



FP Industry 4.0 Communicator

FP-I4C Firmware Update



Quick Start Guide
Release Information

Copyright and liability

Copyright and liability information relating to this documentation.

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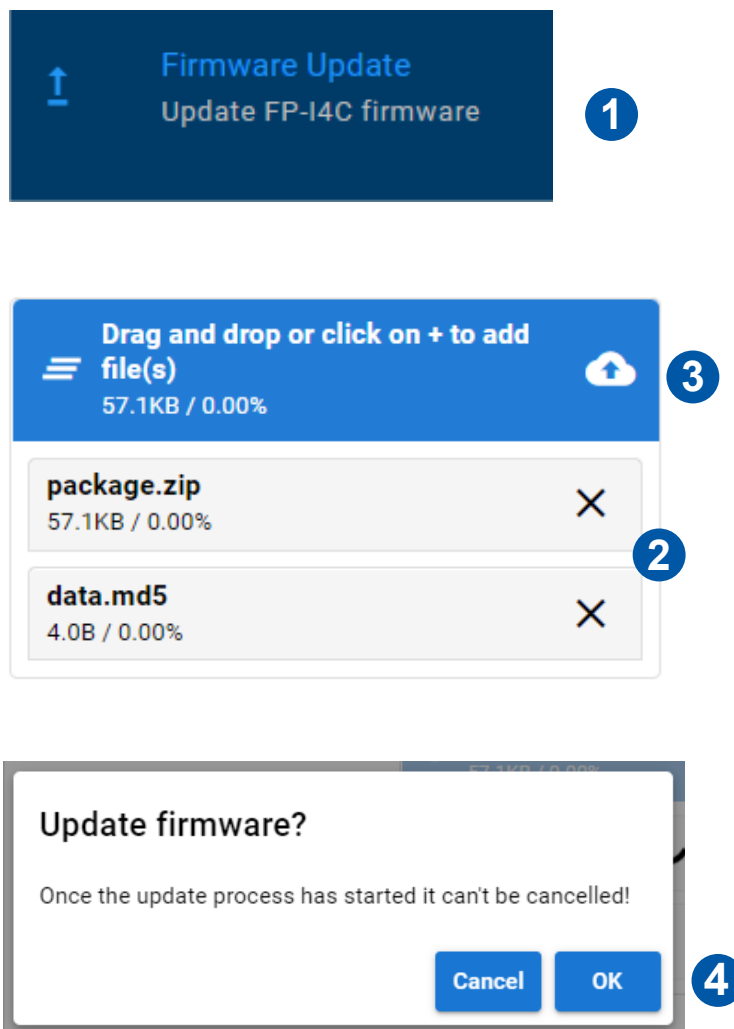
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1 Update the FP-I4C firmware

From version 1.2.0.0, you can easily update the firmware via the FP-I4C unit's Web interface.

1. Open your browser and enter the URL `https://[IP address]/machine_config`. Replace [IP address] with the IP address of your FP-I4C unit (e.g. `https://192.168.168.115/machine_config`).
Depending on your browser, an insecure connection warning may be displayed. Follow the instructions in your browser to accept the connection. You will then be forwarded to the Web interface of the FP-I4C unit.
2. Select "Application Settings" to go to the application settings area.
3. Follow these steps:



Note

Do not turn off the power supply during the update process.

During and after the update, status windows are displayed.

When the update is completed, the unit reboots automatically and the “Firmware Update” page is refreshed after a short while. If the update was successful, the new version number is displayed.

Depending on your browser (e.g. Firefox), a pop-up window may appear after the update process, prompting you to leave the page. In this case select “Leave page”. You will not really leave the page, it will just be refreshed.

Extensive documentation is included with this product. Click on the question mark icon to open the help topics.

2 Release information

This is a log of all changes made to the software since version 1.1.0.0.

Version 1.4.5.1 released in 2024-03

Bug fixes:

- “Port”: The READ_COILS function of the Modbus gateway feature could sometimes return incorrect status information. This has been fixed.

Version 1.4.5.0 released in 2024-02

New functions:

- Compatible with BSP version 1.3 (and HMWIN Studio 4.5)
- Backup files can be encrypted with a password.
- The restore function recognizes encrypted backup files.

Other improvements:

- Password security improved.
- Nodejs updated from version 16.15.1 to 16.20.0.

Version 1.4.0.4 released in 2024-03

Bug fixes:

- “Port”: The READ_COILS function of the Modbus gateway feature could sometimes return incorrect status information. This has been fixed.

Version 1.4.0.3 released in 2023-11

Bug fixes:

- “IEC60870”: Optimized the stability of the “Close IEC60870 connection if PLC is not running” option.
- Changed the range of “Log records in cache” from 0 to 20 to 1 to 20.
- Optimized the data transmission by Corvina 1 (TCP fragmentation).

Version 1.4.0.2 released in 2023-09

Bug fixes:

- “Script”: In some cases the automatic log file transmission using FPWEB_FTP() and FPWEB_EMAIL() did not work as expected. This has been fixed.

Version 1.4.0.1 released in 2023-08

Bug fixes:

- Downloading of data logger configuration files did not work. This has been fixed.
- Importing data points of type LREAL did not work. This has been fixed.

Other improvements:

- For Modbus server communication, WR and WY memory areas can now be mapped to holding registers and input registers.

Version 1.4.0.0 released in 2023-04

New functions:

- TLS client and TLS server
- “SQL Client”:
 - “Test connection” button.
 - PLC function blocks to insert data into the SQL database and to read data from the database.
- French user interface and online help.
- Nodejs 10 replaced by Nodejs 16.

Other improvements:

- “SQL Client”:
 - Improved performance through shorter polling intervals of 0.5s .
 - Encryption available for all connections.
 - Added certificate upload for secured connections.
 - Added PLC example.
- “Application Settings”: Improved page loading time.
- Saving of settings: Only modified pages are refreshed.
- Improved security through updated software packages in the firmware.

Bug fixes:

- “REST API/HTTP Server”: GET requests for LD registers caused a syntax error. This has been fixed.
- Uploading a different CA certificate type did not remove the existing certificate. This has been fixed.

Version 1.3.1.0 released in 2022-08

New functions:

- “REST API/HTTP Server”:
 - The name of the configuration page was changed to “REST API/HTTP Server”.

- POST method added.
 - HTTP server functionality added.
 - Encryption for REST API and HTTP server added.
 - IP range limitation for REST API and HTTP server access added.
- Reset to default function added to each configuration page.
- “Data Logger”: Data types LREAL and LREALEXP added in data point settings.
- “HTTP Client”: Function block with parameter to specify user-defined headers added to FP-I4C Library.
- “IEC60870”: File operations are supported.

Other improvements:

- Unknown settings will get a default value instead of an unknown state.
- Other small improvements.

Bug fixes:

- Saving the REST API settings was sometimes not confirmed. This has been fixed.
- The function block **FPI4C_TELEGRAM_SendMessage** (Control FPWIN Pro7) did not send space characters. This has been fixed.

Version 1.3.0.3 released in 2022-03

Bug fixes:

- “Email Client”: An error message appeared when the optional sender and recipient entry fields were left empty. This has been fixed.
- “Email Client”: In some cases, the email client crashed when an email was sent. This has been fixed.
- “Email Client”: No error message appeared when the mandatory port and SMTP server entry fields were left empty. This has been fixed.
- PLC connection wizard: In advanced mode, the serial interface for redirected TCP packages was not set correctly. This has been fixed.
- TCP connections: Improved the TIME_WAIT status handling of orphan TCP connections.

Other improvements:

- “Email Client”: The performance for validating the email address was improved.
- PLC test: Added all FP-XH PLC types.

Version 1.3.0.2 released in 2022-02

Bug fixes:

- “IEC60870”: In some cases the overlapping address of “IEC870_Monitor” was not calculated correctly. This has been fixed.

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- “IEC60870”: In some cases the upper limit of the address range for control registers was not set correctly. This has been fixed.

Version 1.3.0.1 released in 2022-01

Bug fixes:

- “IEC60870”: The parameter “w” was bound to a wrong variable. This has been fixed.
- “IEC60870”: The parameter “CASDU address” didn’t work in some cases where the address was not set correctly. This has been fixed.
- “Data Logger”: When log files were deleted, the files were still shown in the list until the user left the page. This has been fixed.
- “Data Logger”: The user-defined log file format did not work. This has been fixed.
- “Restart by time”: Restart by time was not executed correctly. This has been fixed.

Other improvements:

- “Data Logger”: User-defined log file formats can now be removed and deleted.

Version 1.3.0.0 released in 2021-12

New functions:

- New more user-friendly Web interface.
- New configuration wizard to make settings on the “COM Interface” and the “Port” page.
- German online help.
- More mobile device friendly.
- “Script”: Syntax highlighting for script language.
- “Time/Date”: New option to always use the UTC time.

Bug fixes:

- “Port”: The input register could not be mapped to the WX area (Modbus/TCP gateway). This has been fixed.
- “Email Client”: Occasionally certificates were not accepted. This has been fixed.
- In some cases, “Reset to default configuration” did not perform a full reset. This has been fixed.

Version 1.2.2.0 released in 2021-04

New functions:

- SMTP (email) client added.

Bug fixes:

- “Data Logger”: Control words did not work correctly in case of a wrong polling time setting or due to an addressing issue. This has been fixed.

- “HTTP Client”: When the settings were saved, the certificates and key files were not saved. This has been fixed.
- “Port”: Optimized read/write/block restrictions.
- “FTP Client”: Sometimes wrong PLC registers were overwritten when files with very long lines were read. This has been fixed.

Other improvements:

- The body parser has been removed (deprecated).
- “Script”: You can now choose between sending log files automatically via FTP or email and not sending log files.
- The size of application settings that can be restored was limited to approximately 50kB. This limit has been increased.
- Updated the online help.
- Other small improvements.

Version 1.2.1.0 released in 2020-12

New functions:

- “REST API/HTTP Server”: Added HTTP function for reading/writing data to the PLC.
- HTTP client function added.
- Logout button added.

Bug fixes:

- “IEC60870”: Fixed issue with time stamp transmission if local time is used
- “Port”: If a setting error occurred in the restriction table, the error was not always indicated. This has been fixed.

Other improvements:

- Updated the online help.
- Overlapping default PLC control registers have been adjusted.
- “Port”: Connections to access restricted memory areas no longer timeout; an error code is returned instead.

Version 1.2.0.4 released in 2020-11

Bug fixes:

- General: The progress indicator did not turn off even though the setting had been saved successfully. This has been fixed.
- “Port”:
 - If a setting error occurred in the restriction table, the error was not always scrolled into view. This has been fixed.
 - The title text of the restriction table has been corrected (memory area and access right were switched).

- “IEC60870”: When “Use IEC60870” was disabled, the ASDU address was not properly saved. Now, the default ASDU address is set.

Other improvements:

- “IEC60870”: The IP settings are disabled when “IP lock mode” is set to “Disabled”.

Version 1.2.0.3 released in 2020-09

Bug fixes:

- “COM Interface”: The Modbus protocol has been removed from the USB interface (COM3).
- “Port”:
 - Sometimes Modbus TCP communication to RS232 used the wrong Modbus address. This has been fixed.
 - In some cases, the progress indicator did not turn off when the PLC connection was tested. This has been fixed.
- “IEC60870”: In some cases, a wrong ASDU address was saved. This has been fixed.

Other improvements:

- If a configuration error occurs, the incorrect entry is scrolled into view.

Version 1.2.0.2 released in 2020-09

Bug fixes:

“Port”: Bugfix for communication via MEWTOCOL7 (write bits)

Version 1.2.0.1 released in 2020-08

Bug fixes:

- “IEC60870”: Optimized handshakes between each task.

Other improvements:

- “MQTT”: Optimized connection lost handling and reconfiguration
- “Port”: Optimized reconfiguration handling
- Updated the FPI4C.sul library for MQTT (including examples)

Version 1.2.0.0 released in 2020-07

New functions:

- IEC60870 communication with up to 4 redundancy connections
- New firmware update function via Web interface

Bug fixes:

- “Port”:

- When adding new restrictions the button sometimes toggled between visible and hidden. This has been fixed.
- In some cases, “Delete selection” did not work for restrictions. This has been fixed.
- Some checks for addresses in the restriction table did not work correctly (e.g. end address lower than start address). This has been fixed.
- The service no longer stops inadvertently if no configuration is set.

Other improvements:

- “MQTT”: Max. payload increased to 64 kbytes

Version 1.1.0.4 released in 2020-05

Minor changes:

- Support for HMWIN Studio 4.0, build 155 without runtime update. HMWIN Studio 2.x is no longer supported.
- New feature in script to monitor the open port status:
`WI[xyz] := FPWEB_GET_IP4(["PORT_INBOUND" | "PORT_OUTBOUND"], "port number");`
Currently not documented in online help.

Bug fixes:

- “Script”: FPWEB_COPY_DT did not work with RS485. This has been fixed.

Version 1.1.0.3 released in 2020-04

Minor changes:

- Text changes
- “Restart by time”: 0 is not selectable anymore.
- Date/time update to PLC will be set immediately after an FP-I4C restart.

Bug fixes:

- MQTT: Fixed a stability issue.

Version 1.1.0.2 released in 2020-04

Minor changes:

- On the “Data Logger” page, the export function is now a separate section.

Other improvements:

- For the COM4 (Ethernet) interface it is now possible to set an offset of 0
- After restarting the FP-I4C, a time sync will be initiated if the option "Update by time" is set

Bug fixes:

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- The SQL client was not able to connect to Azure because encryption was disabled. The problem has been fixed.

Version 1.1.0.1 released in 2020-03

New functions:

- New user access control
 - When "user" is logged in, only monitoring and downloading files are allowed.
- "Data Logger"
 - Log files can also be deleted.
- PLC examples and library.
 - PLC examples for FTP client, SQL client and MQTT can be downloaded from the pages "FTP Client", "SQL Client" and "MQTT".
 - PLC library for FP-I4C can be downloaded from the pages "FTP Client", "SQL Client" and "MQTT".

Other improvements:

- Date/time update to PLC is now also available also in case NTP is disabled
- Listing log files (in data logger section), a text will show when data was updated
- Updated FTP pointer to 32bits.
- Modbus gateway for all interfaces (except RS485) use plc address of "EE".
- Added different links to online help.
- Added port selection (for connection test) in case multiple ports are set for the same interface.

Bug fixes:

- Data logging was not working when a certain configuration was set. The problem has been fixed.
- Restriction table was not working in some cases of configuration. The problem has been fixed.
- Modbus gateway returned no response when an area was set to "Block". The problem has been solved with an error response.
- Debug mode for node exited with an exception. The problem was solved and improved.

Version 1.1.0.0 released in 2020-02

New functions:

- New UI design
 - The design has been modified and improved.
 - Texts and headers have been modified (easier and shorter).
 - Icons have been added.
- "COM Interface"/"Port"

- The “Test connection” button has been removed from “COM interface” page.
 - On the “Port” page the test connection buttons has been added individually for the interfaces RS232, RS485/RS232 and USB.
 - Added Modbus Gateway for each port.
 - Added “Allow FPWin Pro” for each port.
- Restriction and Modbus gateway table
 - A new table has been added on the “Port” page for access restrictions and for Modbus gateway address mapping.
- “Data Logger”
 - A new section for listing and downloading logged files has been added.
- “Port”
 - GT communication protocol is accepted in MEWTOCOL and MEWTOCOL7 port settings.
- Online help
 - Added online help

Other improvements:

- Each settings page will be checked if changes has been done. If so, by changing the page, it will ask for save.
- Control registers and control flags will be checked for all pages if it was used multiple times.
- Improved the positions of tooltips.

Minor changes:

- The COM3 (USB) interface does not have “Autobaud” setting anymore.
- When “COM interface” is set to “USB” the station number is set fixed to “0”.
- PLC connection test is only possible when the protocol is set either to Mewtocol or Mewtocol7.
- Data logger file name length and device name length has been changed to 30 (from 32).
- Added a footnote for the port page, when settings has been changed.

Bug fixes:

- “Script”: When the setting were saved a message was returned after approx. 1min with some html codes.
- “Data Logger”: Device name won't appear on the expandable button.
- “Data Logger”: Importing CSV variable list doesn't check the variable name length (max. 30 chars).
- “Data Logger”: In some cases the “Delete selected” button was set disabled/enabled incorrect.
- “Port”: IP start and IP end were not been checked.
- “Time/Date”: When “Update by time in min” was set other than 0 then the “Time/Date” didn't show “ON”.

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- “Time/Date”: For FP7 the address range DT50 didn't write the date and time into the FP7 system registers.

3 Panasonic hotline

If you have questions that cannot be clarified by the manuals or online help, please contact one of our sales offices.

You can help us by having the following data at hand:

- Your product's serial number and/or version number.
- The version and service pack numbers of MS-Windows installed on your computer.
- The type of hardware you are using.
- The exact wording of any message that appears on your screen.
- What happened and what did you do when the problem occurred?
- How did you attempt to solve the problem?

Dial a hotline number, or use our [contact form](#)  to send us your request.

[For inquiries outside of Europe, please visit our global Web site.](#) 

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