

FREE Advance Secure Interface (m172si-v0.8.0)

Firmware Release Notes

Original Instructions

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by **Schneider** Electric

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About the Document

Document Scope

This document contains important information about the firmware delivery of product Secure Interface. Read the complete document before you use the firmware described herein.

Validity Note

The information in this Release Notes document is applicable only for FREE Advance Secure Interface. This document has been updated for the release of firmware m172si-v0.7.0

The characteristics of the products described in this document are intended to match the characteristics that are available on www.eliwell.com. As part of our corporate strategy for constant improvement, we may revise the content over time to enhance clarity and accuracy. If you see a difference between the characteristics in this document and the characteristics on www.eliwell.com, consider www.eliwell.com to contain the latest information.

Related Documents

Title of documentation	Reference number
FREE Studio Plus Release Notes	9MA10300

General Cybersecurity Information

In recent years, the growing number of networked machines and production plants has seen a corresponding increase in the potential for cyber threats, such as unauthorized access, data breaches, and operational disruptions. You must, therefore, consider all possible cybersecurity measures to help protect assets and systems against such threats.

To help keep your Schneider Electric products secure and protected, it is in your best interest to implement the cybersecurity best practices as described in the [Recommended Cybersecurity Best Practices](#) document.

Schneider Electric provides additional information and assistance:

Subscribe to the Schneider Electric [security newsletter](#).

Visit the [Cybersecurity Support Portal](#) to:

- Find Security Notifications
- Report vulnerabilities and incidents

Visit the [Schneider Electric Cybersecurity and Data Protection Posture](#) to:

- Access the cybersecurity posture
- Learn more about cybersecurity in the [cybersecurity academy](#)
- Explore the cybersecurity services from Schneider Electric

Environmental Data

For product compliance and environmental information refer to the Schneider Electric Environmental Data Program.

Information on Non-Inclusive or Insensitive Terminology

As a responsible, inclusive company, Schneider Electric is constantly updating its communications and products that contain non-inclusive or insensitive terminology. However, despite these efforts, our content may still contain terms that are deemed inappropriate by some customers.

Safety Information

Important Information

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 manual or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either 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.

Product Information

Overview

Maintenance release of Secure Interface Firmware, with implementation of new features and bug fixing

Product Identification

Reference	Description	Version	Note
AVS00PI070500	FREE Advance Secure Interface Plug-in	Firmware m172si-v0.8.0	updated
AVS00GW080500	FREE Advance Secure Interface Gateway	Firmware m172si-v0.8.0	

Release History

Version	Release Date	Description
0.8.0	April 2026	Release notes firmware m172si-v0.8.0
0.7.0	November 2025	Release notes firmware m172si-v0.7.0
0.6.0	November 2024	Release notes firmware m172si-v0.6.0
0.5.0	February 2024	Release notes firmware m172si-v0.5.0

Compatibility

AVS00PI070500/ AVS00GW080500 Logic Controllers

Installation Instructions

Firmware m172si-v0.8.0 can be downloaded from our website www.eliwell.com.

Follow the instructions of the FREE Advance AVS00• Secure Interface User Guide.

To help ensure the correct operation of the devices, it is necessary to update the PLC project to target 815.08 (for Plugin model) or 816.08 (for Gateway Model) and download it into the devices.

Firmware Information

Firmware Upgrade

NOTICE

UNINTENDED EQUIPMENT OPERATION

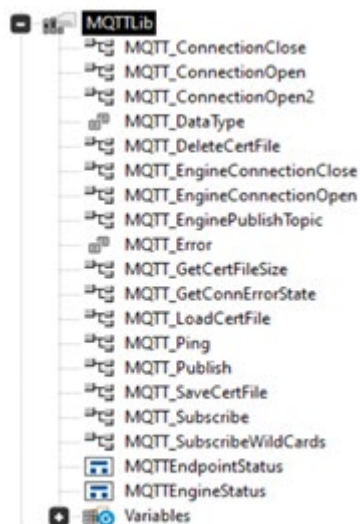
When uploading from firmware version 0.5.0 or earlier to 0.6.0 or later, custom web application and related users will be removed and must be recreated. Refer to User Guide for details.

Failure to follow these instructions can result in equipment damage

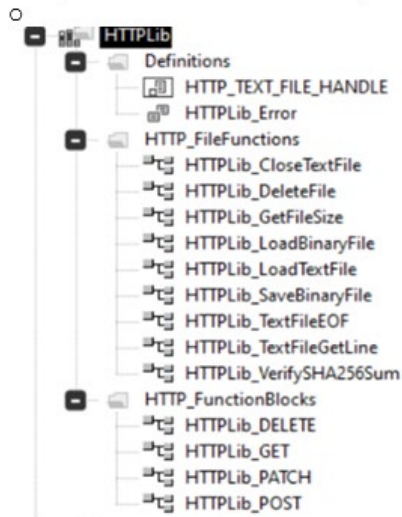
New Features

AVPS00• (FIRMWARE m172si-v0.8.0)

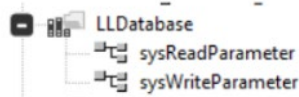
- Update MQTTLib (2.1.1) library. Refer to User Guide for details.
 - MQTT_Subscribe
 - MQTT_SubscribeWildCards
 - MQTT_GetCertFileSize
 - MQTT_DeleteCertFile
 - MQTT_LoadCertFile
 - MQTT_SaveCertFile



- Add HTTPLib library (0.0.60). Refer to User Guide for details.



- Remove HTTPClient library.
- New library LLDatabase (1.0.0).
 - sysReadParameter
 - sysWriteParameter



- SNMP: configuration page changes. For brand new product SNMP is disabled by default.

Mitigated Anomalies

AVPS00• (FIRMWARE m172si-v0.8.0)

- No additional reboot is required after completing device update of version 0.8.0.

Device Update Procedure

Interrupting the firmware update process (for example rebooting, powering off, or power cycling during upload) may result in system outage, requiring device replacement.

NOTICE

HAZARD OF SYSTEM OUTAGE AND/OR DEVICE REPLACEMENT

- During firmware upload, do not reboot, power off, or power cycle the device.
- Help ensure power supply is stable and protected (for example UPS in place).
- Avoid updates during periods of potential power interruption.

Failure to follow these instructions can result in equipment damage.

The procedure to update a device is:

- Make sure to have a USB key or micro SD card with a valid update file
- Reboot the device
- Launch device update
- Reboot the device to apply changes (not necessary when updating to 0.8.0 version).

Remote updates provide flexibility but require extra attention to help ensure device safety.

Before starting the update, make sure that:

- Power supply is stable and protected: use backup power systems (UPS).
- Verify stable and continuous power availability.
- Schedule updates during controlled maintenance windows, avoiding high-risk periods.

Taking these precautions is essential to avoid service disruptions and additional costs.

For more details or assistance, please contact Eliwell technical support team.

Security Updates

The following third-party components have been updated to address cybersecurity vulnerabilities:

- Mongoose,
- MbedTLS,
- TinyXML

Installation Instructions

Compatibility Table

Starting Version	Target Version	Skip Data Migration
0.4.0 and earlier	0.5.0 or later	YES
0.5.0	0.6.0 or later	ANY

Additional Notes

- **Update from 0.5.0 to 0.6.0 or later:** No need to select "skip data migration."
- **Update from 0.4.0 or earlier to 0.5.0 or later:** "Skip data migration" must be selected.

Additional Information

Release Notes History

[Release Notes FREE Advance Secure Interface \(Firmware m172si 0.7.0\)](#)

Third Release

[Release Notes FREE Advance Secure Interface \(Firmware m172si 0.6.0\)](#)

Second Release

[Release Notes FREE Advance Secure Interface \(Firmware m172si 0.5.0\)](#)

First Release

Installation Instructions v0.7.0

Firmware m172si-v07.0 can be downloaded from our website www.eliwell.com.

Follow the instructions of the FREE Advance AVS00• Secure Interface User Guide.

To help ensure the correct operation of the devices, it is necessary to update the PLC project to target 815.07 (for Plugin model) or 816.07 (for Gateway Model) and download it into the devices.

Firmware Information v0.7.0

Firmware Upgrade

NOTICE

UNINTENDED EQUIPMENT OPERATION

When uploading from firmware version 0.5.0 or earlier to 0.6.0 or later, custom web application and related users will be removed and must be recreated. Refer to User Guide for details.

Failure to follow these instructions can result in equipment damage

New Features v0.7.0

AVPS00• (FIRMWARE m172si-v0.7.0)

- Add functions to push data to AVEVA Cloud. Refer to User Guide for details.
- Add new servers in **Secure connect VPN** selection:
 - eu.ecostruxure-secure-connect.se.app
 - us.ecostruxure-secure-connect.se.app
- Add in log files some information about:
 - SNMP Server
 - FTP Server
 - Secure Connect

- GateManager, status of Connection and Authentication
- Communications events

Mitigated Anomalies v0.7.0

AVPS00• (FIRMWARE m172si-v0.7.0)

- Increase webserver timeouts to improve performance.

Device Update Procedure

Interrupting the firmware update process (for example rebooting, powering off, or power cycling during upload) may result in system outage, requiring device replacement.

NOTICE

HAZARD OF SYSTEM OUTAGE AND/OR DEVICE REPLACEMENT

- During firmware upload, do not reboot, power off, or power cycle the device.
- Help ensure power supply is stable and protected (for example UPS in place).
- Avoid updates during periods of potential power interruption.

Failure to follow these instructions can result in equipment damage.

The procedure to update a device is:

- Make sure to have a USB key or micro SD card with a valid update file
- Reboot the device
- Launch device update
- Reboot the device to apply changes

Remote updates provide flexibility but require extra attention to help ensure device safety.

Before starting the update, make sure that:

- Power supply is stable and protected: use backup power systems (UPS).
- Verify stable and continuous power availability.
- Schedule updates during controlled maintenance windows, avoiding high-risk periods.

Taking these precautions is essential to avoid service disruptions and additional costs.

For more details or assistance, please contact Eliwell technical support team.

Security Updates v0.7.0

Migrated to Linux Yocto Kirkstone LTS Version.

Installation Instructions v0.6.0

1. **WebServer Configuration Files Update:**

- The WebServer configuration files are updated automatically, regardless of the data migration option selected.

2. **Webdata Content Reinitialization:**

- The webdata content is reinitialized with new content. Any existing user websites will be deleted as they would no longer be usable.

NOTE. Automatic conversion of old websites is not possible.

3. **Web Page Compatibility:**

- Web pages developed with previous firmware versions are not compatible with version 0.6.0.

Compatibility Table

Starting Version	Target Version	Skip Data Migration
0.4.0 and earlier	0.5.0	YES
0.4.0 and earlier	0.6.0	YES
0.5.0	0.6.0	NO

Additional Notes

- **Update from 0.5.0 to 0.6.0:** No need to select "skip data migration."
- **Update from 0.4.0 or earlier to 0.5.0 or 0.6.0:** "Skip data migration" must be selected.
- **New Eco Struxure Machine Expert HVAC** If the target selected is 0.5.0 and **TM172SI Secure Interface** is 0.5.0, the website functions correctly.

NOTE. Using incompatible versions of Eco Struxure Machine Expert HVAC and TM172SI Secure Interface can cause unexpected user web pages to appear.

Firmware Information v0.6.0

Firmware Upgrade v0.6.0

NOTICE

UNINTENDED EQUIPMENT OPERATION

When uploading to firmware 0.6.0 all users are reset and must be recreated.

Failure to follow these instructions can result in equipment damage

New Features v0.6.0

AVPS00• (FIRMWARE m172si-v0.6.0)

- Change HTTPS Basic Authentication Mechanism
- Introduce HTTPS certificate management.
- Implemented additional security measures to help ensure that only valid and unaltered files are used for the update.
- DHCP server on RNDIS.
- Possibilities to enter the Device name.
- Add Application Name and Release.
- WEB PLC Users Management:
 - Increase to eight the web users number
 - Web pages access permissions management.
 - Functionality to add web users is remove from WebApp and added in SW Free Studio Plus 1.7.0.

The screenshot displays the SW Free Studio Plus 1.7.0 interface. The top navigation bar includes 'Configuration', 'Programming', and 'Commissioning'. The main window is titled "'USER_1' USER PAGE'. On the left, a 'Resources' tree shows the project structure, including 'Web Site' > 'Users' > 'User_1'. The main area contains a form for user configuration:

- User name:
- User password:
- Default permission: (dropdown)
- Change password at login:

Below the form are '+ Add' and '- Remove' buttons. A table lists the user's permissions for different pages:

#	Page	Permission
1	Page1	w
2	Page2	r
3	Page3	-

Mitigated Anomalies v0.6.0

AVPS00• (FIRMWARE m172si-v0.6.0)

Solved the following issues:

- Unexpected Email sending to last mail server.
- Poor display of web pages.

Security Updates v0.6.0

The following third-party components have been updated to address cybersecurity vulnerabilities.

Component	ID
mbedTLS	CVE-2024-30166
net filters on Linux	CVE-2024-1086

Installation Instructions v0.5.0

Firmware m172si-v0.5.0 can be downloaded from our website www.se.com.

Follow the instructions of the FREE Advance Secure Interface User Guide.

In order to be fully effective, this specific update requires to enable the option “Skip data migration”. After the update, if used, PLC application and PLC WEBapp must be downloaded to restore all functionalities.

Install new firmware

By clicking on **INSTALL** your file `m172si-v0.5.0_signed.raucb` will be installed as a new firmware on this machine. Installation process can't be interrupted once it runs.

The web application will be restarted at the end of the process.

Skip data migration, migrate network configuration only

INSTALL Cancel

Firmware Information v0.5.0

None

Mitigated Anomalies v0.5.0

AVPS00• (FIRMWARE m172si-v0.5.0)

Solved the following issues:

- Function Blocks ModbusRTU_DiscrInputs() and ModbusRTU_DiscrInputs_Async() send the Read Coil command FC01 instead of the expected FC02.
- Special characters like &, # used in variable strings displayed on the User WEBapp cause string truncation. (This fix, also resolved in version 0.4.0, requires a firmware update without data migration to take effect).
- Numeric values defined in the PLC Application with the format XXX.Y or XX.YY are not properly edited from the User WEBapp pages, causing an incorrect value to be saved in the PLC. (This fix requires a firmware update without data migration to take effect).

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As standards, specifications, and designs change from time to time, please ask for confirmation of the information given in this publication.

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