Modicon TM3 Bus Coupler
Firmware Version

TM3BCEIP V2.1.50.2
TM3BCCO V2.0.50.2
TM3BCSL V2.0.50.2

Release Notes

August 2020

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein. If you have any suggestions for improvements or amendments or have found errors in this publication, please notify us.

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All pertinent state, regional, and local safety regulations must be observed when installing and using this product. For reasons of safety and to help ensure compliance with documented system data, only the manufacturer should perform repairs to components.

When devices are used for applications with technical safety requirements, the relevant instructions must be followed.

Failure to use Schneider Electric software or approved software with our hardware products may result in injury, harm, or improper operating results.

Failure to observe this information can result in injury or equipment damage.

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1 Safety Information

Important Information

NOTICE

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.

The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.

This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

⚠ DANGER

DANGER indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

⚠ WARNING

WARNING indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

⚠ CAUTION

CAUTION indicates a hazardous situation which, if not avoided, **could result** in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to physical injury.

PLEASE NOTE

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation and has received safety training to recognize and avoid the hazards involved.

2 About the Book

At a Glance

Document Scope

This document contains important information about the firmware delivery of the product TM3 Bus Coupler. Read the complete document before you use the product or products that are described in here.

Validity Note

The information in this Release Notes document is applicable only for TM3 Bus Coupler products.

For product compliance and environmental information (RoHS, REACH, PEP, EOLI, etc.), go to www.schneider-electric.com/green-premium.

The technical characteristics of the devices described in the present document also appear online. To access the information online, go to the Schneider Electric home page https://www.se.com/ww/en/download/.

The characteristics that are described in the present document should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the document and online information, use the online information as your reference.

3 Product Information

3.1 Overview

Use the new firmware for the TM3 Bus Coupler to have new features and also to support the configuration files generated by the software TM3BC IO Configurator.

This release contains:

- TM3 Bus Coupler Firmware

3.2 Product Identification

Reference	Description	Version	Date
TM3BCEIP	TM3 Bus Coupler EtherNet/IP and Modbus TCP	2.1.50.2	August 2020
TM3BCCO	TM3 Bus Coupler CANopen	2.0.50.2	August 2020
TM3BCSL	TM3 Bus Coupler Serial Line	2.0.50.2	August 2020

3.3 Release History Identification

TM3BCEIP

Version	Release Date	Description
1.2.1.1	July 2019	First Release
1.3.1.2	Dec 2019	Cybersecurity Improvement

TM3BCCO

Version	Release Date	Description
1.0.16.1	Feb 2020	First Release

TM3BCSL

Version	Release Date	Description
1.0.15.11	Jan 2020	First Release

3.4 Compatibility

The following table shows the supported TM3 bus couplers and the minimum firmware needed:

Reference	Firmware
TM3BCEIP	v1.2.1.1, v1.3.1.2
TM3BCCO	v1.0.16.1
TM3BCSL	v1.0.15.11

The following table shows the Modicon TM3 expansion modules:

Reference	Description
TM3DQxx	TM3 Digital Output Modules
TM3DIxx	TM3 Digital Input Modules
TM3DMxx	TM3 Digital Mixed Modules
TM3AQxx	TM3 Analog Output Modules
TM3AIxx	TM3 Analog Output Modules
TM3AMx	TM3 Analog Mixed Modules

TM3TM3x	TM3 Analog Mixed Modules

The following table shows the Modicon TM3 expansion Expert and Safety modules:

Reference	Description
TM3XTYS4	TM3 TeSys module
TM3SAx	TM3 Safety module
TM3XTRA1	Data transmitter module for remote I/O

The following table shows the Modicon TM2 expansion modules:

Reference	Description
TM2DOxx	TM2 Digital Output Modules
TM2DIxx	TM2 Digital Input Modules
TM2DMxx	TM2 Digital Mixed Modules
TM2DRIxx	TM2 Digital Input Modules
TM2AMIxx	TM2 Analog Input Modules
TM2AMOxx	TM2 Analog Output Modules
TM2AMMx	TM2 Analog Mixed Modules
TM2ALxx	TM2 Analog Mixed Modules
TM2ARIxx	TM2 Temperature Modules
TM2AVOxx	TM2 Analog Output Modules

3.5 Installation Instructions

Installation Procedure
Execute the following steps to install the TM3BC firmware:

Step	Action
1	Remove power from the bus coupler
2	Connect the USB cable
3	Apply power to the bus coupler
4	Log into the Web server via USB using the IP address 90.0.0.1
5	Verify in the MONITORING page that the bus coupler is not exchanging data with the controller
6	Click MAINTENANCE / Firmware
7	Click Select then select the firmware file. Result: A confirmation window is displayed
8	Click I agree. Result: At the end of the download and verification of the file, a confirmation window is displayed
9	Click Yes to close the confirmation window then click Apply. Result: At the end of the firmware update, a message is displayed to inform you whether the firmware update is completed successfully

4 Firmware Information

4.1 New Features TM3BCEIP

- Support of configurations generated by the software TM3BC IO Configurator
- Devices Profile for Web Services (DPWS)
- TM3 IO Modules Firmware update
- Modbus TCP Diagnostics
- RSTP Diagnostics
- Webserver Multiuser
- Syslog (RFC3164)
- Secure Webserver HTTPS
- Fast Device Replacement (FDR)
- Support of Fallback and Filter for TM3DIx and TM3DMx modules with firmware version greater than 2.0

4.2 New Features TM3BCCO

- Support of configurations generated by the software TM3BC IO Configurator
- Secure Webserver HTTPS
- Support of Fallback and Filter for TM3DIx and TM3DMx modules with firmware version greater than 2.0

4.3 New Features TM3BCSL

- Support of configurations generated by the software TM3BC IO Configurator
- Secure Webserver HTTPS
- Support of Fallback and Filter for TM3DIx and TM3DMx modules with firmware version greater than 2.0

4.4 Fallback behavior

- request from the PLC, the TM3 Bus coupler will set to 0 After receiving a new configuration the output values of the expansion modules. The configuration request is sent by the PLC after any of the following events is done: reset cold, reset warm, communication timeout.

- After a webserver session timeout, the TM3 Bus coupler will apply the fallback values if it has been configured, or in other case will set to 0 the output values of the expansion modules.

- After a Modbus TCP or EtherNet/IP communication timeout the TM3 Bus coupler will apply the fallback values if it has been configured, or in other case will set to 0 the output values of the expansion modules.

4.5 Known anomalies

ID	Description
TM3BC-1351	When using Internet Explorer or Microsoft Edge browser, a message “Network connectivity issue..” can be displayed intermittently on Monitoring Page of the webserver.
TM3BC-1345	TM3 Bus Coupler EtherNet/IP does not send DHCP request after it rebooted with “Duplicate IP error”
TM3BC-1245	To avoid any disconnection between Logic controller and TM3 Bus Coupler when login to webserver, the Modbus TCP health timeout should be greater than 100 ms

5 Additional Information

Cybersecurity Best Practices

Schneider Electric has incorporated cybersecurity best practices and solutions in our products. NOTE: To help keep your Schneider Electric products secure and protected, it is in your best interest that you implement the cybersecurity best practices as indicated in the Cybersecurity Best Practices document provided on the *Schneider Electric website*.