~ 120Vac / 0.5A

Analog Input Modules


- 12Bits and 14Bits in the Analog Input module are available according to 4 channels or 8 channels.
- 2/4/8 channels and RTD, TC are available as well.



Type	Model	Specification
0~20mA	ST-3114	Analog Input 4 Channels, 0~20mA, 12Bits, RTB
	ST-3118	Analog Input 8 Channels, 0~20mA, 12Bits, RTB
	ST-3134	Analog Input 4 Channels, 0~20mA, 14Bits, RTB
4~20mA	ST-3214	Analog Input 4 Channels, 4~20mA, 12Bits, RTB
	ST-3218	Analog Input 8 Channels, 4~20mA, 12Bits, RTB
	ST-3234	Analog Input 4 Channels, 4~20mA, 14Bits, RTB
0~10V	ST-3424	Analog Input 4 Channels, 0~10Vdc, 12Bits, RTB
	ST-3428	Analog Input 8 Channels, 0~10Vdc, 12Bits, RTB
	ST-3444	Analog Input 4 Channels, 0~10Vdc, 14Bits, RTB
-10~+10V	ST-3524	Analog Input 4 Channels, -10~+10Vdc, 12Bits, RTB
	ST-3544	Analog Input 4 Channels, -10~+10Vdc, 14Bits, RTB
0~5V	ST-3624	Analog Input 4 Channels, 0~5Vdc, 12Bit, RTB
	ST-3644	Analog Input 4 Channels, 0~5Vdc, 14Bit, RTB
RTD	ST-3702	Analog Input 2 Channels, RTD, RTB
	ST-3704	Analog Input 4 Channels, RTD, 20Pins Connector
	ST-3708	Analog Input 8 Channels, RTD, 20Pins Connector
Temp.Controller (DeviceNet only)	ST-3714	Analog Input 4 Channels, RTD, Temp. Con, SSR Out, 20Pins Connector
	ST-3734	Analog Input 4 Channels, RTD, Temp. Con, RTD In, 4~20mA Out, 20Pins Connector
TC	ST-3802	Analog Input 2 Channels, Thermocouple, RTB
	ST-3804	Analog Input 4 Channels, Thermocouple, 20Pins Connector
	ST-3808	Analog Input 8 Channels, Thermocouple, 20Pins Connector
Temp.Controller (DeviceNet only)	ST-3814	Analog Input 4 Channels, TC, Temp. Con, SSR Out, 20Pins Connector
	ST-3834	Analog Input 4 Channels, TC, Temp. Con, Thermocouple In, 4~20mA, 20Pins Connector

Analog Output Modules


- There are Voltage type and Current type in the Analog Output module according to 2 channels and 4 channels.



Type	Model	Specification
0~20mA	ST-4112	Analog Output 2 Channels, 0~20mA, 12Bits, RTB
	ST-4114	Analog Output 4 Channels, 0~20mA, 12Bits, RTB
4~20mA	ST-4212	Analog Output 2 Channels, 4~20mA, 12Bits, RTB
	ST-4214	Analog Output 4 Channels, 4~20mA, 12Bits, RTB
	ST-4274	Analog Output 4 Channels, 4~20mA, 12Bits, Sensor Connector
0~10V	ST-4422	Analog Output 2 Channels, 0~10V, 12Bits, RTB
	ST-4424	Analog Output 4 Channels, 0~10V, 12Bits, RTB
	ST-4474	Analog Output 4 Channels, 0~10V, 12Bits, Sensor Connector
	ST-4491	Analog Output 1 Channel, 0~10V, 12Bits, Manual Type, RTB
-10~+10V	ST-4522	Analog Output 2 Channels, -10~+10V, 12Bits, RTB
0~5V	ST-4622	Analog Output 2 Channels, 0~5V, 12Bits, RTB


Special Modules

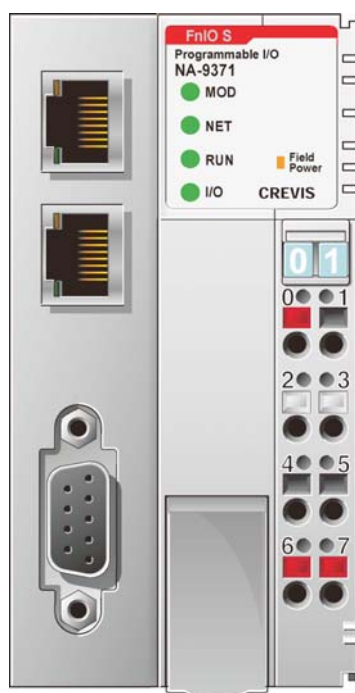
- There are 1/2/4 channels High Speed Counter modules which have 5Vdc or 24Vdc type.
- There are 1/2 channels Serial Communication modules that support RS233, RS422, RS485.
- There are 2/4 channels PWM modules which have 0.5A or 2A type.
- There are 1/2 channels Pulse modules which have 24Vdc type.

	Type	Model	Specification
	High Speed Counter	ST-5101/5111	High Speed Counter, 1 Channel, 5Vdc/24Vdc
		ST-5112	2 channels High Speed Counter Input, 24Vdc
		ST-5114	4 channels High Speed Counter Input, 24Vdc
	Serial Communication	ST-5211	Serial Interface RS 232 1 Channel
		ST-5212	Serial Interface RS 232 2 Channels
		ST-5221	Serial Interface RS 422 1 Channel
		ST-5231	Serial Interface RS 485 1 Channel
		ST-5232	Serial Interface RS 485 2 Channels
	Extension	ST-5725	Extension Function IO, Master
		ST-5726	Extension Function IO, Slave
	SSI	ST-5351	1 channel SSI Interface
	PWM	ST-5422	2 channels PWM Output, 1.5A/24Vdc, Source
		ST-5442	2 channels PWM Output, 0.5A/24Vdc, Source
		ST-5444	4 channels PWM Output, 0.5A/24Vdc, Source
	Pulse	ST-5641	1 channel Pulse Output, 0.5A/24Vdc, Source
		ST-5642	2 channels Pulse Output, 0.5A/24Vdc, Source
		ST-5651	1 channel Pulse Output, RS 422

Power Modules

- CREVIS has Power Supply Modules to prevent the lack of Power capacity in NA module while expending each modules.
- There is a Field Power Distributor to sort out the AC and DC from Field Power during the expansion of modules.
- It has Common modules such as Shield, 0Vdc, 24Vdc and Mixed Mode without any special terminal.

	Type	Model	Specification
	Potential Distributor	ST-7008	Shield Module
		ST-7408	Shield Module, ID Type
		ST-7108	Common for 0Vdc
		ST-7508	Common for 0Vdc, ID Type
		ST-7118	Common for 24Vdc
		ST-7518	Common for 24Vdc, ID Type
		ST-7188	Common for 0Vdc and 24Vdc
		ST-7588	Common for 0Vdc and 24Vdc, ID Type
	Expansion System Power	ST-7111	Expansion Power Supply, Input 24Vdc, Output 1.0A/5Vdc
	Expansion Field Power	ST-7241	Field Distributor, 5Vdc, 24Vdc, 48Vdc, 110Vac, 220Vac
		ST-7641	Field Distributor, 5Vdc, 24Vdc, 48Vdc, 110Vac, 220Vac, ID Type



Programmable IO



MODBUS

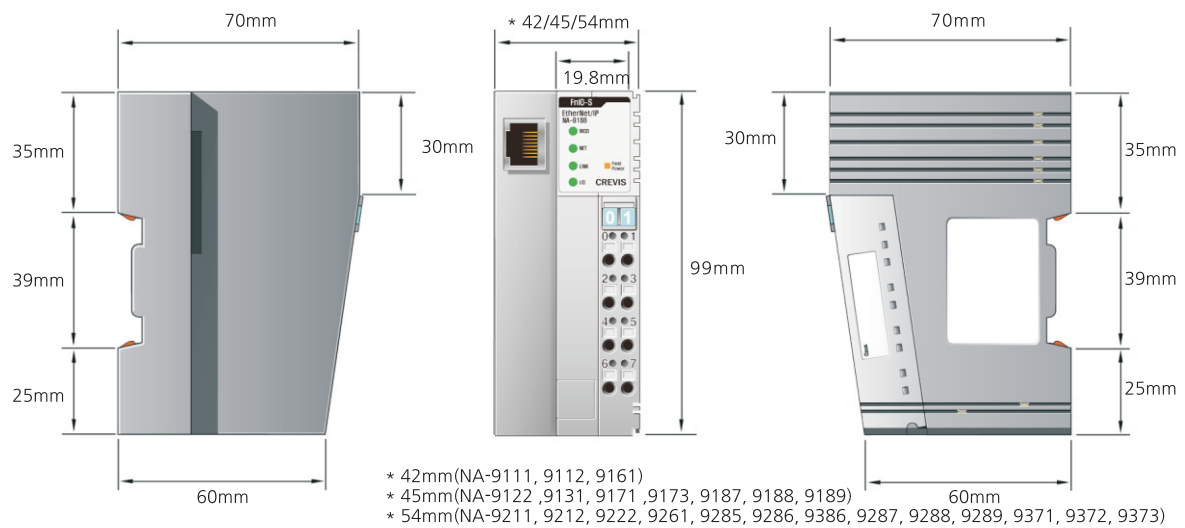
- Modbus TCP/IP, RS-232/RS-485 master
Slave protocol support
- 10M/100M Bits/s
- Programming micro PLC
(32 Bits multi tasking controller)
CODESYS V3
- Web visualization
- Max. 63 node expandable IO slot support
- Dual Ethernet port (Switch)



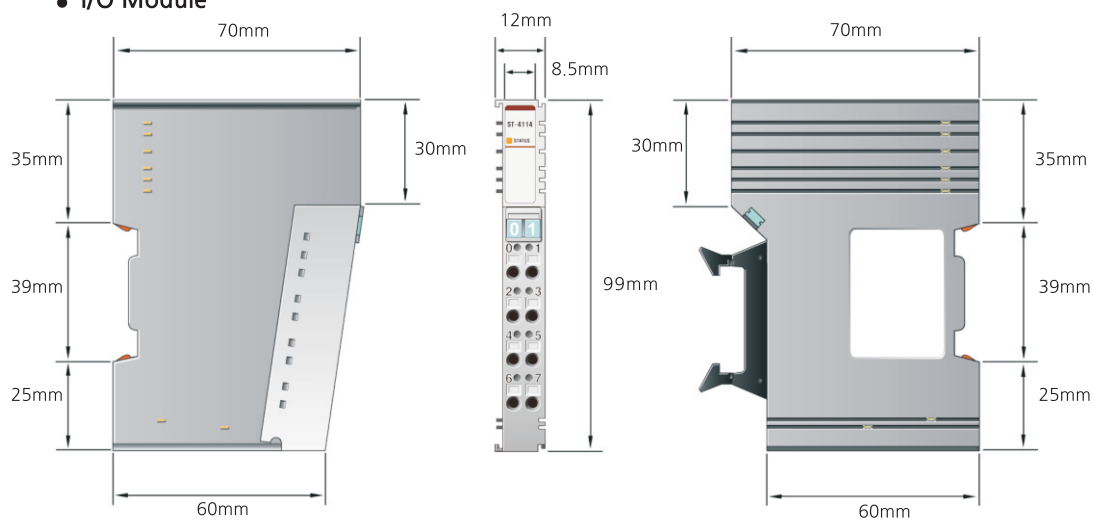
	NA-9371	NA-9372	NA-9373
Program Memory	256 KBytes	4 Mbytes	
Data Memory	48 KBytes	4 MBytes	
Non Volatile	4 KBytes	32 KBytes	
Retain	2 KBytes	16 KBytes	
Flag	2 KBytes	16 KBytes	
RTC	Retain : 1day	Retain : 6days	
ModBus TCP	Master/Slave		
ModBus RTU	RS232/485 Slave	RS232/485 Master / Slave	
CodeSys Version	Codesys V3.5 Sp3 patch 1		
Interface Connector	2 x RJ45, 1 serial port RS232/485 for Modbus RTU		
Protocols	Modbus TCP, BootP, DHCP, SNMP, HTTP		
Program Language	IEC61131-3 (LD, IL, ST, FBD, SFC)		
IO Size	Input 252 Bytes / Output 252 Bytes		
Expansion slot	63 Slots		
IP setting	BootP/DHCP/Webserver		
IO guide Pro configuration	Yes	Yes	Yes
Web Server	Yes	Yes	Yes
OPC	No	Yes	Yes
Online Change	No	Yes	No
Web Visulation	No	No	Yes
Power	24Vdc @ 110mA typical		
Certification	CE, FCC, KC, UL, DNV, RoHS2, Reach		

Dimension

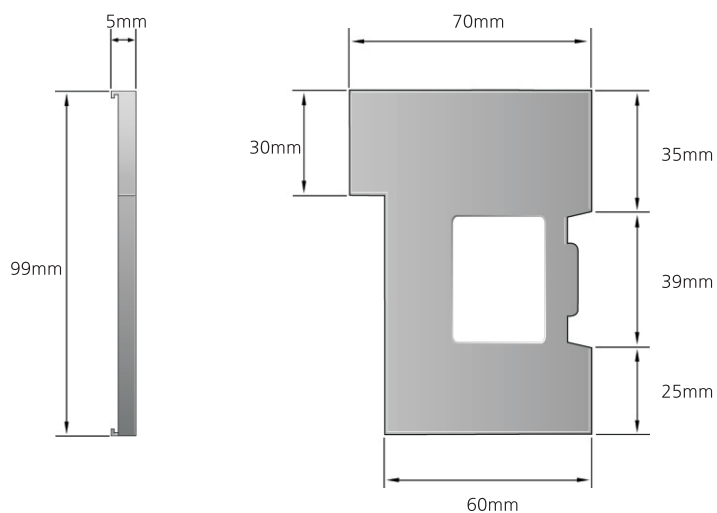
● Network Adapter



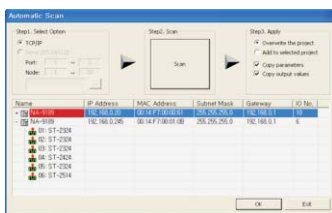
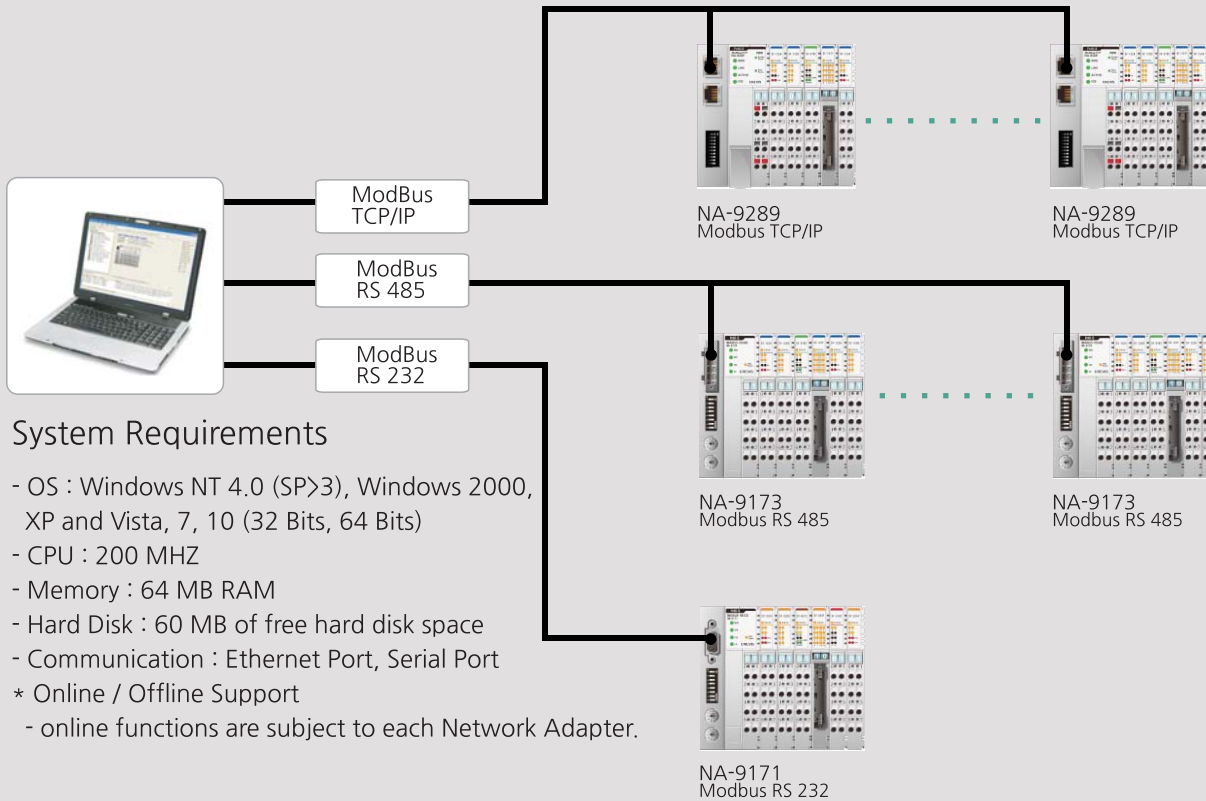
● I/O Module



● END Module

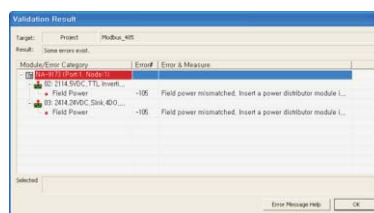


I/O Guide Pro : Software Tool for Configuration



Automatic scan

- MODBUS support.
- Completely scan connected with online



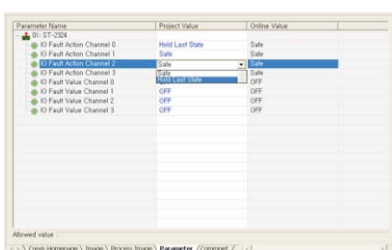
Check validation

- Check validation whether system is correct or not.



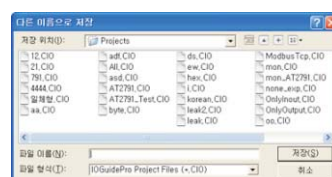
View Address Map

- Displaying input/output address map.



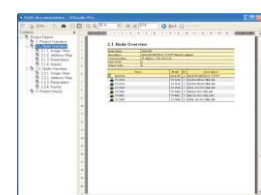
Setup IO Parameters

- Parameters in network adapter or I/O module can be changed.



Save As Project

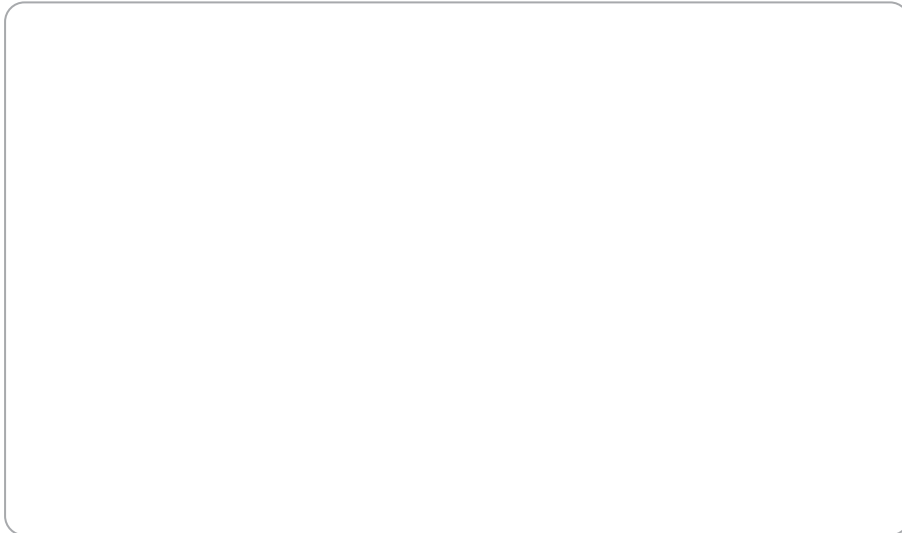
- Save what you made.



Documentation

- Possible to print information of selected project or Network Adapter or save them as PDF, Excel file
- Document contains as following.

Documentation offered by your distributor



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www.crevis.co.kr

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