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Charge Amps Dawn Firmware 1.7.3

Release Notes

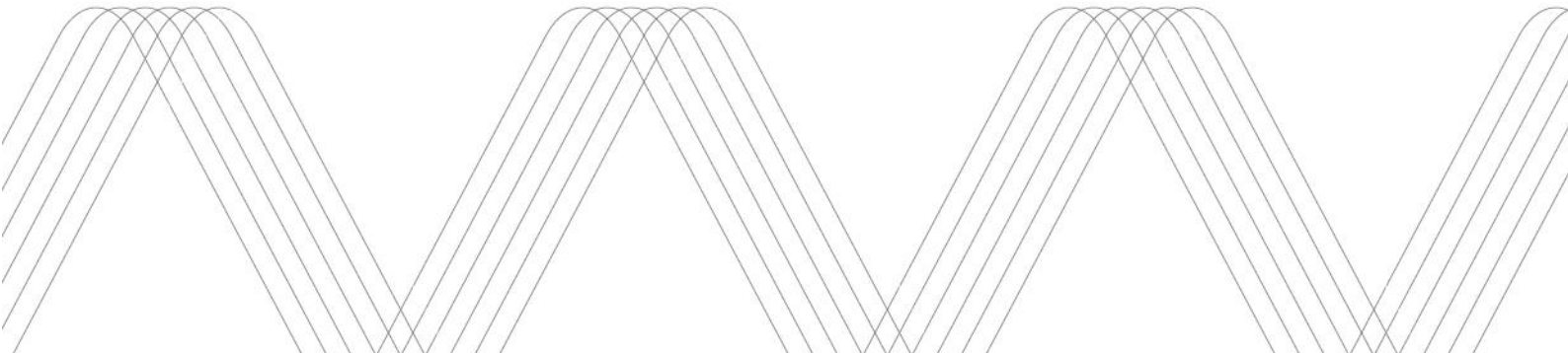


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Revision History

Version	Author	Date	Updates
1	Martin Borg	2025-08-15	First version

References

Nr	Description	Link
1	Charge Amps Dawn OCPP API description	Available on request

Version 1.7.3

Release date 2025-08-15

Supported Charging Unit Revisions

- Charge Amps Dawn: P/N 130287 R1, R5, R6. P/N 131743 R2
- Charge Amps Dawn Professional DE: P/N 131657 R1, R3

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.7.2

Improvements

- Updated modem firmware

Bug Fixes

- Fixed modem connection bug related to firmware update rollback

Known Issues and Limitations

- See Charge Amps Dawn OCPP API description [1] for OCPP issues and limitations.

Version 1.7.2

Release date 2025-06-16

Supported Charging Unit Revisions

- Charge Amps Dawn: P/N 130287 R1, R5, R6. P/N 131743 R2
- Charge Amps Dawn Professional DE: P/N 131657 R1, R3

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.7.1

Improvements

- Updated RCD firmware to resolve ground failure issues for certain car models.
- Updated modem firmware for EN 18031 compliance.

- Updated Dawn MID firmware to align display with Dawn Professional DE
- Added production test for ISO 15118 extension board hardware.

Bug Fixes

- Fixed issue where charger could get stuck in Preparing state after rapid cable reconnect.
- Fixed bug causing socket LED to not adjust LED intensity.
- Fixed potential MID serial number mismatch after firmware upgrade.
- Dawn Professional DE: Corrections for RFID tags with 7- and 10-byte UUIDs.

Known Issues and Limitations

- See Charge Amps Dawn OCPP API description [1] for OCPP issues and limitations.

Version 1.7.1

Release date 2025-03-19

Supported Charging Unit Revisions

- Charge Amps Dawn: R1, R5, R6
- Charge Amps Dawn Professional DE: R1

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.7.0

Bug Fixes

- Fix bug that caused cable lock to retry locking indefinitely on failure when permanent lock is enabled.
- Fix PP signal processing bug that could cause the charging cable capacity to be incorrectly identified as lower than its specification.

Known Issues and Limitations

- See Charge Amps Dawn OCPP API description [1] for OCPP issues and limitations.

Version 1.7.0

Release date 2025-03-05

Supported Charging Unit Revisions

- Charge Amps Dawn: R1, R5, R6
- Charge Amps Dawn Professional DE: R1

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.5.4.

New Features

- Relay weld detection
- Support for charging limitation reporting to CPMS via DataTransfer
- High-level network supervision to reboot after 2 hours offline (configurable timeout)

Improvements

- Updated RCD firmware to avoid ground failure when charging ends for some car models.
- Improved error reporting, InternalErrors categorized with Info field.

Bug Fixes

- Fix bug that caused soft reset to stop working after failing once.
- Fix for Bluetooth becoming unavailable after initial session disconnects.
- Fix bug that caused a 0A smart charging profile to be ignored during ongoing phase change.
- Fix bug that caused the charger not to enter Preparing/Charging state after availability is toggled while cable is inserted.
- Synchronize change of charging PWM duty cycle with end of a period.
- Fix bug that caused GroundFailure to occur outside of a charging session.
- Fix bug that caused MID firmware upgrade not to be triggered in case of PowerMeterFailure.

Known Issues and Limitations

- See Charge Amps Dawn 1.7.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.5.4

Distribution intended for Eichrecht integration tests. Customers shall use version 1.7.0 or later.

Release date 2025-02-13

Supported Charging Unit Revisions

- Charge Amps Dawn Professional DE: R1

New Features

- Eichrecht support, including updated MID firmware for Charge Amps Dawn Professional DE.

Version 1.4.5

Release date 2024-12-05

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.4.4.

New Features

- Updated RCD firmware (version 2.1.1) and improved trip data reporting.
- Add CPU temperature sensor readings for redundancy.

Improvements

- Adjusted temperature limits to allow higher temperatures before reducing current.
- AuthorizationCacheEnabled OCPP key is now true by default from production (but will not be changed when upgrading from older versions).

Bug Fixes

- MMC firmware upgrade to fix system boot failure due to inaccessible flash memory.
- Fix bug that may cause charging to be restarted after the transaction has been stopped.
- Fix bug for smart charging weekly recurring profiles when wrapping to a new week.
- Fix bug that caused the cable to remain locked in E state.

Known Issues and Limitations

- See Charge Amps Dawn 1.4.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.4.4

Release date 2024-05-03

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.4.3.

Bug Fixes

- Fix bug that causes reject of valid settings from Installer app when EarthingSystem is not changed.

Known Issues and Limitations

- See Charge Amps Dawn 1.4.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.4.3

Release date 2024-04-12

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.4.2

Bug Fixes

- Fix bug that can cause RemoteStart to be rejected in FreeCharging.
- Fix crash when configuring IT-net from Installer app.

Known Issues and Limitations

- See Charge Amps Dawn 1.4.0 OCPP API description [4] for OCPP issues and limitations.

Version 1.4.2

Release date 2024-03-08

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.4.1

Bug Fixes

- Fix bug that causes relays to open during phase change
- Allow phase change during 2 second wait between state C and relays on
- Tune CP signal hysteresis
- Resend FirmwareStatusNotification when charger comes back online
- Fix naming of StopTxn OCPP configuration keys

Known Issues and Limitations

- See Charge Amps Dawn 1.4.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.4.1

Release date 2024-02-09

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.4.0

New Features

- Support for IT earthing system

Bug Fixes

- Fix for problems related to ISO15118 BCB toggle from EV.
- Fix bug with EV legacy wakeup if the cable remains connected between charging sessions.
- Fix to return updated Chargepoint ID to the installer app.

Known Issues and Limitations

- See Charge Amps Dawn 1.4.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.4.0

Release date 2024-01-19

Supported Charging Unit Revisions

- R1

- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.3.6

New Features

- OCPP Basic Authentication
- Factory Reset

Improvements

- Improved cable lock detection algorithm
- Send RCD trip/touch information in DataTransfer to CPMS
- Allow changing Chargepoint ID OCPP key without InstallationChange
- Ignore AssignedCurrent OCPP key in smart charging.
- Send detailed hardware component information to CPMS
- Show all available network interfaces in NetworkStatus DataTransfer
- Improved logging and debugging capabilities

Bug fixes

- Fix for faults for some EV models due to unstable CP signal.
- Fix for smart charging profiles remaining in use after valid time expires
- Disable overcurrent monitoring when relays are open
- Limit number of overcurrent retries
- Fix for fault codes not always propagated correctly to CPMS.
- Fix for possible crash on RemoteStart in FreeCharging mode.
- Fix RFID auth to only block identical tags temporarily.
- Randomized backoff for CPMS connection attempts
- Handle space in LTE-M operator name

Known Issues and Limitations

- See Charge Amps Dawn 1.4.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.3.6

Release date 2023-12-07

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- This release is for production only.

Bug fixes

- Check running MID version before upgrade to avoid triggering a MID upgrade at first boot after flashing.

Known Issues and Limitations

- See Charge Amps Dawn 1.3.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.3.5

Release date 2023-11-23

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.3.4

Bug fixes

- Resolved problem causing faulted state on some chargers on 1.3.4.
- Fix a bug causing soft reset to fail in faulted state.

Known Issues and Limitations

- See Charge Amps Dawn 1.3.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.3.4

Release date 2023-11-17

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.3.3

Bug fixes

- Add LTE-M modem watchdog to restart modem if needed to restore network connectivity.
- Fix hard reset issue that can cause the charger to remain offline and non-functional until it is power cycled.
- Fix application crash on Network Status request received after long system uptime.
- Fix potential crash loop due to invalid RfidTagFreeCharging OCPP key.
- Fix problem that caused MID upgrade not to be applied on chargers upgrading from Firmware version 1.1.x.
- Improve recovery from early startup failures to ensure the charger still connects to cloud.

Known Issues and Limitations

- See Charge Amps Dawn 1.3.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.3.3

Release date 2023-10-30

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- This release is for production only.

Bug fixes

- Fixed a bug causing the solenoid self-test to fail.

Known Issues and Limitations

- See Charge Amps Dawn 1.3.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.3.2

Release date 2023-10-16

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.3.1

Bug fixes

- MID firmware upgrade to resolve a critical issue that caused the MID to become non-functional after 49 days of continuous operation.
- Fixed a bug causing the charger to permanently pause charging after a phase change for certain EV models.

Known Issues and Limitations

- See Charge Amps Dawn 1.3.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.3.1

Release date 2023-10-05

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.3.0

Bug fixes

- Fix for file-transfer interruption due to DNS lookup failure on poor connections.

Known Issues and Limitations

- See Charge Amps Dawn 1.3.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.3.0

Release date 2023-09-29

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.2.2

New Features

- Support for LAN extension module
- OCPP RemoteTrigger feature profile
- Configurable Charge Point ID (for external CPMS only)
- DataTransfer of network status information

- DataTransfer of component information
- WebSocketPingInterval support

Improvements

- Firmware update resume of interrupted partial download
- Support for Power.Active.Import meter value
- Legacy EV wake-up workaround (IEC61851-1 A.5.3)

Bug fixes

- Fix for potential SuspendedEV to SuspendedEVSE load-balancing loop
- Fix possible crash on malformed messages from CPMS
- Reboot charger when a temporary power-loss is detected

Known Issues and Limitations

- See Charge Amps Dawn 1.3.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.2.2

Release date 2023-08-25

Supported Charging Unit Revisions

- R1
- R5
- R6

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.2.1

Bug fixes

- Fix problems related to cable lock.

Known Issues and Limitations

- See Charge Amps Dawn 1.2.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.2.1

Release date 2023-07-05

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.2.0

Bug fixes

- Fix for network interface switching to LTE-M if Wi-Fi connection fails

Known Issues and Limitations

- **The Charge Amps custom OCPP configuration key “CableLock” is not working and must not be used!**
- See Charge Amps Dawn 1.2.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.2.0

Release date 2023-06-30

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.1.5

New Features

- OCPP Core profile full support
- OCPP Local Auth List Management
- Updated RCD firmware (version 1.3.0)

- Rollback of firmware upgrade if the charger fails to reconnect to CPMS
- Support for OTA upgrade of MID firmware

Improvements

- Improved temperature management algorithm
- Transaction ID added in meter values
- Allow remote start/stop in free charging mode
- Handle charging profile as part of remote start

Bug fixes

- Fixes to prevent false RCD trips
- Fix incorrect reject of electrical settings from installation app
- Fix PWM signal issues affecting some EVs
- Handle firmware update URI passwords with special chars
- Fix remote start not restarting charging after remote stop
- Properly cancel firmware upgrade if download fails
- Replace previous charging profile when the stacklevel is the same
- Fix race condition causing incorrect charging profile reject
- Corrected energy value in stop transaction at powerloss

Known Issues and Limitations

- **The Charge Amps custom OCPP configuration key “CableLock” is not working and must not be used!**
- See Charge Amps Dawn 1.2.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.1.5

Release date 2023-05-11

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.1.4

Bug fixes

- RCD upgrade to version 1.2.2 to fix incorrect RCD trips for some EVs

Known Issues and Limitations

- No local offline RFID authorization.
- See Charge Amps Dawn 1.1.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.1.4

Release date 2023-05-11

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- **This release is for production only, shall not be used for OTA.**

Improvements

- LTE-M is now functional in all supported regions
- Temperature management added that adjust or suspend charging to avoid over temperature.
- Temperature and offered current added to meter values

Bug fixes

- Phase cross connection of incoming L2/L3 phases to L1
- Correct board version values reported to CPMS
- Fix possible crash when setting connector Unavailable during a charging session

Known Issues and Limitations

- No local offline RFID authorization.
- See Charge Amps Dawn 1.1.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.1.3

Release date 2023-04-27

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.1.2

Bug fixes

- Units with missing or incorrect pin/serial from production automatically corrected.

Known Issues and Limitations

- LTE-M is not functional in all regions
- No thermal management
- No local offline RFID authorization.
- See Charge Amps Dawn 1.1.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.1.2

Release date 2023-04-20

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- Supports firmware upgrade from all versions from 1.0.0 to 1.1.1

Improvements

- Added get functions for serial and pin code for Bluetooth production test client
- Added sync on write for serial and pin code in production test

Known Issues and Limitations

- LTE-M is not functional in all regions
- No thermal management
- No local offline RFID authorization.
- See Charge Amps Dawn 1.1.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.1.1

Release date 2023-04-14

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- Supports firmware upgrade from versions 1.0.0 and 1.1.0.

Improvements

- LTE-M increased watchdog timeout to improve stability
- Disconnect when EV draws current over the assigned level

Bug fixes

- Fix for phase assignment during load balancing
- Overcurrent calculation fixes

Known Issues and Limitations

- LTE-M is not functional in all regions
- No thermal management
- No local offline RFID authorization.
- See Charge Amps Dawn 1.1.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.1.0

Release date 2023-03-25

Supported Hardware Revisions

- R1
- R2

Firmware Upgrade

- Supports firmware upgrade from version 1.0.0.

New Features

- Certified MID module.
- Embedded RCD.
- LTE-M connectivity.
- Automatic network interface switching between Wi-Fi and LTE.
- Bluetooth support for installation app and production client.
- OCPP 1.6j support as stated in the Charge Amps Dawn 1.1.0 OCPP API description [1].
- Centralized Authentication by CPMS system
- OCPP Smart Charging.
- Automatic self-diagnostic at boot.
- Power loss handling.
- Current monitoring and overcurrent handling.

Known Issues and Limitations

- LTE-M is not functional in all regions.
- No thermal management.
- No local offline RFID authorization.
- See Charge Amps Dawn 1.1.0 OCPP API description [1] for OCPP issues and limitations.

Version 1.0.0

Release date 2022-12-21

Initial release for MVP units.