GL-9971   Economic MODBUS TCP Programmable I/O

Specifications
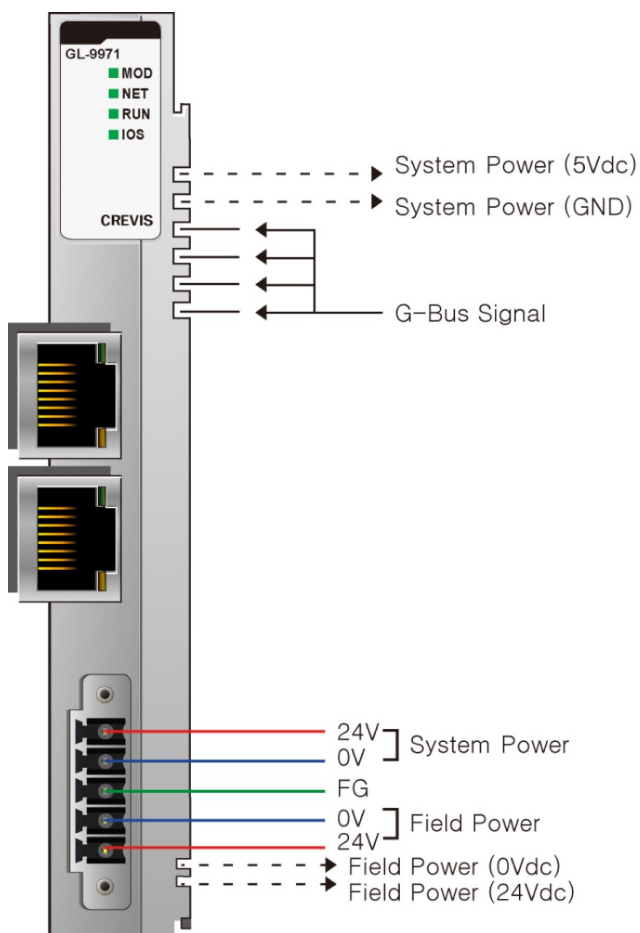
Status	LED	To indicate
Not Powered	OFF	Device may not be powered.
No Expansion Module	Flashing Red	Adapter has no expansion module
Internal Bus Connection, Run Exchanging I/O	Green	Exchanging I/O data.

Expansion Configuration Failed	Red	One or more expansion module occurred in fault state.
		   - Detected invalid expansion module ID.
		   - Overflowed Input/Output Size
		   - Too many expansion module
		   - Initialization failure
		   - Communication failure.
		   - Changed expansion module configuration.
		   - Mismatch vendor code between adapter and expansion module.

General Specification	
Power dissipation	50mA typical @ 24Vdc
System Power	Supply voltage: 24Vdc nominal Supply voltage range: 15 ~ 28.8Vdc Reverse polarity protection
Field Power*	Supply voltage: 24Vdc typical (Max. 32Vdc)
Max. Current Field Power Contact	Max. DC 8A
Current for Expansion Module	1.0A @ 5Vdc
Isolation	System power to internal logic : Non-isolation System power I/O driver : Isolation
Max. Expansion Module	10 slots
I/O Data Size	Max. 128 Bytes each slot
Weight	77g
Dimension	109mm x 70mm x 22mm

Interface Specification	
Adapter Type	Modbus TCP master/slave node
Interface	RJ-45 socket * 2pcs

Baudrate	10/100Mbps, Auto-negotiation, Full Duplex
Ethernet Protocol	Modbus/TCP, Modbus/UDP, SNTP, HTTP(Web-server), BootP/DHCP
Max. Socket	16 (UDP: 10, TCP: 6, TCP_LISTEN: 6)
LED Indicator	4 LEDs 1 Green/Red, Module Status (MOD) 1 Green/Red, Network Status (NET) 1 Green/Red, PLC Status (RUN) 1 Green/Red, Expansion I/O Status (IOS)

Ethernet Connection Specification	
Function	**Max. Concurrent communications**
Modbus/TCP Master	1 Modbus TCP slaves can be connected.
Modbus/TCP Slave	6 Modbus TCP masters can be connected.

Status Indicator LED

MOD (Module Status LED)

Status	LED	Description
Not Powered	OFF	Power is not supplied to the unit.

Normal, Operational	Green	The unit is operating in normal condition.
IAP Mode*	Toggling Green & Red	Available for firmware download using FireFox.
Firmware Fault	Red	The unit has occurred unrecoverable fault in self-testing.
Recoverable Fault	Blinking Red	The unit has occurred recoverable fault in self-testing. - EEPROM checksum fault.

NET (Network Status LED)

Status	LED	Description
Not Powered	OFF	Network off-line.
Link	Green	The LAN cable is physically connected to the ethernet port.

RUN (PLC Status LED)

Status	LED	Description
None PLC	OFF	Device has no program.
PLC Run	Green	PLC program is running.
PLC Stop	Blinking Green	PLC program stop.
Firmware Fault	Red	The unit has occurred unrecoverable fault in self-testing.
Diagnostic	Blinking Red	PLC program and expansion I/O modules do not match.

IOS LED (Expansion IO Status LED)

Status	LED	Description
No Expansion I/O	OFF	Device has no expansion modules or not powered.
Have Expansion I/O	Green	Device has expansion modules.
Configuration Fault	Red	Replace expansion modules or fail to initialize. - Detect invalid expansion module ID. - Too many expansion modules. - Initial protocol failure. - Mismatch vendor code between adapter and expansion module.

Connection Fault	Blinking Red	One or more expansion module occurred in fault state. - Chaned expansion module configuration. - Communication failure. - Overflowed I/O size.

I/O Process Image Map