

VersiCharge AC Series Firmware Release Notes

Product Information

Legal information

Warning notice system

This manual contains notices you have to observe in order to ensure your personal safety, as well as to prevent damage to property. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring only to property damage have no safety alert symbol. These notices shown below are graded according to the degree of danger.

 DANGER

indicates that death or severe personal injury will result if proper precautions are not taken.
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 WARNING
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indicates that death or severe personal injury may result if proper precautions are not taken.

 CAUTION
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indicates that minor personal injury can result if proper precautions are not taken.
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NOTICE

indicates that property damage can result if proper precautions are not taken.
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If more than one degree of danger is present, the warning notice representing the highest degree of danger will be used. A notice warning of injury to persons with a safety alert symbol may also include a warning relating to property damage.

Qualified Personnel

The product/system described in this documentation may be operated only by **personnel qualified** for the specific task in accordance with the relevant documentation, in particular its warning notices and safety instructions. Qualified personnel are those who, based on their training and experience, are capable of identifying risks and avoiding potential hazards when working with these products/systems.

Proper use of Siemens products

Note the following:

 WARNING
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Siemens products may only be used for the applications described in the catalog and in the relevant technical documentation. If products and components from other manufacturers are used, these must be recommended or approved by Siemens. Proper transport, storage, installation, assembly, commissioning, operation and maintenance are required to ensure that the products operate safely and without any problems. The permissible ambient conditions must be complied with. The information in the relevant documentation must be observed.
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Disclaimer of Liability

We have reviewed the contents of this publication to ensure consistency with the hardware and software described. Since variance cannot be precluded entirely, we cannot guarantee full consistency. However, the information in this publication is reviewed regularly and any necessary corrections are included in subsequent editions.

Table of contents

Contents

VersiCharge AC Series A8 Firmware	4
1.1 General information	4
1.2 Base Version: 2.120	5
1.3 Base Version: 2.118	7
1.4 Base Version: 2.116	9
1.5 Base Version: 2.115.4	11
1.6 Base Version: 2.115	12
1.7 Base Version: 2.113	13
1.8 Base Version: 2.112	14
1.9 Base Version: 2.111	15
1.10 Base Version: 2.110	15

VersiCharge AC Series A8 Firmware

1.1 General information

Units from factory might be shipped with former firmware versions and require a connection to the Siemens Device Management to receive this firmware updates.

1.2 Base Version: 2.120

Release Date: 13-Jan-2023

Supported Hardware:

- **VersiCharge Gen 3 IEC with MID meter**
 - **32A 3-phase Commercial**
 - 8EM1310-3EJ04-0GA0; 8EM1310-3EH04-0GA0;
 - 8EM1310-3EJ04-3GA1; 8EM1310-3EH04-3GA1;
 - 8EM1310-3EN04-0GA0; 8EM1310-3EN04-3GA1;
 - 8EM1310-3EN04-3GA2; 8EM1310-2EJ04-3GA2;
 - 8EM1310-2EH04-3GA2
 - **32A 1-phase Commercial**
 - 8EM1310-2EJ04-0GA0; 8EM1310-2EH04-0GA0;
 - 8EM1310-2EJ04-3GA1; 8EM1310-2EH04-3GA1;
 - 8EM1310-2EH04-3GA2; 8EM1310-3EJ04-3GA2;
 - 8EM1310-2EN04-0GA0; 8EM1310-2EN04-3GA1;
 - 8EM1310-2EN04-3GA2
 - **Shutter**
 - 8EM1310-2EN04-0GA0; 8EM1310-2EN04-3GA1;
 - 8EM1310-3EN04-0GA0; 8EM1310-3EN04-3GA1;
 - 8EM1310-2EN04-3GA2; 8EM1310-3EN04-3GA2
 - **French Shutter – E-Plug**
 - 8EM1310-3EK04-3GA2; 8EM1310-3EK04-3GA1;
 - 8EM1310-3EK04-0GA0; 8EM1310-2EK04-3GA2;
 - 8EM1310-2EK04-3GA1; 8EM1310-2EK04-0GA0
 - **32 A 3-phase ERK**
 - 8EM1310-3FH04-0GA0; 8EM1310-3FH04-3GA2;
 - 8EM1310-3FH04-3GA1; 8EM1310-3FJ04-0GA0;
 - 8EM1310-3FJ04-3GA2; 8EM1310-3FJ04-3GA1

New Features:

- Support for new hardware (see supported MLFBs) Enhanced Modbus register map

Resolved Issues:

- Maximum Wi-Fi power adjusted per regional requirements in Europe and North America
- Logs no longer lost when a power cycle takes place
- RFID tags loaded locally now can be used if the charger is configured for OCPP usage
- Power loss while charging no longer blocks charging re-start by the same user
- OCPP:
 - Meter information between last sample interval and the end of session missing from the end of session meter value
 - RFID authentication failing intermittently
 - Meter samples are now consistent for 15s, 30s and 45s intervals
 - TransactionMessageRetryInterval and TransactionMessageAttempts now supported
- Firmware version properly reported representing A8
- Modbus RTU address can be configured
- Persistent Wi-Fi yellow LED no longer present

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- If local RFID is used it only works when the charger is online
- Wrong meter values detected in App and VersiCloud
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on although RFID is enabled)
- Interval between RFID taps should be at least 2 seconds
- Modbus:
 - Maximum Current set is decreased by one ampere
- OCPP:
 - GetCompositeSchedule inconsistent behavior
 - TxProfile accepted without an ongoing transaction or with the wrong Transaction ID
 - TxDefaultProfile doesn't change the duty cycle
 - SecurityProfile configuration key for change to profile 1 not supported
 - Energy.Active.Import.Register values & MeterStart values not aligned
 - GetDiagnostics upload failure
 - Boot Notification description fields inconsistent

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Bluetooth interface not functional
- ISO15118 interface not functional
- OCPP 1.6J protocol does not support Smart Charging Profile

1.3 Base Version: 2.118

Release Date: 25-Aug-2022

Supported Hardware:

- **VersiCharge Gen 3 IEC with MID meter**
 - **32A 3-phase Commercial**
 - 8EM1310-3EJ04-0GA0; 8EM1310-3EH04-0GA0
 - 8EM1310-3EJ04-3GA1; 8EM1310-3EH04-3GA1
 - 8EM1310-3EN04-0GA0; 8EM1310-3EN04-3GA1
 - 8EM1310-3EN04-3GA2; 8EM1310-2EJ04-3GA2
 - 8EM1310-2EH04-3GA2
 - **32A 1-phase Commercial**
 - 8EM1310-2EJ04-0GA0; 8EM1310-2EH04-0GA0
 - 8EM1310-2EJ04-3GA1; 8EM1310-2EH04-3GA1
 - 8EM1310-2EH04-3GA2; 8EM1310-3EJ04-3GA2
 - 8EM1310-2EN04-0GA0; 8EM1310-2EN04-3GA1
 - 8EM1310-2EN04-3GA2
 - **Shutter**
 - 8EM1310-2EN04-0GA0; 8EM1310-2EN04-3GA1
 - 8EM1310-3EN04-0GA0; 8EM1310-3EN04-3GA1
 - 8EM1310-2EN04-3GA2; 8EM1310-3EN04-3GA2
 - **FS -EPlug**
 - 8EM1310-3EK04-3GA2; 8EM1310-3EK04-3GA1
 - 8EM1310-3EK04-0GA0; 8EM1310-2EK04-3GA2
 - 8EM1310-2EK04-3GA1; 8EM1310-2EK04-0GA0
- **VersiCharge Gen 3 UL**
 - **40A plug-in and hardwire Residential**

- 8EM1312-4CF18-0FA3; 8EM1312-5CF18-0FA3
- **40A Commercial**
 - 8EM1310-4CF14-1GA2; 8EM1310-4CF14-0GA0
- **48A Commercial**
 - 8EM1310-5CF14-1GA2; 8EM1310-5CF14-0GA0
 - 8EM1310-5CG14-1GA2; 8EM1314-5CG18-0FA3
 - 8EM1314-5CG14-2FA2

New Features:

- Support for Shutter new IEC hardware variants
- Support for Modbus
- Additional OCPP command support (see OCPP documentation with commands supported per firmware variant)
- OCPP: minimum samples meter interval reduced from 60 seconds to 15 seconds

Resolved Issues:

- IEC hardware: hardware is no longer susceptible to ESD events that cause a power cycle (HMI shows abnormal sequence)
- Under voltage alarms removed
- RFID allow list does not work when previously registered charger is being deregistered
- RFID allow list does not work when the charger is offline

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- Wrong meter values detected in App and VersiCloud
- OCPP: Meter information between last sample interval and the end of session missing from the end of session meter value
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on although RFID is enabled)
- Modbus RTU works on a fixed address
- Interval between RFID taps should be at least 2 seconds

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Bluetooth interface not functional
- ISO15118 interface not functional
- OCPP 1.6J protocol does not support Smart Charging Profile

1.4 Base Version: 2.116

Release Date: Apr-2022

Supported Hardware:

- **VersiCharge Gen 3 IEC with MID meter**
 - **32A 3-phase Commercial**
 - 8EM1310-3EJ04-0GA0; 8EM1310-3EH04-0GA0
 - 8EM1310-3EJ04-3GA1; 8EM1310-3EH04-3GA1
 - 8EM1310-3EN04-0GA0; 8EM1310-3EN04-3GA1
 - 8EM1310-3EN04-3GA2; 8EM1310-2EJ04-3GA2
 - 8EM1310-2EH04-3GA2
 - **32A 1-phase Commercial**
 - 8EM1310-2EJ04-0GA0; 8EM1310-2EH04-0GA0
 - 8EM1310-2EJ04-3GA1; 8EM1310-2EH04-3GA1
 - 8EM1310-2EH04-3GA2; 8EM1310-3EJ04-3GA2
 - 8EM1310-2EN04-0GA0; 8EM1310-2EN04-3GA1
 - 8EM1310-2EN04-3GA2
- **VersiCharge Gen 3 UL**
 - **40A plug-in and hardwire Residential**
 - 8EM1312-4CF18-0FA3; 8EM1312-5CF18-0FA3
 - **40A Commercial**
 - 8EM1310-4CF14-1GA2; 8EM1310-4CF14-0GA0
 - **48A Commercial**
 - 8EM1310-5CF14-1GA2; 8EM1310-5CF14-0GA0
 - 8EM1310-5CG14-1GA2; 8EM1314-5CG18-0FA3
 - 8EM1314-5CG14-2FA2

New Features:

- None

Resolved Issues:

- Reduces OCPP communication dropouts
- OCPP charger hand shaking improved
- Improved the Charging Available Status in OCPP
- Improved the Charging Complete Status in OCPP
- OCPP configuration settings improved
- Improved Wi-Fi Connectivity

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- Wrong meter values detected in App and VersiCloud
- RFID allow list does not work when previously registered charger is being deregistered
- RFID allow list does not work when the charger is offline
- IEC hardware: hardware I susceptible to ESD events that cause a power cycle (HMI shows abnormal sequence)
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on though RFID is enabled)

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Modbus interface is not functional
- Bluetooth interface not functional
- ISO15118 interface not functional
- OCPP 1.6J protocol does not support Smart Charging Profile

1.5 Base Version: 2.115.4

Release Date: Mar-2022

New Features:

- Remote Stop Command can be executed via OCPP
- 3-phase variants: Current reported for each phase via OCPP

Resolved Issues:

- None

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- Wrong meter values detected in App and VersiCloud
- RFID allow list does not work when previously registered charger is being deregistered
- RFID allow list does not work when the charger is offline
- IEC hardware: hardware I susceptible to ESD events that cause a power cycle (HMI shows abnormal sequence)
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on though RFID is enabled)

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Modbus interface is not functional
- Bluetooth interface not functional
- ISO15118 interface not functional
- OCPP 1.6J protocol does not support Smart Charging Profile

1.6 Base Version: 2.115

Release Date: Feb-2022

New Features:

- Improved performance between VersiCloud and connected networks
- Added beep to 1st tap on RFID cards
- Improved commissioning for hardwire ethernet variant
- Support toggling of RFID access control during commissioning
- OCPP interoperability and security improvements

Resolved Issues:

- Undervoltage protection configuration modified to include the entire 208V range for UL variants
- OCPP metering data format fixed

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- Wrong meter values detected in App and VersiCloud
- RFID allow list does not work when previously registered charger is being deregistered
- RFID allow list does not work when the charger is offline
- IEC hardware: hardware I susceptible to ESD events that cause a power cycle (HMI shows abnormal sequence)
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on though RFID is enabled)

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Modbus interface is not functional
- Bluetooth interface not functional
- ISO15118 interface not functional
- OCPP 1.6J protocol does not support Smart Charging Profile, Remote Stop and 3-phase current reporting

1.7 Base Version: 2.113

Release Date: 26-Oct-2021

New Features:

- Improved SSID input when commissioning
- RFID can be remotely tuned on/off via VersiCloud (contact <http://www.siemens.com/emobility-customer-service>)
- OCPP Client - Support for Configuration Parameter "AuthorizationKey"
- OCPP Client - Support for "GetDiagnostics"

Resolved Issues:

- Charger not responsive to OCPP server after reboot
- Removal of pause toggle between M0 and A8 which caused occasional loss of communication with both VersiCloud and OCPP server
- Charging session stopped by unwanted reboot when trying to connect to Wi-Fi
- Energy reporting corrected
- Charging interruptions on UL residential chargers
- Unexpected pauses with RFID cards

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- Wrong meter values detected in App and VersiCloud
- RFID allow list does not work when previously registered charger is being deregistered
- RFID allow list does not work when the charger is offline
- RFID response times extremely slow
- IEC hardware: hardware I susceptible to ESD events that cause a power cycle (HMI shows abnormal sequence)
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on though RFID is enabled)
- Undervoltage protection set at value incompatible with lower end of 208V range
- OCPP metering data format
- Charging session stopped by unwanted reboot when trying to connect to Wi-Fi

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Modbus interface is not functional
- Bluetooth interface not functional
- ISO15118 interface not functional

- OCPP 1.6J does not support Smart Charging, Remote Stop and 3-phase current reporting
- Performance issues between VersiCloud and connected networks

1.8 Base Version: 2.112

Release Date: 9-Aug-2021

New Features:

- RFID-based authentication can be enabled and disabled

Resolved Issues:

- Wi-Fi configuration removed persisted unless a power cycle happened
- Cannot select certain Wi-Fi SSIDs including special characters
- Wi-Fi router handshake issues
- Energy reported with incorrect scaling
- VersiCloud-configured current limit does not work when EVSE is used via OCPP
- OCPP default profile is rejected

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- Wrong meter values detected in App and VersiCloud
- RFID allow list does not work when previously registered charger is being deregistered
- RFID allow list does not work when the charger is offline
- IEC hardware: hardware I susceptible to ESD events that cause a power cycle (HMI shows abnormal sequence)
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on though RFID is enabled)
- Undervoltage protection set at value incompatible with lower end of 208V range
- OCPP metering data format

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Modbus interface is not functional
- Bluetooth interface not functional
- ISO15118 interface not functional
- OCPP 1.6J protocol does not support Smart Charging Profile, Remote Stop and 3-phase current reporting
- Performance issues between VersiCloud and connected networks

1.9 Base Version: 2.111

New Features:

- Improvements for Parent/ Child setup

Resolved Issues:

- Improved stability of parent/child communication for up to 9 child units connected to one parent unit for IEC models.

Known Issues:

- Network configuration timeout too short, can cause commissioning issues and work in poor cellular strength environments for parent chargers
- Wrong meter values detected in App and VersiCloud
- RFID allow list does not work when previously registered charger is being deregistered
- RFID allow list does not work when the charger is offline
- IEC hardware: hardware I susceptible to ESD events that cause a power cycle (HMI shows abnormal sequence)
- When the Wi-Fi connection between parent and child is weak and the child loses connectivity a physical power cycle may be necessary for connectivity to be restored
- HMI incorrectly reflects RFID status of charger (blue LED not on though RFID is enabled)
- Undervoltage protection set at value incompatible with lower end of 208V range
- OCPP metering data format

Known Limitations:

- UL hardware: only one client is supported per Wi-Fi parent
- Modbus interface is not functional
- Bluetooth interface not functional
- ISO15118 interface not functional
- OCPP 1.6J protocol does not support Smart Charging Profile, Remote Stop and 3-phase current reporting
- Performance issues between VersiCloud and connected networks

1.10 Base Version: 2.110

Summary of relevant customer facing changes:

Free charging scenario edge case fix

Unauthorized charging sessions may previously have been allowed to start in the following scenarios. They have now been fixed. (1) After a fault occurs while the charger is charging and the fault is cleared, and (2) after the cable is unplugged from EV side when it is charging.

RFID audible authentication notification enhancements

Audible indication of card tap and authorization status can now be observed by the driver.

Note

Inconsistencies may still occur when the unit is not yet fully booted up which can be indicated by the Wi-Fi LED on the front of the unit showing either a blinking or solid white status.

Note

Ideally the user should wait 10 seconds between two RFID card taps, otherwise inconsistencies may still occur.

Commissioning improvements

Time reduction in total time required to commission unit via the mobile app and the PC tool.

Display inconsistencies fixed

Adjusted Amps on mobile app displaying correct value for derated Amps. Inconsistency in connectivity status of charger displayed on mobile app and VersiCharge SG cloud web page fixed to be more reliable.

Over the air upgrade automation enhanced

Improve time to administer over the air updates to field chargers.