



FR-A7N-ETH Version Info

► 07.21.2015

Multiprotocol firmware

- V2.333 release
- EtherNet/IP changes
 - Ignore socket address info items to improve the connection establishment
 - Fixed get attribute single of AC/DC assembly I/O data
- Modbus/TCP changes
 - Added option to enable and disable the connection timeout timer
- BACnet/IP changes
 - Internal memory improvements
- Web page changes
 - Changed XML TCP port to 843 to improve firewall and internetwork compatibility

Profinet firmware

- V2.333 release
- PROFINET changes
 - Updated PROFIdrive profile state machine transitions
- Web page changes
 - Changed XML TCP port to 843 to improve firewall and internetwork compatibility

GSDML file

- GSDML-V2.0-ICC-FR_A7N_ETH-20150210.xml
- Limited the lowest I/O cycle update time to 8ms
- Updated the maximum input, output, and total sizes to account for overhead data

User's manual version

- 10653-2.333-000

► 10.17.2014

Multiprotocol firmware

- V2.330 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Review the V2.300 firmware release notes before updating to this firmware version.
- Increased response time to accommodate large register requests.
- Improved handling and recycling of network resources.
- Modified the FTP server to improve Windows Explorer FTP compatibility.
- CSP changes
 - Added logical ASCII addressing for both Typed Read and Typed Write commands.



PROFINET firmware

- V2.330 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Review the V2.300 firmware release notes before updating to this firmware version.
- Increased response time to accommodate large register requests.

User's manual version

- No new user's manual released at this time: current version remains 10653-2.320-001

▶ **08.14.2013**

Multiprotocol firmware

- No new firmware released at this time: current multiprotocol firmware is still V2.320

PROFINET firmware

- V2.321 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Review the V2.300 firmware release notes before updating to this firmware version.
- Modified the FTP server to improve Windows Explorer FTP compatibility.
- PROFINET changes
 - Modified the handling of modules after the PROFINET connection is terminated. The modification will improve the compatibility with the PROFINET controller on the subsequent connection.

User's manual version

- No new user's manual released at this time: current version remains 10653-2.320-001

▶ **04.29.2013**

Multiprotocol firmware

- No new firmware released at this time: current multiprotocol firmware is still V2.320

PROFINET firmware

- No new firmware released at this time: current PROFINET firmware is still V2.310

User's manual version

- 10653-2.320-001: principle documentation update related to E700 installation and setup

▶ **08.30.2011**

Multiprotocol firmware

- No new firmware released at this time: current multiprotocol firmware is still V2.320



PROFINET firmware

- No new firmware released at this time: current PROFINET firmware is still V2.310

User's manual version

- 10653-2.320-000: principle documentation update related to RSLogix 5000 Add-On Instructions only

▶ **05.25.2011**

Multiprotocol firmware

- V2.320 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Review the V2.300 firmware release notes before updating to this firmware version.
- Fixed error code blinking pattern rate.

PROFINET firmware

- V2.310 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Review the V2.300 firmware release notes before updating to this firmware version.
- Fixed error code blinking pattern rate.
- Profinet changes
 - Added support for timeout processing.

User's manual version

- No new user's manual released at this time: current version remains 10653-2.310-000

▶ **05.01.2011**

Multiprotocol firmware

- V2.310 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Review the V2.300 firmware release notes before updating to this firmware version.
- EtherNet/IP changes
 - Added class 1 I/O support for point-to-point (unicast) in the T→O direction.

PROFINET firmware

- No new PROFINET firmware released at this time: current version remains V2.300.

EtherNet/IP EDS file

- V2.1
- Updated connection description to support point-to-point (unicast) in the T→O direction.

User's manual version

- 10653-2.310-000



► 02.01.2011

Multiprotocol firmware

- V2.300 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Note that the V2.300 multiprotocol firmware image name (10640a_rom.bin) does not follow the firmware image filename conventions used with previous firmware updates (typically something like 10640a_eth_vXXXX_image.bin). This name change for V2.300 is intentional: **do not** modify the filename prior to uploading it to the interface card. The reason for this is because V2.300 & future firmware releases require a one-time adjustment to internal memory locations, and the adjustment code (contained in this firmware release) will only be executed by the interface card when it receives this firmware file with the special filename 10640a_rom.bin. If you have any questions regarding this update process, please contact ICC technical support for assistance.
- Add Mitsubishi MELSEC server support
- BACnet/IP changes
 - Fixed invalid character set for Device Object character string properties.
- EtherNet/IP changes
 - Fixed ListServices to correctly return the service string.
- Web page changes
 - Added MELSEC tab

PROFINET firmware

- V2.300 release
- **CRITICAL FIRMWARE UPDATE NOTE:** Migrating to V2.300 or later versions of the PROFINET firmware from a previous version requires an additional intermediate step not typically necessary with version-to-version firmware updates. Prior to uploading the V2.300 or later PROFINET image (with filename 10640a_pnio_vXXXX_image.bin), you must first upload and run the associated V2.300 multiprotocol image (with filename 10640a_rom.bin). The reason for this is because V2.300 & future firmware releases require a one-time adjustment to internal memory locations, and this adjustment code only exists in the multiprotocol 10640a_rom.bin firmware image. After applying the V2.300 multiprotocol image and allowing the card to reboot, you may then freely apply the V2.300 or later PROFINET image to return PROFINET functionality to the interface card. No interface card configuration information is modified or lost during this stair-step application process. If you have any questions regarding this update process, please contact ICC technical support for assistance.
- Fixed PROFIdrive RPM output conversion bug
- Add support for timeout processing

User's manual version

- 10653-2.300-000

► 04.14.2009

Multiprotocol firmware

- V2.210 release



- Modbus TCP changes
 - Corrected a bug which resulted in corruption of the last half of the response data to a read request targeting non-scanned registers
- BACnet/IP changes
 - Fixed an issue whereby the priority array entries for user-added objects (i.e. BACnet objects that are added by direct XML file editing) were not being properly initialized
- Web page changes
 - Modified the behavior of non-scanned register values when they are modified via the monitor tab. Previously, the “refresh” button had to be clicked in order to re-load the value from the inverter and see the change. Now, registers modified via the monitor tab are auto-refreshed immediately after being written down to the inverter.
 - Fixed a bug whereby failed XML sockets were not being properly recycled. This could lead to a web browser session being unable to establish a successful XML socket connection until the interface card is rebooted.
 - Fixed a bug which prevented the SMTP authentication from being deleted once settings have been entered.

PROFINET firmware

- V2.210 release
- Web page changes
 - Modified the behavior of non-scanned register values when they are modified via the monitor tab. Previously, the “refresh” button had to be clicked in order to re-load the value from the inverter and see the change. Now, registers modified via the monitor tab are auto-refreshed immediately after being written down to the inverter.
 - Fixed a bug whereby failed XML sockets were not being properly recycled. This could lead to a web browser session being unable to establish a successful XML socket connection until the interface card is rebooted.
 - Fixed a bug which prevented the SMTP authentication from being deleted once settings have been entered.

User's manual version

- 10653-2.210-000

▶ **02.17.2009**

Multiprotocol firmware

- V2.200 release
- EtherNet/IP changes
 - Added the ability to directly access non-scanned (inverter configuration) parameters
- Allen Bradley CSP (PCCC/AB Ethernet) changes
 - Added the ability to directly access non-scanned (inverter configuration) parameters
- BACnet/IP changes
 - Added support for “Reinitialize Device” service
- Modbus TCP changes
 - Added the ability to directly access non-scanned (inverter configuration) parameters
 - Added optional supervisory timer



- Web page changes
 - Added non-scanned parameters, parameter groups, and non-scanned parameter “refresh” button to monitor tab
 - Added supervisory timer selection to Modbus tab
 - Added Dashboard tab

PROFINET firmware

- V2.200 release
- PROFINET changes
 - Added acyclic access to non-scanned (inverter configuration) parameters
 - Added support for PROFIdrive profile
- Web page changes
 - Added non-scanned parameters, parameter groups, and non-scanned parameter “refresh” button to monitor tab
 - Added Dashboard tab
 - Corrected an issue caused by a new Flash Player “policy file request” that occurs with the latest release of the Flash Player browser plug-in. This would cause the XML sockets to fail on their initial connection attempt.
 - Added “SMTP Authentication” fields to Alarm tab
- Other changes
 - Added support for email servers that require authentication (SMTP AUTH) when sending alarm emails

User’s manual version

- 10653-2.200-000

► **08.21.2008**

Multiprotocol firmware

- V2.110 release
- EtherNet/IP changes
 - Corrected a bug introduced in V2.100 firmware that caused the user-configured timeout action(s) to not execute when an EtherNet/IP connection timeout occurred
 - Added the ability for the user to choose the action to take when an I/O connection’s run/idle header indicates that the client is in the “idle” state (ref. section 5.8.3)
- Modbus TCP changes
 - Increased the number of registers writable in a “write multiple registers” packet from 100 to 123
 - Increased the number of coils writable in a “force multiple coils” packet from 1600 to 1968
- Web page changes
 - Added “Run/Idle Flag” behavior checkbox to EtherNet/IP tab
 - Added “SMTP Authentication” fields to Alarm tab
- Other changes



- Added support for email servers that require authentication (SMTP AUTH) when sending alarm emails

PROFINET firmware

- No new PROFINET firmware released at this time: current version remains at V2.000

User's manual version

- 10653-2.110-000

▶ **07.25.2008**

Multiprotocol firmware

- V2.100 release
- Modbus TCP changes
 - Fixed infinite looping that could occur if extraneous data remains in receive buffer as a result of an improperly-coded Modbus master driver sending extra garbage bytes after the normal data packet
 - Added register remapping capabilities (ref. section 5.10.2)
 - Socket timeout resolution (entered via web page Config tab) increased to 0.01s increments
- BACnet/IP changes
 - Added support for output object priority arrays and relinquish default properties
 - Changed/added supported datatypes for reading and writing object properties (ref. "Datatypes Supported" table in section 8.4.1)
- EtherNet/IP changes
 - Allow only one exclusive owner connection
 - Allow only one input connection instance to be active at a time (e.g. 70, 71 or 150)
 - Allow multiple clients to simultaneously establish input-only connections
 - Added support for the ODVA AC/DC drive profile instances 20&70 / 21&71 (ref. section 8.2.2)
 - Added support for the AC/DC Drive, Control Supervisor and Motor Data objects
 - Changed product type code from Communications Adapter (12) to AC Drive (2)
- Web page changes
 - Added Modbus tab
 - Corrected an issue caused by a new Flash Player "policy file request" that occurs with the latest release of the Flash Player browser plug-in. This would cause the XML sockets to fail on their initial connection attempt.

PROFINET firmware

- No new PROFINET firmware released at this time: current version remains at V2.000

User's manual version

- 10653-2.100-000



▶ **04.14.2008**

Multiprotocol firmware

- V2.000 release
- Add Alarm monitoring functionality with email reporting
- Add ability to change authentication information (config tab)
- Add ability to change IP address assignments via web page (config tab)
- Add Ethernet/IP class 1 (IO) messaging support with associated consumed/produced data configuration
- Ethernet/IP class 3 (explicit) messaging tag references expanded to allow direct access to any available register
- Ethernet/IP now triggers timeout processing when connection errors occur
- Add support for Modbus TCP function codes 02 and 04
- Add support for Allen Bradley CSP protocol (for Allen Bradley PLC-5 and SLC-500 series PLCs)

PROFINET firmware

- V2.000 release
- Add Alarm monitoring functionality with email reporting
- Add ability to change authentication information (config tab)
- Add ability to change IP address assignments via web page (config tab)

User's manual version

- 10653-2.000-000

▶ **10.09.2007**

Multiprotocol firmware

- V1.000 initial release.

PROFINET firmware

- V1.000 initial release.

User's manual version

- 10653-1.000-000