

Modbus Router

Release Notes

A-MBR

Document No. D106-011

Document Revision 1.0

12/2017

Firmware Revision 1.018

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1. PREFACE

1.1. COMPATIBILITY

Firmware revision 1.018 of the Modbus Router will require the following compatible versions:

Software	Version
Slate	1.033 and later

1.2. NOTES

The following should be noted:

- Firmware upgrades will be done using Aparian's Slate software.
- Aparian flash files have an *.afb* extension.
- Slate can also be used to set the initial network parameters using its DHCP server.
- Should any interruptions cause the module to not complete the firmware upgrade the module will return to Safe Mode. The user can then re-flash the module with the application firmware. See the user manual for more information regarding Safe Mode.

1.3. ADDITIONAL INFORMATION

The following resources contain additional information that can assist the user with the module installation and operation.

Resource	Link
Slate Installation	http://www.aparian.com/software/slate
Modbus Router User Manual Modbus Router Datasheet Example Code & UDTs	http://www.aparian.com/products/modbusrouter
Ethernet wiring standard	www.cisco.com/c/en/us/td/docs/video/cds/cde/cde205_220_420/installation/guide/cde205_220_420_hig/Connectors.html
CIP Routing	The CIP Networks Library, Volume 1, Appendix C:Data Management
Modbus	http://www.modbus.org

1.4. SUPPORT

Technical support will be provided via the Web (in the form of user manuals, FAQ, datasheets etc.) to assist with installation, operation, and diagnostics.

For additional support the user can use either of the following:

Contact Us web link	www.aparian.com/contact-us
Support email	support@aparian.com

2. IMPROVEMENTS

The following updates are included in this firmware revision.

Revision	Improvement	Description
1.018	SLC/MicroLogix	Support for SLC and MicroLogix Controllers.
1.017	Node Address Emulation	Allow the module to emulate multiple node addresses when operating in reactive mode.
1.016	Mapped Items	Increased mapped item count from 20 to 40
	ODVA	Updates for ODVA conformance
1.013	RTU CRC	Added Checksum to packet capture when sending data using RTU
	EtherNet/IP	Added CIP Stats
	Webserver	Added page for Modbus 485
	Modbus Diagnostic	Added statistic for reading of Modbus Diagnostics function.
1.012	Diagnostics Function	Added support for Modbus diagnostics functions when in Reactive Mode
	EDS AOP	Added EDS AOP functionality
1.008	EtherNet/IP	Updates to EtherNet/IP and CIP communication to comply with latest ODVA certification.
1.007	EtherNet/IP	Add retry functionality when no response was received
	Mapping Counters	Cleared with download
1.004	EtherNet/IP	Minor improvements to communication stability.
1.003	EtherNet/IP	Improved communications.

3. ANOMALIES FIXED

The following anomalies have been fixed in this firmware revision.

Revision	Anomaly	Description
1.018	Scheduled Timeout	Resolved issue which could cause the module in Scheduled mode to not recover if Ethernet cable was unplugged at startup.
1.015	Ethernet	Fix for certain broadcast Ethernet packets that were being re-broadcasted.
1.014	EtherNet/IP Management	Resolved bug in the EtherNet/IP management causing ENIP and TCP clients to timeout too fast due to inactivity.
1.011	Ethernet	Fix anomaly where certain messages were responded to when receiving unsupported protocols.
1.010	Read/Write Booleans	Fix anomaly which could cause reading/writing of too little data when using Booleans and Logix Boolean array offsets.
1.009	Read/Write Booleans	Fix anomaly which could cause reading/writing of too much data when using Booleans. This would result in failed data transactions.
1.008	Data Alignment	Resolve Boolean 32bit alignment anomaly
	Data Alignment	Resolve 32bit data type alignment anomaly when running in PLC addressing mode.
1.007	Modbus TCP	Fix handling of receiving out of order packets
	Other	Minor bug fixes
1.006	Coil Read	Fix coil offset anomaly.
1.005	Coil Read/Write	Fix large element count read/write for Coils.
1.003	Modbus RTU	Fix anomaly which can cause a received serial packet to become corrupted.
	Capture	When receiving a faulty packet, the Modbus capture would log an empty packet.

4. KNOWN ANOMALIES

The following known anomalies exist in this firmware revision.

Revision	Anomaly	Description
1.018	None	-