Where Automation Connects.

PLX51-DNPS

DNP3 Slave Gateway

September 8, 2022

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PLX51-DNPS Release Notes

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Contents

1   Start Here

This document highlights the new features, fixes, enhancements and known issues for the PLX51-DNPS Gateway module.

1.1   About the PLX51-DNPS

Model	Standards
PLX51-DNPS	UL/cUL; Class1Div2

The PLX51-DNPS gateway provides intelligent routing between DNP3 (Distributed Network Protocol) and either EtherNet/IP™ or Modbus® protocols. The gateways support Ethernet and Serial communications.

PLX51-DNPS gateway is the DNP3 Outstation or Slave.

The PLX51-DNPS allows the user to integrate DNP3 devices over a secure link into a Logix system with minimal effort. No copying or mapping of data in the Logix controller is required as the PLX51-DNPS writes directly into Logix tags.

The PLX51-DNPS allows users to integrate the gateway into a Modbus TCP/IP or serial network. The gateway supports Modbus TCP/IP Client and Server and Modbus RTU protocols.

The PLX51-DNPS module provides DNP3 Secure Authentication 5 which enables the user to connect DNP3 devices to a Logix platform securely. The module also provides a range of diagnostics, statistics and a DNP3 traffic analyzer to assist with fault-finding.

1.2   Release Enhancements

Release Version	Release Date	Description
1.003.033	8-Sep-2022	**New Features:** • When downloading configuration, allow user to keep or clear current unsolicited messages • Support for String Octet DNP object • DNP protocol port number is configurable for TCP and UDP • Non flag based objects can be event logged • Support for time based event logging • Support for analog dead bands • Support for dual DNP master event unloading (Redundancy) • Option to disable event logging when maximum event count is reached • Support to inhibit DNP3 communications to master until Modbus communications to end devices are running at startup, after module reset or after power reset • Support to inhibit Modbus communications to end devices until DNP3 communications to DNP3 master has been established at startup, after module reset or after power reset • Option for DNP3 master to enable unsolicited reporting for each DNP3 object • Option for DNP3 master to configure event class for each DNP3 object • IP address check for dual master event unload • Support to update module time either using Logix controller or PLX50 configuration utility • Option to force DNP3 object online flag if DNP3 object was created without a flag attribute • Support for module to reply on the same communications port as the incoming message or to replay on all ports • Support for dynamic configuration from DNP3 master. (The PLX51-DNPS will support dynamic configuration command to change the dead band, object class and enable unsolicited message from the DNP3 master and will retain the configuration changes across after the power cycle) **Fixes & Changes:** • Fixed - Issue where events would be read using EtherNet/IP when CIP USB was selected.

1.003.016	30-Aug-2021	• Minor hardware change
1.003.015	8-Dec-2020	• Updated EDS file • Updated event Logix tag reading to be more efficient • Fixed issue where only the first 256 mapped items could use events • Fixed issue where a large configuration file being downloaded may cause the flash used to store the configuration file to become corrupt
1.003.012	29-Sep-2020	• 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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