



MODBUS TCP/IP

Item		NA-9289
Interface Specification		
Adapter Type	Slave node (MODBUS/TCP, MODBUS/UDP Server)	
Max. Expansion Module	63 Slots	
Max. Input Size	252 bytes	
Max. Output Size	252 bytes	
Max. Length Bus Line	Up to 100m from Ethernet Hub/Switch with twisted CAT 3 UTP/STP	
Max. Nodes	Limited by Ethernet Specification	
Baud rate	10/100 Mbps, Auto-negotiation, Full duplex	
Protocol	MODBUS/TCP, MODBUS/UDP, HTTP, DHCP 10 TCP Connections	
Interface Connector	RJ-45 socket x 2 pcs	
IP-Address Setup	Via DHCP/BOOTP or IOGuide (Crevis Configuration Software)	
IP-Address range	xxx.xxx.xxx.1 ~ 253 (User area)	
	xxx.xxx.xxx.254 ~ 255 (Reserved for IAP Function)	
Serial Configuration (Rs232)	Node : 1 (Fixed)	
	Baud Rate : 115200 (Fixed)	
	Data bit : 8 (Fixed)	
	Parity bit : No parity (Fixed)	
	Stop bit : 1 (Fixed)	
Indicator	5 LEDs	
	1 Green/Red, Module Status (MOD)	
	1 Green, Physical Connection (LINK)	
	1 Green, Exchange Data/Traffic Present (Active)	
	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	100mA 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	167g	
Module Size	54mm x 99mm x 70mm	
Environment Condition	Refer to " Environment Specification" (page : 1-191)	

Network Adapter

Status LED Indicator

MOD : Module Status LED

Status	LED is	To indicate
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.
MODBUS Error	Green / Red Toggle	MODBUS error such as watchdog error, etc.
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.

LINK : Physical Connection LED

Status	LED is	To indicate
Not Powered or Not Linked	Off	Device may not be powered
Adapter physical connected	Green	Adapter Ethernet Controller Physically connected

ACTIVE : Exchange Data / Traffic Present LED

Status	LED is	To indicate
Not Powered	Off	Device is idle or may not be powered
Adapter Exchange data	Flashing Green	Adapter(Slave) exchange data/Traffic present. About 10msec flashing.

IOS : 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	Flashing 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	Exchanging I/O data
Expansion Configuration Failed	Flashing 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.
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

Field Power : Field Power Status LED

Status	LED is	To indicate
Not Supplied Field Power	Off	Not Supplied 24V dc Field Power
Supplied Field Power	Green	Supplied 24V dc Field Power

Indicator states and flash rates

