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PLX51-HART-4I

4 Channel HART Input ModuleGateway

January 22, 2024

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PLX51-HART-4I Release Notes For Public Use.

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1 Start Here

This document highlights the new features, fixes, enhancements and known issues for the PLX51-HART-4I gateway.

1.1 About the PLX51-HART-4I

Model	Standards
PLX51-HART-4I	UL/cUL; Class1Div2

The PLX51-HART-4I allows users to easily connect their existing HART-compatible field devices to EtherNet/IP™, Modbus® TCP/IP, and DNP3 Ethernet networks. The gatewaye can be used to connect HART Input devices such as process instruments into an Ethernet network.

The PLX51-HART-4I supports up to 4 channels of HART communication, as well as Analog 4-20 mA signals for real-time process variables to/from the HART-compatible device.

1.2 Release Enhancements

Release	Release	Description
Version	Date	
1.003.021	22-Jan-2024	Reformat option for custom HART commands – bytes being swapped with bytes outside of the sent packet will be forced to zero.
		Known Issues:
		When the Fixed Addressing option is disabled after the communication has been established with that address; the firmware will cause the gateway to momentarily poll addresses that are not configured. The issue resolves itself after about a minute.
1.003.020	21-Dec-2023	Added a data format option (byte/word swap) for custom HART commands.
		Added burst option for custom HART commands. User can select if burst responses are written to a Modbus Holding Register or Logix tag without a request message to be triggered first.
		 Added auto-trigger option for custom HART commands.
1.003.017	9-Jan-2023	Minimum firmware required to run on hardware with the "HB" designation in the F/W REV product label
1.003.015	25-Feb-2022	 Added support to disable HART communications from the operation interface (EtherNet/IP, Modbus TCP/IP, or PCCC). Added additional CIP attributes to allow SLC/MicroLogix to read all 4 process variables of main and multidrep devices in one read.
		and multidrop devices in one read. The following features require PLX50 Configuration Utility
		version 1.027 or later: • Added functionality to send custom HART commands using either EtherNet/IP or Modbus TCP/IP.
		 Added support for HART packet capture. Added option to zero-out data when HART device is lost.
		 Added configurable HART response timeout. Added option to equally share bandwidth between multidrop and main device. Added Dual Master functionality.
1.003.010	8-Jan-2020	Updated Modbus Input Registers to fix Device Status mapping.

		Added CIP stats for Multidrop tag read/write when in EtherNet/IP mode.
1.003.009	20-Feb-2020	 Fixed anomaly with DNP3 UINT8. Added support for rapid fire Modbus TCP/IP. Added support for multiple Modbus requests in a single TCP packet. Fixed Device Info range for DNP3 UINT8. Fixed Zero process variable that does not exists in CMD3 response for multi-drop devices.
1.003.006	6-Nov-2019	 Fixed DNP3 signed integer mapping. Added support for PCCC (AB-ETH) allowing legacy controllers to access the HART device (eg. SLC) - main devices and multidrop devices. Added multidrop support for Modbus TCP/IP. Added automated multidrop support for Logix - (option of new UDT structure or ProSoft legacy MVI56 UDT). Added support for FTview (without needing a Logix Controller) for main and multidrop HART devices. Added DIP 3 Config Download block. Added DIP 4 fixed IP address 192.168.1.100. Fixed issue where scaled value keeps getting updated from output assembly when program mode and set to force to value on output. Fixed Modbus mapping conversion range check to always use INT sizes. Updates to Write Register locations for output devices. Updates to Holding Register locations for HART statistics. Fixed HART unit codes for DNP3 in uint8_t. When updating DNP3 update key - clear keys to force reissue of session keys. Zero process variable that does not exist in CMD 3 response. HART Fault bit in the device status will now only be used for the primary device while each multi-drop still uses its' poll status to indicate a device fault.
1.003	31-Oct-2018	Initial Release

2 Support, Service & Warranty

2.1 Contacting Technical Support

ProSoft Technology, Inc. is committed to providing the most efficient and effective support possible. Before calling, please gather the following information to assist in expediting this process:

- 1 Product Version Number
- 2 System architecture
- 3 Network details

If the issue is hardware related, we will also need information regarding:

- 1 Module configuration and associated ladder files, if any
- 2 Module operation and any unusual behavior
- 3 Configuration/Debug status information
- 4 LED patterns
- 5 Details about the interfaced serial, Ethernet or Fieldbus devices

Note: For technical support calls within the United States, ProSoft Technology's 24/7 after-hours phone support is available for urgent plant-down issues.

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