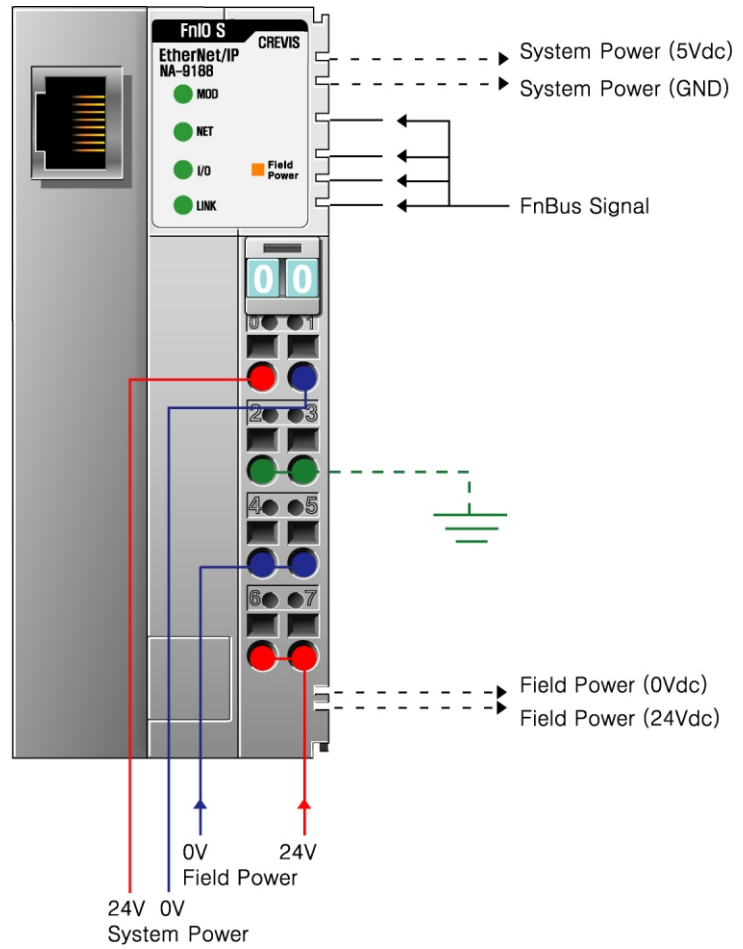


EtherNet/IP

- NA-9188은 EtherNet/IP Network Adapter이며, RJ-45 Connector를 통하여 EtherNet에 연결합니다.
- NA-9188은 Master/Slave 환경에서 Slave 역할을 합니다.
- NA-9188은 최대 2016 digital input/2016 digital output 또는 126 analog input/126 analog output들을 처리할 수 있습니다.
- NA-9188은 diagnostic 기능(Module 상태, Network 상태, Link 상태, Expansion Unit 상태, Field power 상태)을 위한 Indicator들이 있습니다.
- 통신속도는 10M~100Mbps까지의 통신속도를 지원하며 Auto baud rate을 지원합니다.
- IP는 Command Window를 사용하여 지정합니다.

Items	Ethernet/IP Adapter Module
Communication Interface Specifications	
Adapter Type	Level 2 I/O Server (Explicit, I/O Message)
Max. Expansion Module	32 slots
Max. Input Size	252bytes
Max. Output Size	252bytes
Max. Length Bus Line	Up to 100m from Ethernet Hub/Switch with twisted CAT 3 UTP/STP
Max. Nodes	Limited by Ethernet Specification
Max. Connection	16 IO message connections 64 CIP connections 64 Explicit message connections
Data transfer rate	10/100Mbps, Auto-negotiation, Full duplex
Protocol	Ethernet/IP, BOOTP
Interface Connector	RJ-45 socket
IP-Address Setup	Via BOOTP
Indicator	5 LEDs 1 Green/Red, Module Status (MOD) 1 Green, Network Status (NET) 1 Green, Link/Active Status (LINK) 1 Green/Red Expansion I/O Module Status (I/O) 1 Green, Field Power Status
Module Location	Starter module left side of FnIO system
Field Power Detection	About 11Vdc
General Specification	
System Power	Supply voltage : 24Vdc nominal Supply voltage range : 11~28.8Vdc Protection : Output current limit(Min. 1.5A) Reverse polarity protection
Power Dissipation	60mA typical @24Vdc
Current for I/O Module	1.5A @5Vdc
Isolation	System power to internal logic : Non-isolation System power to I/O driver : Isolation
Field Power	Supply voltage : 24Vdc nominal Supply voltage range : 11~28.8Vdc
Max. Current Field Power Contact	DC 10A Max.
Weight	150g
Module Size	45mm x 99mm x 70mm
Environment Condition	Refer to " 2.Environment Specification "

RJ-45	Signal Name	Description
1	TD+	Transmit +
2	TD-	Transmit +
3	RD+	Receive +
4	-	-
5	-	-
6	RD-	Receive -
7	-	-
8	-	-
Case	Shield	-



Status Indicator LED

MOD : Moduel Status LED

Status	LED is	Description
No Power	Off	No power is supplied to the unit.
Device Operational	Green	The unit is operating in normal condition.
Device in Standby	Flashing Green	The device needs commissioning due to configuration missing, incomplete or incorrect.
Minor Fault	Flashing Red	Recoverable Fault - EEPROM sum check error.
Unrecoverable Fault	Red	The device has an unrecoverable fault. - Memory error or CPU watchdog error.

NET : Network Status LED

State	LED is:	To indicate:
Not Powered	Off	Module is not powered.
No IP Address		Does not have an IP address
No Connections	Flashing Green	Module has obtained an IP address, but has no established connections.
CIP Connections	Green	Module has an IP address and at least one established connections.
Connection Time-out	Flashing Red	One or more of the connections in which the module is the target has time out.
Duplicate IP Address	Red	Module has detected that its IP address is already in use. Configure the module with a unique IP address.

LINK : Link/Active Status LED

State	LED is:	To indicate:
Not Powered	Off	May not be powered
Physical network not ready		
Link Operational	Green	Physical Network communication ready
Act Operational	Flashing Green	some data communication on the base Ethernet 802.3

I/O : Expansion Module Status LED

State	LED is:	To indicate:
Not Powered	Off	Device has no expansion module or may not be powered
No Expansion Module		
FnBus On-line, Do not Exchanging I/O	Flashing Green	FnBus is normal but does not exchanging I/O data (Passed the expansion module configuration).
FnBus Connection, Run Exchanging IO	Green	Exchanging I/O data
FnBus connection fault during exchanging IO	Flashing Red	One or more expansion module occurred in fault state. - Changed expansion module configuration. - FnBus communication failure.
Expansion Configuration Failed	Red	Failed to initialize expansion module - Detected invalid expansion module ID. - Overflowed Input/Output Size - Too many expansion module - Initial protocol failure - Mismatch vendor code between adapter and expansion module.

Field Power Status LED

State	LED is:	To indicate:
Not Supplied Field Power	Off	Not supplied 24Vdc field powered
Supplied Field Power	Green	Supplied 24Vdc field power

Mapping Data into the Image Table

