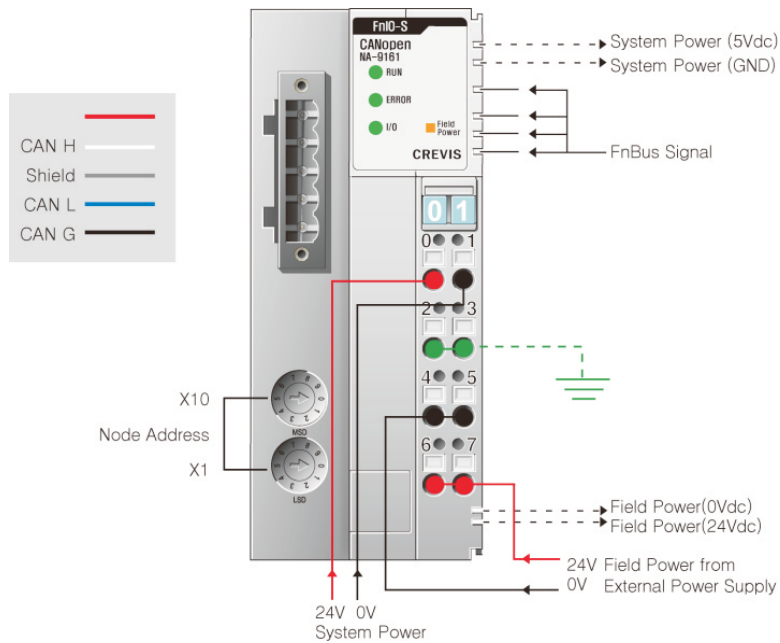


CANopen Network Adapter, 64 bytes input and 64 bytes output



Item		NA-9161
<b>Interface Specifications</b>		
Number of Network modules		Max. 99 slot
Expansion I/O Module		Max. 32 slot
Peripheral Signals		Input 64 bytes / Output 64 bytes
Indicators		1 Green : CAN-RUN Status Indicator 1 Red : CAN-ERR Status Indicator 1 Green / Red : Fn-Bus Status Indicator 1 Green : Field Power Supply Status Indicator
Communication Rate		10Kbps ~ 1Mbps
Max. bus length		Depending on Baud rate
Number of PDOs available		8 Transmit PDOs / 8 Receive PDOs
Number of SDOs available		1 Standard SDOs
<b>General Specification</b>		
System Power		Supply voltage : 24Vdc nominal Voltage range : 11~28.8Vdc
Power dissipation		Nominal 24Vdc@ 100mA
Current for I/O Module		Max. 5Vdc@ 1.5A
Isolation		Network to Logic : Isolation Logic to Field Power : Isolation Logic to System Power : Non-isolation
Field Power		Supply voltage : 24Vdc nominal Voltage range : 11~28.8Vdc
Current in Jumper Contacts		DC 10A maximum capacity
Weight		155g
Module Size		42mm x 99mm x 70mm
Environment Condition		Refer to " Environment Specification"(page : 1-191)

Status Indicator LED

RUN : CAN-RUN LED

State	LED is :	To indicate :
No Powered Not On-line	Off	The Device is not on-line or may not be powered - Not completed the Dup-MAC_ID test yet
On-line, STOPED	Single Flash Green	The Device is in STOPED state
On-line, PRE-OPERATIONAL	Blinking Green	The Device is in the PRE-OPERATIONAL state
On-line, OPERATIONAL	Green	The Device is in the OPERATIONAL state

## ERR : CAN-ERR LED

Status	LED is	To indicate
Not Powered Not On-line	Off	The Device is in working condition
Warning limit reached On-line	Single Flash Red	At least one of the error counters of the CAN controller has reached or exceeded the warning level (too many error frames).
Error Control Event On-line	Double Flash Red	The guarding monitor has asserted, guarding telegrams are no longer being received. The adapter is pre-operational state.
Sync Error On-line	Triple Flash Red	A sync error has occurred. - The adapter is pre-operational (PDOs switch off).
Bus Off	Red	The CAN controller is bus off

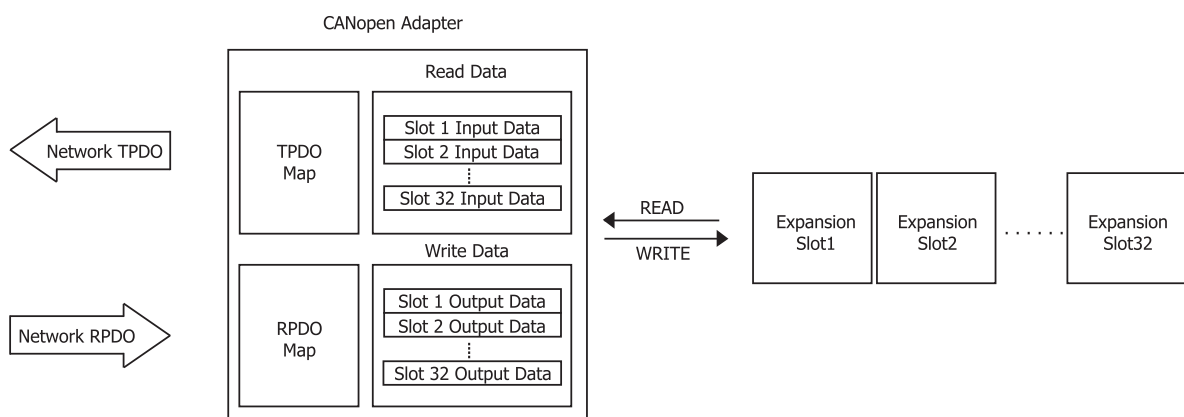
## Field Power : Field Power Status LED

Status	LED is	To indicate
Not Supplied Field Power	Off	Not supplied 24Vdc field power
Supplied Field Power	Green	Supplied 24Vdc field power

## I/O : Expansion Module Status LED

Status	LED is	To indicate
Not Powered No Expansion Module	Off	Device has no expansion module or may not be powered
Fn-Bus On-line, Do not Exchanging I/O	Flash Green	Fn-Bus is normal but does not exchanging I/O data (Passed the expansion module configuration)
Fn-Bus Connection, Run Exchanging I/O	Green	Expansion I/O data
Fn-Bus Connection Fault during Exchanging I/O	Red	One or more expansion module occurred in fault state. - Changed expansion module configuration - Fn-Bus communication failure.
Expansion Configuration Failed	Flash 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

## Mapping Data into the Image Table



# Network Adapter

## Configuration of the Fieldbus Node

### Network Address and Baud rate

Before starting Adapter operation the node number (node ID) and the Network adapter's baud rate must be set. These settings are made by means of 2 rotary switches on the Adapter.

### Node ID

The coupler's node ID is set with Rotary switches.  
The node ID can be set in the range from 1 to 99 (the ID is not allowed).

### Baud rate setting procedure

1. Both switches below must be '0' for the baud rate set-up, after power off the NA-9161
2. After the set-up for select S/W about the baud rate ranges like the table below, power on the NA-9161
3. The acceptance S/W should be set from 0 to 1 in order to retain the new baud rate in the NA-9161
4. The baud rate setting procedure is completed
5. User can set up the node ID.



The select S/W can be set in the range from 0 to 8  
The Acceptance S/W can be set in the range from 0 to 1

	0	1	2	3	4	5	6	7	8	9
Select S/W	0	1	2	3	4	5	6	7	8	9
Acceptance S/W	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'	'0'_'>'1'
Baud rate	1MB	800KB	500KB	250KB	125KB	100KB	50KB	20KB	10KB	Auto baud rate