KeContact

P30 x-series
Charging Station
Software Release Notes V 1.18.1

Original instructions

KEBA®
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History

Version	Date	Change in chapter	Description
1.8.2	01-2019	-	Software Package 1.8.2
1.9	06-2019	-	Software Package 1.9.0
1.9.1	07-2019	-	Software Package 1.9.1
1.9.2	07-2019	-	Software Package 1.9.2
1.9.10	10-2019	-	Software Package 1.9.10
1.10	01-2020	-	Software Package 1.10
1.11	07-2020	-	Software Package 1.11
1.12	03-2021	-	Software Package 1.12
1.12.1	06-2021	-	Software Package 1.12.1
1.13	03-2022	-	Software Package 1.13
1.14	06-2022	-	Software Package 1.14
1.14.1	10-2022	-	Software Package 1.14.1
1.15	01-2023	-	Software Package 1.15
1.15.1	04-2023	-	Software Package 1.15.1
1.16	06-2023	-	Software Package 1.16
1.16.1	07-2023	-	Software Package 1.16.1
1.17	08-2023	-	Software Package 1.17
1.17.1	10-2023	-	Software Package 1.17.1
1.17.2	04-2024	-	Software Package 1.17.2
1.18	07-2024	-	Software Package 1.18
1.18.1	01-2025	-	Software Package 1.18.1

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Contents

1 General

Purpose of this document is to inform about the changes of the latest software and firmware version. Detailed descriptions and instructions about the new features can be found in the product manuals. The content is categorized as enhancements; changes because of normative requirements; and bug fixes.

1.1 Identification

After installation, the software version 1.18.1 can be read on the web interface (WebUI).

1.2 Compatibility information

This firmware is compatible with all KeContact P30 x-series charging stations and connected KeContact P30 c-series in client mode.

To identify your charging station, please compare your product code with the product codes table in the installation manual.

Below you will find a list of the most important implemented features and fixed bugs.

All the features and fixed bugs related to the KeContact P30 a-, b- and c-series are reported in the release notes of the new firmware.

Information
*From software version **1.11** and onwards, the KeContact P20 c-series is no longer supported in a master/client charging network.*

1.3 Further documents and information

https://www.keba.com/en/emobility/service-support/downloads/downloads

User manual

Installation manual

Configuration manual

FAQ for users and commissioning

2 Version Package 1.18.1

Date of release: 23.01.2025

Notice
*The Software Package 1.18.1 can **only** be installed on devices which already have Software Package 1.17.x or 1.18.0 installed.*

2.1 Package components

The file name of the package is **P30x_SW_1_18_1.keb**

The current package contains the following components:

Release Version: 1.18.1	
Component	**Version**
CPM	4.18.1
KEEP	5.9.0
OS	4.18.1
WEBUI	4.18.1
RESTAPI	2.3.0
PDC	3.10.61

2.2 Implemented features, changes and improvements

Notice for P30 x-series in Master/Client setup with M20

Updating a P30 x-series via software management page is not possible when connected to M20.

A separate update will be provided soon to enable updates via M20 software management page.

With M20 version 1.17.600, you can provision a P30 x-series with version 1.18.1. Devices with versions earlier than 1.18.1 (including 1.18.0) won't be updated during provisioning.

To upgrade an already provisioned 1.18.0 or 1.17.x P30 x-series to 1.18.1, unprovision, update, and then reprovision the P30 x-series. This step is optional.

If you have a P30 x-series with version 1.18.0 or 1.17.x and want to connect it in an M20 installation but still update to 1.18.1, perform the update before provisioning.

Do not attempt to update to 1.18.1 using the *P30x_1_18_1.keb* file via the software management page on the M20, as this is unsupported and will disrupt communication.

2.2.1 Duplicated Charging Sessions

In some rare cases, charging records were duplicated, which could have affected billing accuracy. This issue has now been fully resolved

2.2.2 Fix for incorrect kWh display

In some cases, the energy consumption of a charging session was incorrectly displayed with too high consumption or a negative kWh value. Please rest assured that the measurement data of your charging station was always accurate. This issue only affected a few product variants manufactured from 02/24 onwards and has now been successfully fixed.

2.2.3 ChargingSessionStoppedEvent not triggered

In some cases, the ChargingSessionStoppedEvent was not triggered, even though the charging session was successfully completed. As a result, under certain conditions, the next charging session could be incorrectly assigned to the wrong user (wrong idTag), and meter values continued to be sent as if the previous session was still open.

2.2.4 Fixed TxProfile rejection after StartTransaction

The issue with saving StartTransaction data has been resolved. Now, any SmartCharging request for the charging session (using the transaction ID) will be applied correctly.

3 Version Package 1.18

Date of release: 04.07.2024

Notice
*The Software Package 1.18 can **only** be installed on devices which already have Software Package 1.17.0, 1.17.1, 1.17.2 or 1.17.3 installed.*

3.1 Package components

The file name of the package is **P30x_SW_1_18.keb**

The current package contains the following components:

Release Version: 1.18	
Component	**Version**
CPM	4.18.0
KEEP	5.9.0
OS	4.18.0
WEBUI	4.18.0
RESTAPI	2.3.0
PDC	3.10.57

3.2 Implemented features, changes and improvements

3.2.1 The Automated Charge Report will no longer be available on the Webinterface

Automatic export of charging sessions is now only available in the KEBA eMobility Portal (www.keba.com/emobility-portal) only. The KEBA eMobility Portal provides extended functionalities.

3.2.2 Adjustments for §14a EnWG

In accordance with §14a EnWG (Germany), the distribution system operator (DSO) can limit the grid-relevant power consumption of flexible consumption devices to a minimum value of 4.2kW via a control unit if the grid status so requires.
The available charging current on the KeContact P30 can be reduced to 0A or 6A in accordance with EnWG when opening or closing the enable contact X1 if the DIP switches are configured accordingly.

3.2.3 Change X1 Value for DIP switch 2.6

The 8A power limitation for the Right to Plug (Austria) was previously regulated by DSW 2.6. This now makes room for the requirement of §14a, which implies the possibility to reduce power to 6A via the X1 enable input.
The 8A power restriction is implemented in a more suitable location.

3.2.4 Added DataTransfer to expose DIP switch settings via OCPP

Added support for an additional OCPP DataTransfer message.
Using vendorId = com.keba.kemove and messageId = dipSwitchConfiguration will return a comma separated list where each element has the format:

```
<connectorId>.<DSWrow>.<DSWSwitch>.<DSWvalue>
```

3.2.5 New external meter implemented

The external meter Phoenix Contact EEM-MA371 is now implemented.

3.2.6 Resume after power cut

There is a new setting for the "ResumeSessionAfterPowercut" use case. This use case now works also with a disabled authorization. Therefore, a new UDP setting "setBoot" was introduced. If this is set to 1 the charger will continue in suspended state if "ResumeSessionAfterPowercut" is activated.

3.2.7 SmartCharging: TxDefaultProfile Relative

Adaptions in the OCPP smart charging algorithm. TxDefaultProfile profiles having the chargingProfileKind set to Relative are getting active by default, at the start of each new Transaction.

3.2.8 Webinterface performance improvements

Refactored PHP page rendering has resulted in approximately a 10% improvement in page loading times.

3.2.9 Performance improvement of the processing of REST API requests/responses

The response time of the REST API, especially when requesting a large number of charging sessions was improved.

3.2.10 OCPP StatusNotificationRequest redesigned

Updated how StatusNotification requests are sent to the backend for improved system robustness.

3.2.11 Authentication throttling mechanism

Implemented a solution to mitigate large number of requests within short durations, enhancing protection against DoS attacks.

3.2.12 Improved Reconnection Functionality

Implemented sending a Heartbeat.req upon reconnection to the OCPP backend to address an issue where chargers did not send messages after reconnecting until the heartbeat time interval passed. Additionally, StatusNotification.req is now sent for all charging stations that changed their OCPP status during the disconnection, enhancing communication reliability.

3.2.13 Ghost session recovery mechanism

Implemented a mechanism to reduce the probability that an open session would be left in the system, either preventing a charging session to be authenticated or being wrongfully included in the load management distribution.

3.2.14 TimeNtpClientServers property configurable

Implemented the configurability of NTP servers and improved NTP synchronization for enhanced performance.

3.2.15 Added DataTransfer for External Meter Connection Loss

Introduced DataTransfer OCPP requests to detect and report connection loss with external meters.

```
DataTransferRequest:
{
    "vendorId":"com.keba.kemove",
    "messageId":"extMeterCommLost",
    "data":"{\"meter\":\"<IP>\"}"
}
```

After the lost communication, upon reestablishing connection with the meter, another DataTransfer is sent:

```
DataTransferRequest:
{
    "vendorId":"com.keba.kemove",
    "messageId":"extMeterCommReestablished","data":"{\"me-
    ter\":\"<IP>\"}"
}
```

OCPP configuration key: "*sendCommLostDataTransfer*"

3.2.16 Added DataTransfer to perform a GSM signal test

Signal strength is included as a configuration key.

```
DataTransferRequest:
{
    "vendorId":"com.keba.kemove",
    "messageId":"signalStrength","data"
}
```

The KeContact P30 will respond with Accepted, and will send a new DataTransferRequest with the result of the signal strength calculation.

3.2.17 Added DataTransfer to get current time on KeContact P30

```
DataTransferRequest:
{
  "vendorId": "com.keba.kemove",
  "messageId": "getTime"
}

DataTransferResponse:
{
  "status": "Accepted",
  "data": "2024-01-25T14:07:09.319Z"
}
```

3.2.18 Added DataTransfer to detect pwm_state: E

Introduced DataTransfer OCPP requests to detect and report when the pwm_state is E_TEMP_PROBLEM_OR_PILOT_SHORT_TO_EARTH.

```
DataTransferRequest:
{
  "vendorId": "KEBA AG",
  "messageId": "E_TEMP_PROBLEM_OR_PILOT_SHORT_TO_EARTH",
  "data": "19834214"
}
```

OCPP configuration key: "*SendRcvStateEDataTransfer*"

4 Version Package 1.17.2

Date of release: 04.04.2024

Notice
*The Software Package 1.17.2 can **only** be installed on devices which already have Software Package 1.17.1 installed.*

4.1 Package components

The file name of the package is **P30x_SW_1_17_2.keb**

The current package contains the following components:

Release Version: 1.17.2	
Component	**Version**
CPM	4.17.2
KEEP	5.8.1
OS	1.18.1
WEBUI	1.18.1
RESTAPI	2.2.1
PDC	3.10.53

4.2 Implemented features, changes and improvements

4.2.1 Memory issue was resolved

When RESTAPI was used, the nginx_access.log could grow very big and cause an out of memory issue.

4.2.2 WebSocket write timeout

When building the WebSocket connection the write timeout is set to 60 milliseconds. If a message was not sent in 60 milliseconds, the OCPP backend would see multiple connections.

The value was multiplied by 1000 to set the value in seconds instead of milliseconds.

4.2.3 Detection of subnet IP conflict (wlan0 and eth0) failed

Executable flag was not set on some scripts used in detection of an IP conflict. This issue was resolved by marking the scripts as executable.

4.2.4 Energy Server – Reconnection on Close Reason 1001

The issue that the KeContact P30 x-series did not try to reconnect to the energy server for the automated charge report upon error code 1001 was resolved.

4.2.5 Energy server and KEBA eMobility Portal – Factory settings fix

A factory reset did not revert the settings for the KEBA eMobility portal and energy server - automated charge report (ACR). This issue is resolved.

4.2.6 Udev rule

Fixed the udev rule to have a consistent name for the PLC network interface.

5 Version Package 1.17.1

Date of release: 11.10.2023

Notice
*The Software Package 1.17.1 can **only** be installed on devices which already have Software Package 1.16.0, 1.16.1 or 1.17 installed.*

5.1 Package components

The file name of the package is **P30x_SW_1_17_1.keb**

The current package contains the following components:

Release Version: 1.17.1	
Component	**Version**
CPM	4.17.1
KEEP	5.8.1
OS	1.18.1
WEBUI	1.18.1
RESTAPI	2.2.1
PDC	3.10.53

5.2 Implemented features, changes and improvements

5.2.1 Simultaneous change of username and password in WebUI enabled

Username and password can now be changed simultaneously in the WebUI.

5.2.2 Boost operation via the App/Portal resolved

PV boost operation, which failed due to missing supported request in the portal connector configuration, has been fixed.

5.2.3 Possibility to force close an open “ghost” session

Open ghost sessions can be forcedly closed via the RemoteStopTransaction request, using a known transaction ID.

5.2.4 Permanently locked socket configuration fixed for preconfigured variants

The issue due to which the permanently locked socket field on the charging network page on a preconfigured wallbox always displayed as N/A was fixed.

6 Version Package 1.17

Date of release: 08.08.2023

Notice
*The Software Package 1.17 can **only** be installed on devices which already have Software Package 1.16.0 or 1.16.1 installed.*

6.1 Package components

The file name of the package is **P30x_SW_1_17.keb**

The current package contains the following components:

Release Version: 1.17.0	
Component	**Version**
CPM	4.17.0
KEEP	5.8.1
OS	1.18.0
WEBUI	1.18.0
RESTAPI	2.2.0
PDC	3.10.53

6.2 Implemented features, changes and improvements

6.2.1 Implementation of direct payment terminal KeContact T10

The direct payment terminal KeContact T10 is now ready to order for CPOs in the German market and can be integrated with KeContact P30 ME variants. The payment terminal communicates with the P30 x-series and can be added to a load management network.

Further information can be found in the KEBA eMobility download section:
https://www.keba.com/en/emobility/service-support/downloads/Downloads

6.2.2 Set fixed IP addresses

Setting a fixed IP address is now possible using the WebUI, RESTAPI and USB.
To activate the fixed IP address, the DHCP Server and Client must be deactivated.

Then a fixed IP address / Net Mask / Gateway / DNS Server can be set manually.

The known DHCP Server or Client feature remains as before.

6.2.3 Password recovery via RESTAPI supported

The RESTAPI supports the password recovery procedure.

6.2.4 Missing phase-assignment resolved

In earlier software version it was possible to have a socket configured without "phase assignment", which lead to an error in the load management algorithm so that the wallbox would charge with only 6A. Updating to software version 1.17 fixes this error by setting the phase assignment to the default L1_L2_L3. Mind that configuring the correct phase assignment should still be done by administrators and is quintessential to the load management algorithm, even in single charge point installations.

6.2.5 Status notification for all connectors sent

When changing any of the OCPP connector connection parameters a StatusNotification.req will be sent for all connectors instead of only for connector 0.

6.2.6 Timezone issues resolved

Issues related to setting the time and/or timezone on the KeContact P30 x-series were corrected.

6.2.7 OCPP Status notifications with permanently locked socket resolved

The problem of an OCPP status sent by a permanently locked socket, which was inconsistent with the actual status, was resolved. In essence, now a permanently locked socket behaves like a "cable" variant from an OCPP status point of view.

6.2.8 Phase Switching via UDP enabled

For a direct initiation of the phase switching feature by an external energy management system, the KeContact P30 functionality has been enhanced to decide on itself if it should charge with 1-phase or 3-phases based on the UDP control method.
Up to now, the KeContact P30 forwarded information to the external phase switch S10, which reacted upon the command by the inverter.

7 Version Package 1.16.1

Date of release: 05.07.2023

Notice
*The Software Package 1.16.1 can **only** be installed on devices which already have Software Package 1.15.0, 1.15.1 or 1.16.0 installed.*

7.1 Package components

The file name of the package is **P30x_SW_1_16_1.keb**

The current package contains the following components:

Release Version: 1.16.1	
Component	**Version**
CPM	4.16.1
KEEP	5.8.1
OS	1.17.0
WEBUI	1.17.1
RESTAPI	2.1.0
PDC	3.10.51

7.2 Implemented features, changes and improvements

7.2.1 Important information: Automated Charge Report

As a fix to update 1.16 the activation of the service "Automatic Export" has been restored in software update 1.16.1. The service can now be used as usual. User, who have activated the service in Release 1.15 or prior, are not affected. The service remains available until the end of 2023 and will then be ultimately replaced by a similar service with increased functionality and better ease-of-use, which is available in the KEBA eMobility Portal.

8 Version Package 1.16

Date of release: 14.06.2023

Notice
*The Software Package 1.16 can **only** be installed on devices which already have Software Package 1.15.0 or 1.15.1 installed.*

8.1 Package components

The file name of the package is **P30x_SW_1_16.keb**

The current package contains the following components:

Release Version: 1.16.0	
Component	**Version**
CPM	4.16.0
KEEP	5.8.1
OS	1.17.0
WEBUI	1.17.0
RESTAPI	2.1.0
PDC	3.10.51

8.2 Implemented features, changes and improvements

8.2.1 Permanently locked socket

It is possible to lock the cable even if there is no ongoing charging session. The socket can be locked for all sockets of an master/client charging network. The setting to lock the socket is available over the WebUI, OCPP and RESTAPI interfaces.

8.2.2 Timezone support

The P30 x-series now supports different time zones. Setting the timezone for the P30 is supported using WebUI and RESTAPI.

The **WebUI** got a new drop down to select the timezone in the "User Settings" page.

The **RestAPI** has new functions available:

GET
- /configs/time/timezone - to get the current set timezone
- /configs/time/timezones - to retrieve the list of the available timezones
- /configs/time/time - to retrieve the current time

PUT
- /configs/time/timezone - to change the set timezone

8.2.3 Automated Charge Report enhancements

Numerous changes have been made to enhance the user experience with the Automated Charge Report feature. The user is now given more detailed information within the section about this feature.

8.2.4 WebUI enhancements

- Improved German and French translations on the WebUI.
- Improved filter options in the Charging Session and RFID section
- Previously the sum of charging sessions was shown in seconds. Now it is displayed in seconds, hours, days and weeks.

8.2.5 RESTAPI enhancements

Numerous changes have been made to enhance the RESTAPI interface.

8.2.6 WLAN IP address shown on display

On the display of the P30 x-series the IP address of the WLAN interface is also shown. Also a prefix is added to identify the interface.

- Prefix for LAN is "lan:" followed by the assigned IP address.
- Prefix for WLAN it is "wlan:" followed by the assigned IP address.

8.2.7 Integration of external meters and inverters without software update

The integration of external meters for our connectivity is now decoupled from our release timelines. The user is able to request and add a new external meter integration any time via a .keb file.

8.2.8 French display texts added

User now have the ability to select predefined display texts in French language.

8.2.9 Negative values shown when consumption exceeds 32A with the Carlo Gavazzi meter

Issue fixed when a Carlo Gavazzi meter is used and the consumption exceeds 32A and negative values were shown.

8.2.10 Subnet IP conflict with WLAN Access Point

In case there is a conflict with IP address of the LAN and WLAN interface in access point mode, the WLAN interface will switch the used subnet automatically. There is a pool of three subnets which are used for the WLAN in access point mode:

- 192.168.178.1
- 192.168.179.1
- 192.168.187.1

The net mask is 255.255.255.0 in all cases. The former used subnet 192.168.2.x is not in the pool anymore.

8.2.11 WLAN client recovery procedure

Added the ability to easily recover/migrate the KeContact P30 x-series when the WLAN credentials of a router change by automatically starting WLAN hotspot after the first reboot.

8.2.12 Parameter “Central System Hostname” renamed in the WebUI

For consistency reasons, the parameter “Central” System Hostname” was renamed to “Central System Address” in the WebUI.

Also the German and French texts have been adapted:

- DE: “OCPP-Backend Hostname” → “OCPP-Backend Adresse”
- FR: "Nom d´hôte du Système Central" → "Adresse du système central"

8.2.13 Provide Master/Client alias in OCPP

New configuration keys available via OCPP GetConfiguration/ChangeConfiguration requests to return the alias of a specific wallbox: AliasSerial1, AliasSerial2,…AliasSerial16.

8.2.14 Charging session opened upon unplugging an EV after closing the current session via APP

Added a safeguard to prevent a situation which could lead to a charging session not being properly closed after a cable lock failure.

8.2.15 Transaction.Begin=Transaction.End

Issue fixed where in some corner cases the Transaction.Begin had the same value as the Transaction.End after a power loss.

8.2.16 Wrong state after RemoteStopTransaction

Fixed some transitions between states reported by StatusNotification requests for OCPP1.6.

8.2.17 Missing RFID page in the WebUI on products with an “A” in the product code (e.g. KC-P30-EC2404E2-L0A-GE)

Resolved an issue where the RFID page was missing in the WebUI for products with a product code containing the letter “A”.

8.2.18 WIFI Hotspot doesn’t work after an update

Fixed WIFI Hotspot settings which were broken by an update.

8.2.19 Restrictions on the authorization key

Resolved issue so that a key like 8VQVYVU39LRGPMYGR8HD is accepted in the WebUI for BasicAuthentication over OCPP1.16 JSON.

8.2.20 Adapt failsafe behavior over UDP

Setting the failsafe current to 0 using UDP is applied for all charging sessions, not only for the ongoing charging session.

8.2.21 Adapt failsafe minimum value over UDP

It is now possible to set the time delay for failsafe mode to values as low as 5 seconds.

8.2.22 Two UDP responses after sending “x2 0” or “x2 1”

The message “Not allowed” does not appear anymore after sending the UDP commands “x2 0” or “x2 1”.

9 Version Package 1.15.1

Date of release: 05.04.2023

Notice
*The Software Package 1.15 can **only** be installed on devices which already have Software Package 1.14.0, 1.14.1, 1.14.2 or 1.15.0 installed.*

9.1 Package components

The file name of the package is **P30x_SW_1_15_1.keb**

The current package contains the following components:

Release Version: 1.15.1	
Component	**Version**
CPM	4.15.0
KEEP	5.8.0
OS	1.16.1
WEBUI	1.16.1
RESTAPI	2.0.1
PDC	3.10.42

9.2 Implemented features, changes and improvements

9.2.1 WebUI login doesn’t work, when RESTAPI is OFF by default from production line

Fixed WebUI login for wallboxes which are preconfigured to have RESTAPI disabled out of the production line.

9.2.2 RESTAPI can not be activated after update from software version 1.14.2 to 1.15

Fixed RESTAPI starting on wallboxes which were updated to software version 1.15 from 1.14.2.

10 Version Package 1.15

Date of release: 17.01.2023

Notice
*The Software Package 1.15 can **only** be installed on devices which already have Software Package 1.14.0, 1.14.1 or 1.14.2 installed.*

10.1 Package components

The file name of the package is **P30x_SW_1_15.keb**

The current package contains the following components:

Release Version: 1.15	
Component	**Version**
CPM	4.15.0
KEEP	5.8.0
OS	1.16.0
WEBUI	1.16.0
RESTAPI	2.0.0
PDC	3.10.42

10.2 Implemented features, changes and improvements

10.2.1 Support for second source hardware

The version will include support for our WLAN second source hardware designs.

10.2.2 United Kingdom - The Electric Vehicles (Smart Charge Points) Regulations 2021

In order to meet the UK market requirements, we implemented the following features.
Details on the regulation can be found at the official site:
https://www.legislation.gov.uk/uksi/2021/1467/contents/made

- For devices delivered to UK we changed the default factory password for the web interface to be a randomized one.
- An integrated update-check mechanism is now included in the system software. The user will be informed on the web interface if a new update for the P30 x-series is available for download.
- We now apply full input validation on all interfaces.
- Daylight saving time is now implemented and available.

10.2.3 United Kingdom - Tamper-protection boundary

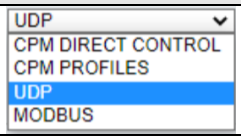
Support for additional tamper protection sensor is included in the system software. Devices delivered to the UK will be equipped with this additional sensor so that they comply with the Smart Charge Point Regulations.
The software will provide information on the sensor state over OCPP, REST and the web interface. A security Log Event “TamperDetectionActivated” is sent to the OCPP host if it is triggered.

10.2.4 RestAPI enhancements

- The RestAPI functionality is now activated by default for all new devices. It can be deactivated on the web interface as well as over OCPP.
- KEBA implemented several enhancements for the RestAPI interface. This improves user experience of mobile app.
- The RestAPI Changelog is now included in the interface documentation.
- The web interface and mobile application are now set to the same passphrase.
- The RestAPI now provides an endpoint for reading the public key.
- It is now possible to set the device time via RestAPI (unless a better time source is available).
- The RestAPI functionality can be activated/deactivated from the backend with the new OCPP configuration “RestApiEnabled”.

10.2.5 Support 1-/3-phase switching with KeContact S10

It is now possible to control the additional KEBA equipment KeContact S10 in order to improve solar charging. This provides the possibility of switching from 3 phase to 1 phase charging and back again. The configuration of the parameters and keys is described in the table below.

Configuring communication channel	Parameter	Key
WebUI	Communication Channel	
OCPP	ConnectorSwitchPhase-Source (within ChangeConfiguration-Message)	NONE|CPM_PROFILES|CPM_DIR_CTRL|MODBUS|UDP
RestAPI	connector_phase_source	NONE|CPM_PROFILES|CPM_DIR_CTRL|MODBUS|UDP
Modbus TCP	5050	0|1|2|3|4*
UDP	x2src	0|1|2|3|4*
Enabling dynamic switching 1-phase/3-phase charging operation	Parameter	Key
WebUI	Dynamic Switching 1-phase/3-phase charging operation	ON|OFF
OCPP	ConnectorSwitch3to1PhaseSupported (within changeconfiguration-message)	true|false
RestAPI	connector_phase_enable	true|false

Modbus TCP	Automatic enabling when setting source different to “none”	
UDP	Automatic enabling when setting source different to “none”	
Trigger phase switch	Parameter	Key (1-phase|3-phase)
OCPP	Numberphases (within charging profile)	1|3
RestAPI (within power profile)	numberOfPhases	1|3
RestAPI (directly)	phase-toggle?number-OfPhases	1|3
Modbus TCP	5052	0|1
UDP	X2	0|1

*Sources that can be configured via Modbus TCP or UDP:
0…disables the feature
1…CPM Profiles (IPVC-Feature, REST or OCPP)
2…CPM Direct Control (REST)
3…Modbus TCP
4…UDP

10.2.6 Intelligent Photovoltaic Charging (IPVC): Locally Optimized

If the meter function on the wallbox is enabled and the meter is connected, we add the possibility to charge a car depending on the available surplus measured.

10.2.7 Intelligent Photovoltaic Charging (IPVC): Fronius Inverter Integration

Fronius inverter products can be configured so that they expose home grid meter values. The KeContact P30 x-series is now is able to read and use the meter data to locally optimize photovoltaic consumption.

10.2.8 Intelligent Photovoltaic Charging (IPVC): New Meter Supported

It is now possible to choose the new KeContact E10 meter as an external TCP-meter for “Domestic Connection TCP Monitoring” and the new “IPVC-feature”.

10.2.9 Update Check and Auto Update on WebUI

The charging station is now able to check for the latest software version which can be downloaded and installed with just one click.

10.2.10 Webinterface enhancements

- It is now possible to use the same alias/name for multiple RFID cards (tokens).
- The RestAPI version is now visible in the Software Update section.
- With fixing a display problem, WLAN is now properly shown as OFF when switching to Charging Network use.
- An issue is fixed where Meter start and Meter end are truncated in the exported charging session file.
- Fixed errors in French translation
- RestAPI password equals WebUI password

10.2.11 Improved usability of Automated Charge Report feature

Numerous changes have been made to enhance the user experience with the Automated Charge Report feature. The user is now given more detailed information within the section about this feature.

10.2.12 Renew manufacturer certificate

KEBA does update the manufacturer certificate with this version.

11 Version Package 1.14.1

Date of release: 05.10.2022

Notice
*The Software Package 1.14.1 can **only** be installed on devices which already have Software Package 1.13.0 or 1.14.0 installed.*

11.1 Package components

The file name of the package is **P30x_SW_1_14_1.keb**

The current package contains the following components:

Release Version: 1.14.1	
Component	**Version**
CPM	4.14.1
KEEP	5.6.0
OS	1.15.1
WEBUI	1.15.1
PDC	3.10.36

11.2 Implemented features, changes and improvements

11.2.1 Important notice related to Automated Charge Report service

Please note that a software update is necessary if you wish to continue using the Automated Charge Report service. Update to software version 1.14.1 by November 30th 2022 at the latest to ensure correct working of this service in future.

12 Version Package 1.14

Date of release: 30.06.2022

Notice
*The Software Package 1.14 can **only** be installed on devices which already have Software Package 1.13 installed.*

12.1 Package components

The file name of the package is **P30x_SW_1_14.keb**

The current package contains the following components.

Release Version: 1.14	
Component	**Version**
CPM	4.14.0
KEEP	5.6.0
OS	1.15.0
WEBUI	1.15.0
PDC	3.10.36

12.2 Implemented features, changes and improvements

12.2.1 United Kingdom - The Electric Vehicles (Smart Charge Points) Regulations 2021

With the entry into force of the new regulations in June, 30th 2022,
each sold charge point has to fulfil new, specific requirements which can be found at https://www.legislation.gov.uk/uksi/2021/1467/contents/made. Software Package 1.14 includes each requested function by adding the following features:

Day time based load management
This new feature allows the user to set current limits with the WebUI for the whole installation for specific clock times and days of week.

Off-Peak charging (only UK)
For the charging stations produced for UK, peak hours are defined as between 8am and 11am, and 4pm and 10pm on weekdays. Within this time periods, the current is unalterably preconfigured to 0 A.

Long term session availability (only UK)
For the charging stations produced for the UK, the transaction data are stored for 12 months. The stored sessions can be shown and filtered on the WebUI. Also an export of (total or filtered) data as CSV-files is possible.

Randomised delay (only UK)
The charging station can be configured to change the drawn current after a randomized delay. So if KeContact P30 starts to charge or the charging profile demands a change in the drawn current, a randomized time passes until P30 offers the new maximum current allowed.

12.2.2 Add Static Routing table

If there is a request from devices which are connected to the charging stations via LAN or WLAN but in another network segment (sub network), the user now has the possibility to define a static routing table with the WebUI in order for the requesting device to receive answers over the defined way instead of sending answers via mobile communication.

12.2.3 Import P30 c-series (clients) via .csv file

For easier changes, adding new clients to the charging network or configure already connected clients can now be done by importing a .csv file.
Therefore, a template can be exported which can be filled out and then imported afterwards.

12.2.4 Load Management improvements

Different improvements lead to better utilisation of the available current. If a one-phase-charging car is detected by P30, the available power, which is reported by the connected TCP meter, is not divided by 3 anymore to calculate the available current.

12.2.5 Support 12-hour clock format

It’s possible to select either a 12 or a 24 hour clock format in the User Settings of the WebUI.

12.2.6 JavaScript library jQuery updated

jQuery version updated from 1.12.0 to 3.6.0

12.2.7 Correct transition SuspendedEVSE → Charging

When regulating an active charging process via SetChargingProfile to 0 kW, the P30 now changes the status to “SuspendedEVSE” instead of “Finishing”.

12.2.8 Improvements for Automatic Export of Charging Sessions

Different measures have been taken to improve the Automatic Export feature of charging sessions.

12.2.9 Correct DSW-Settings shown for Clients on WebUI Sessions

WebUI refreshes now the DSW settings automatically when a client is chosen.

13 Version Package 1.13

Date of release: 29.03.2022

Notice
*The Software Package 1.13 can **only** be installed on devices which already have Software Package 1.12.X installed.*

13.1 Package components

The file name of the package is **P30x_SW_1_13.keb**

The current package contains the following components.

Release Version: 1.13	
Component	**Version**
PDC	3.10.36
CPM	4.13.0
KEEP	5.6.0
OS	1.14.0
WEBUI	1.14.0

13.2 Implemented features, changes and improvements

13.2.1 log4j/log4shell vulnerability

We have been made aware of the CVE-2021-44228 critical vulnerability affecting Apache Log4j2, which is a common open-source logging component, and have conducted a thorough investigation on the impact in our products. The software versions 1.12.X contains an affected version of Log4j2, but the impact of the vulnerability is limited as the system prevents loading external bytecode. The release 1.13.0 contains an update to the latest version of Log4j2, in which the vendor removes the affected feature along with further security improvements. The release 1.13 can also be updated over the Log4j Hotfix already provided on our Homepage.

13.2.2 Avoid asymmetric loads on system level

In addition to the current feature for each charging station, now the system is able to avoid too high asymmetric currents also for Master/Client-installations, according to VDE Guideline 4100 Chapter 5.5.2.

13.2.3 Send charging sessions monthly via e-mail

By activating the new feature, charging sessions are sent on a monthly base without any further manual action.

13.2.4 RestAPI

After UDP and Modbus TCP, a third API has now been included to the software. For this release, the RestAPI is intended for internal use only, and thus, no documentation of support are provided yet.

13.2.5 RFID improvements

Numerous extensions in terms of the RFID tab on WebUI have been added. For example, it is now possible to store a name/alias, which is assigned with the RFID card and also cards can be stored without the necessity of expiry dates.

13.2.6 No CPM restart when a time synchronization is done

After time synchronization, no restart is carried out anymore.

13.2.7 Multiple WebSocket connections after timeout

Fixed issue when the wallbox is in a connect-disconnect loop after the host is up again after a server failure. Also the timeout behaviour was improved, to reduce connection conflicts.

13.2.8 MeasurementUpdateEvt upon delta

When the P30 x-series detects a current deviation larger than the set threshold, it will generate a MeasurementUpdateEvt and immediately trigger a MeterValues.req to the OCPP backend.

Following new configuration keys were added:

- **MeasurementUpdateEvtCurrentTreshold**
  The minimum deviation of current (mA) for which a MeasurementUpdateEvt is triggered (1000 <= value <=32000).

- **HostConnectorSendStateChangeMeterValues**
  If true, MeasurementUpdateEvt triggered by a state change are immediately reported to the OCPP backend. (“true”, “false”)

13.2.9 Collect ClockAlignedMeterValues by the hour but report them with an offset

The MeterValues are reported with a randomly calculated offset, in order not to overload the OCPP backend. Also the MeterValues and the timestamp inside the MeterValue.req message is correspond to the original collect frequency, not the offset one.

13.2.10 ocppGSMCheck is using http instead of https

The connection re-establish mechanism detects now if the HEAD request should be done on http or https.

13.2.11 Truncated property prohibits CPM to start properly

An interruption of the booting sequence (e.g. by power cut) does not lead to a truncated property file, which would prohibit CPM to start properly, anymore.

13.2.12 Updated truststore for cacerts

The truststore for cacerts is now updated to a newer version, so that some certificates like “let’s encrypt” are recognized again.

13.2.13 CPM performance improvements

Numerous improvements are included within this package regarding CPM booting and WebUI requests in order to boost the performance.

13.2.14 Failsafe Setting to be readable via Modbus

Two registers (1600; 1602) are added to the readable registers of the Modbus TCP interface to check the current which is provided after losing connection to the Modbus TCP host and also the time, when a connections is declared as “lost”.
(see feature description in chapter 14.2.5)

13.2.15 WebUI improvements

Different measurements have been taken to optimize WebUI performance in general.

14 Version Package 1.12.1

Date of release: 23.06.2021

Notice
*The Software Package 1.12.1 can **only** be installed on devices which already have Software Package 1.11 or 1.12.0 installed.*

14.1 Package components

The file name of the package is **P30x_SW_1_12_1.keb**

The current package contains the following components.

Release Version: 1.12.1	
Component	**Version**
PDC	3.10.28
CPM	4.12.1
KEEP	5.5.0
OS	1.13.1
WEBUI	1.13.1

14.2 Implemented features, changes and improvements

14.2.1 New section menu “Charging Network” added in WebUI

For a better overview, all parameters related to the charging network can be configured in the “Charging Network” section now.

14.2.2 Added new OCPP configuration keys

- **MeasurementUpdateEvtInterval** defines how often the internal meter values are updated within the P30. This parameter can now be adjusted to correspond the HostConnectorMeterValueSampleInterval and HostConnectorClockAlignedDataInterval.
- **TimeSynchronizationTolerance** defines the allowed time offset. Exceeding this offset leads to a time synchronization and a restart of the box.

14.2.3 Wrong StatusNotification was sent after a power loss

After a power loss of a master/client installation, when one or more clients stay offline, StatusNotification “Available” were sent instead of “Not Available”.

14.2.4 TransactionMessageAttempts and TransactionMessageRetryInterval

The behaviour of sending messages and the chance for the backend to receive them are improved by using a configurable number of attempts. Moreover, the time between these attempts can also be set. No other message will be sent while this mechanism is working.

14.2.5 Enhanced Modbus/TCP handling (only valid for P30 c- and x-series)

New writable registers have been added to ensure a failsafe scenario:

Register	Parameter	Type	Unit	Description
5016	Failsafe Current	UINT16	mA	In this register, charging can be deactivated in case the connection between the PDC and the Smart Home System is down. An active charging process will be stopped. Supported values: 0: Deactivates charging 6000 – 32000: Sets Failsafe current [mA]
5018	Failsafe Timeout	UINT16	s	In this register, Failsafe can be deactivated when no Modbus TCP command was sent in between. Supported values: 0: Deactivates charging, charging will continue with the highest possible value. 10 – 600: Sets failsafe Timeout [s]
5020	Failsafe Persist	UINT16		In this register, the Failsafe settings can be persisted. Supported values: 1: Current Failsafe settings will be persisted.

15 Version Package 1.12

Date of release: 08.03.2021

Notice
*The Software Package 1.12.0 can **only** be installed on devices which already have Software Package 1.11 installed.*

15.1 Package components

The file name of the package is **P30x_SW_1_12.keb**

The current package contains the following components.

Release Version: 1.12	
Component	**Version**
PDC	3.10.27
CPM	4.12.0
KEEP	5.5.0
OS	1.13.0
WEBUI	1.13.0

15.2 Implemented features, changes and improvements

15.2.1 Enhanced security for OCPP 1.6 JSON

OCPP 1.6 JSON + security extension following OCPP 1.6 security whitepaper edition 2 (https://www.openchargealliance.org/uploads/files/OCPP-1.6-security-whitepaper-edition-2.zip)

15.2.2 Support different languages in the WebUI

The web interface (WebUI) can be used in German, English and French.

15.2.3 New Offline Authorization Mode: OfflineFreeCharging

With this authorization mode the charging can be started without using any token in case there is no connection to the OCPP backend.

15.2.4 New external meters for domesetic connection monitoring added

Following devices were added to the list of supported meters on WebUI:

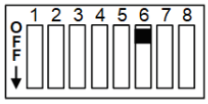
- Siemens 7KM2200

- Carlo Gavazzi EM 24
- Gossen Metrawatt EM228X and EM238X
- ABB M2M
- ABB M4M
- KOSTAL Smart Energy Meter
- TQ Systems EM 420/EM 410

The TQ systems EM 420 is replacing B-Control EM 300, but uses the same Modbus Registers and therefore can be chosen when a B-Control EM 300 is in operation.

15.2.5 Current limitation using the enable input X1 (not valid for P30 e-series)

With a new setting of the DIP switches, it is possible to pause the charging session or to limit it to 8A via the enable input X1.

DIP switch	Function	Illustration
DSW2.6	Not valid for P30 e-series. When the enable contact X1 is opened or closed, the available charging current is reduced to a certain value. The enable input X1 must be activated (**DSW1.1** = ON). **DSW2.6** = OFF = value: **0 A** **DSW2.6** = ON = value: **8 A**	 Example: Current limitation on, 8 A

15.2.6 Enhanced handling for open sessions

Ghost sessions (sessions which are not closed although the car is unplugged) will no longer appear and therefore, sessions which are suspended right from the start (authorization=OFF) as well as starting sessions without the need of an RFID card (although authorization=ON) will not occur without a reason anymore.

15.2.7 Additional accepted messages while in Pending state

Following requests from the Backend now are accepted while in Pending state:

- ChangeAvailabilityRequest
- ChangeConfigurationRequest
- ClearCacheRequest
- DataTransferRequest (only the ones initiated by the CentralSystem)
- GetConfigurationRequest
- ResetRequest
- UnlockConnectorRequest
- GetDiagnosticsRequest
- UpdateFirmwareRequest
- GetLocalListVersion
- SendLocalList

- CancelReservationRequest
- ReserveNowRequest
- ClearChargingProfileRequest
- GetCompositeScheduleRequest
- SetChargingProfileRequest
- TriggerMessageRequest

15.2.8 Enhanced Modbus/TCP handling

- Reading Modbus/TCP register 1500 (last authorizing RFID tag) no longer returns 0
- Modbus/TCP register 1016 returns correct product ID
- Firmware version can now be read from Modbus/TCP register 1018 in order to support different Modbus Server implementations

15.2.9 Enhanced Mobile Communication reconnection

Mobile Communication reconnection issues, especially after updating, have been fixed.

15.2.10 Enhanced system time quality

The system time quality is enhanced by saving timestamps every 15 minutes so that time does not fall back anymore during a reboot.

16 Version Package 1.11

Date of release: 30.07.2020

Notice
*The Software Package 1.11 can **only** be installed on devices which already have Software Package 1.10.x installed.*

16.1 Package components

The file name of the package is **P30x_SW_1_11.keb**

The current package contains the following components.

Release Version: 1.11	
Component	**Version**
PDC	3.10.16
CPM	4.11.0
KEEP	5.4.0
OS	1.12.0
WEBUI	1.12.0

16.2 Implemented features, changes and improvements

16.2.1 Phase considered load management

Phase considered load management allows much more efficiency especially when 1-phase- or 2-phase-charging vehicles are plugged. Please check if the phase rotation and the installation are matching the values inserted.

16.2.2 Domestic Connection Monitoring for a charging network

The master/client load management considers house load measured by an external meter.

16.2.3 Modbus/TCP

The Modbus/TCP interface can be used for example by energy management systems to calculate the actual current and react correspondingly to reduce or increase the charging current. For more information on reading and writing register, please have a look in the Modbus/TCP Programmer's Guide, which can be downloaded from following link:
https://www.keba.com/en/emobility/service-support/downloads/Downloads

16.2.4 Failsafe Charging

Charging is still possible with a limited amount of current even if a client gets disconnected from the master.

16.2.5 SmartCharging – Applying more profiles

Configurable load profiles for specific clients via OCPP 1.6.

16.2.6 Edit display text via USB or OCPP

Display text is configurable locally via USB or remotely via OCPP.

16.2.7 New Online Authorization Mode: OnlyLocal

The Authorization Mode OnlyLocal uses the local whitelist for authentication even if there is a backend connection. For further transaction progress the card must still be validated by the OCPP backend.

16.2.8 More measurands included in the MeterValues

The P30 is able to deliver following measurands to the backend:

- Current.Import
- Current.Offered
- Energy.Active.Import.Register
- Power.Active.Import
- Power.Factor
- Temperature
- Voltage

16.2.9 Read out the maxium DIP switch current via getConfiguration

With getConfiguration it is possible to read out the maxim current for each connector.

16.2.10 Reboot a single connector via OCPP

With DataTransfer it is possible to reboot a single connector remotely via OCPP.

16.2.11 OCPP 1.6 – StopTransactionOnInvalidId

StopTransactionInvalidId allows unknown offline charging sessions. These charging sessions should be continued if the charge point gets online again.

16.2.12 OCPP 1.6 – TransactionId removed from ClockAligned MeterValues

If there is an ongoing charging session, the TransactionId is no longer stored.

16.2.13 Get product code for all connectors via OCPP

With getConfiguration it is possible to get the product code for each connector.

16.2.14 MeterValues sent even if there is no consumption

MeterValues are always sent, no matter how much energy was consumed from the EV within the time period.

16.2.15 TimeSyncQuality wrong reported

Fixed bug when the TimeSyncQuality was wrongly reported, if the backend was connected or disconnected.

16.2.16 Validation error because of the SOAP namespacing

Fixed validation error and ensured that the old SOAP namespacing formats are also working.

16.2.17 Export of the charging sessions not updated after power loss

Fixed bug when the export of the charging sessions freezes after a power loss.

16.2.18 Combination of RFID Tag and serial number too long

When the RFID Tag is combined with the serial number to forward it to the host it is too long due to the limitations of the field in OCPP the combined tag needs to be cut. The combined tag will be cut at the front to have the complete serial number.

17 Version Package 1.10

Date of release: 27.01.2020

Notice
*The Software Package 1.10 can **only** be installed on devices which already have Software Package 1.9.x installed.*

17.1 Package components

The file name of the package is **P30x_SW_1_10.keb**

The current package contains the following components.

Release Version: 1.10	
Component	**Version**
PDC	3.10.7
CPM	4.10.0
KEEP	5.3.0
OS	1.11.0
WEBUI	1.11.0

17.2 Implemented features, changes and improvements

17.2.1 OCPP 1.6 – Full functionality (SOAP & JSON)

The KeContact P30 x-series now supports all OCPP 1.6 functionalities in SOAP and JSON including: SmartCharging (ClearChargingProfile, GetCompositeSchedule, SetChargingProfile), Reservation (CancelReservation, ReserveNow) and TriggerMessage.

17.2.2 Current reduction for 1- or 2-phase vehicles

The KeContact P30 x-series detects when a 1- or 2-phase vehicle is charging and automatically regulates the charging current to a set value. This function is used to avoid phase imbalance in the grid.

17.2.3 Display text behavior during USB actions improved

Different types of messages are displayed during USB configuration and USB update are shown.

17.2.4 Improvement of the GSM reconnection functionality

The KeContact P30 x-series monitors the GSM connection and in case the GSM connection goes down the P30 will restart the connection procedure. This feature is available already in the previous version and has been improved in the present version.

17.2.5 Change in the format of the public key for M&E devices

The public key is now send without the type of the key.

17.2.6 Backend availability status indication improved

The status indicator shows, if the URL/IP of the backend is reachable or not and if the KeContact P30 is currently connected to the backend.

17.2.7 Changes in the StatusNotification

Status Notifications are now improved to fit the requirements also in corner cases.

17.2.8 OCPP tokenID must be case insensitive

The OCPP tokenID is treated as case insensitive.

17.2.9 Charging session is stopped by RFID swipe or RemoteStop altough the availability status is “Scheduled”

The charging session could not be stopped remotely or by RFID card, when the Change Availability Command was set to unavailable on an ongoing session.

17.2.10 Missing SOAPAction in HTTP headers

SoapAction is set in the Content-Type header as well for SOAP 1.2.

18 Version Package 1.9.10

Date of release: 09.10.2019

Notice
*The Software Package 1.9.10 can **only** be installed on devices which already have Software Package 1.8.x or 1.9.x installed.*

18.1 Package components

The file name of the package is **P30x_SW_1_9_10.keb**

The current package contains the following components.

Release Version: 1.9.10	
Component	**Version**
PDC	3.9.25
CPM	4.9.0
KEEP	5.3.0
OS	1.10.0
WEBUI	1.10.0

18.2 Implemented features, changes and improvements

18.2.1 German Mess- & Eichrecht

For the Mess- & Eichrecht legislation in Germany, this version ensures that also signed meter readings are transferred. Please note that only P30 c- and x-series M&E products are able to use this functionality, all other product variants in a master/client charging network are not sending signed records.

18.2.2 Stopping a transaction when not charging

The charging session is stopped when sending a RemoteStopTransaction or swiping the same RFID card at the wallbox although the car is not charging.

18.2.3 Resume charging session after powercut

In case of a powercut, the charging session is closed. If a vehicle is plugged, the user can decide if a new charging session with a predefinedToken should be opened or not.

18.2.4 RFID must be updated with all host information

In some cases not all information concerning the RFID token have been updated correctly. Now all information from the backend are updated.

18.2.5 “ValidityRfidBeforePlugin” renamed to “ConnectionTimeOut”

The configuration key „ValidityRfidBeforePlugin“ was renamed to „Connection-TimeOut“.

18.2.6 RemoteStartTransaction is accepted when a session is already open with the same IdTag

The RemoteStartTransaction is now accepted when a session is already open with the same IdTag on another connector.

18.2.7 Status Unavailable should not be sent, when all connectors are charging

If no connector is vacant for charging, then ConnectorId=0 is no longer reporting “Unavailable” for OCPP1.6.

19 Version Package 1.9.2

Date of release: 24.07.2019

Notice
*The Software Package 1.9.2 can **only** be installed on devices which already have Software Package 1.8.0, 1.8.1, 1.8.2, 1.9.0 or 1.9.1 installed.*

19.1 Package components

The file name of the package is **P30x_SW_1_9_2.keb**

The current package contains the following components.

Release Version: 1.9.2	
Component	**Version**
PDC	3.9.24
CPM	4.9.0
KEEP	5.2.1
OS	1.10.0
WEBUI	1.10.0

19.2 Implemented features, changes and improvements

19.2.1 Proxy without username and password is not taken into account

Improvements regarding the proxy server not sending messages properly have been implemented.

20 Version Package 1.9.1

Date of release: 10.07.2019

Notice
*The Software Package 1.9.1 can **only** be installed on devices which already have Software Package 1.8.0, 1.8.1, 1.8.2 or 1.9.0 installed.*

20.1 Package components

The file name of the package is **P30x_SW_1_9_1.keb**

The current package contains the following components.

Release Version: 1.9.1	
Component	**Version**
PDC	3.9.24
CPM	4.9.0
KEEP	5.2.1
OS	1.10.0
WEBUI	1.10.0

20.2 Fixed bugs

In this paragraph there is a list and short description of the fixed bugs.

20.2.1 Missing charging sessions in WebUI

Upon a power cut on a client charging stations, the charging sessions are missing sometimes in WebUI.

20.2.2 OCPP backend connection lost

In some cases the connection to the OCPP backend gets lost.

21 Version Package 1.9

Date of release: 24.06.2019

Notice
*The Software Package 1.9 can **only** be installed on devices which already have Software Package 1.8.0, 1.8.1 or 1.8.2 installed.*

21.1 Package components

The file name of the package is **P30x_SW_1_9.keb**

The current package contains the following components.

Release Version: 1.9.0	
Component	**Version**
PDC	3.9.24
CPM	4.9.0
KEEP	5.2.1
OS	1.10.0
WEBUI	1.10.0

21.2 Implemented features, changes and improvements

All the features, changes and improvements related to the firmware 3.9.24 will be indicated with the abbreviation (FW) in the title.

21.2.1 OCPP 1.6 – Basic functionalities (SOAP & JSON)

The KeContact P30 x-series supports the basic OCPP 1.6 functionalities in SOAP and JSON:
Authorize, BootNotification, ChangeAvailability, ChangeConfiguration, ClearCache, DataTransfer, GetConfiguration, Heartbeat, MeterValues, RemoteStartTransaction, RemoteStopTransaction, Reset, StartTransaction, StatusNotification, StopTransaction, UnlockConnector, Get Diagnostics, DiagnosticStatusNotification, FirmwareStatusNotification, UpdateFirmware, GetLocalListVersion, SendLocalList

21.2.2 Charging Sessions

The charging sessions of the last 90 days can be exported via the WebUI as a .csv file.

21.2.3 Factory reset via WebUI

It is possible to reset the KeContact P30 x-series to the factory settings via the WebUI in order to have a clean installation on the wall box. The software version remains the same as installed.

21.2.4 Start and stop a charging session via WebUI

It is possible to start and stop a charging session via WebUI for all connectors of a master/client installation.

21.2.5 Unlock connector via WebUI

It is possible to unlock the connectors via WebUI for all connectors of a master/client installation.

21.2.6 New JAVA version

The new JAVA version provides increased stability for more features.

21.2.7 Improved IT Security

Some improvements regarding IT security were made, for example a new password complexity.

21.2.8 Show sections based on product key

The WebUI only offers the configurations of functionalities that are really available as hardware.

21.2.9 Improved DIP switch settings view in the WebUI

When using the Firefox Browser there were some problems with the view of the DIP switch settings in the WebUI.

21.2.10 Lock closes too fast (FW)

Waiting time increased up to 2.5 seconds when closing the lock after plugging in the cable.

21.2.11 No Logging preview

There is no Logging preview anymore. With the Download button all log files are downloaded.

21.2.12 Authorization Mode

The Authorization Mode is split up to offline and online behavior.

21.3 Fixed bugs

In this paragraph there is a list and short description of the fixed bugs.

21.3.1 StopTransaction behaviour was adjusted

As soon as the connector is unlocked or the charging stations receives a RemoteStop command, the transaction will be closed.

21.3.2 OCPP List Version has no impact (SendLocalList)

The OCPP List Version was not taken into account upon a received SendLocalList command.

21.3.3 “Apply” not possible with an insufficiently long Access Point Password

Configuring a Hotspot via WebUI was possible, even if the entered password was too short and the background of the text area was red.

21.3.4 Status Occupied remains after expired authorization

If the charging station is authorized and no vehicle is plugged within 60 seconds, the charging stations sends a StatusNotification with Available.

21.3.5 Transaction ID “-1”

In some corner cases no StartTransaction was sent, resulting in a StopTransaction with the Transaction ID “-1”.

22 Version Package 1.8.2

Date of release: 16.01.2019

Notice
*The Software Package 1.8.2 can **only** be installed on devices which already have Software Package 1.7, 1.8 or 1.8.1 installed.*

22.1 Package components

The name file of the package is **P30x_SW_1_8_2.keb**

The current package contains the following components.

Release Version: 1.8.2	
Component	**Version**
P30 PDC	3.9.19
CPM	4.8.0
KEEP	5.2.0
OS	1.9.0
WebUI	1.9.0

22.2 Fixed bugs

In this paragraph there is a list and a short description of the fixed bugs.

22.2.1 With special DIP switch settings status n/A is displayed in the WebUI

With special DIP switch settings it may occur that some information is not displayed correctly in the WebUI. One of these special DIP switch settings is the DSW1.1.

22.2.2 Some cached OCPP messages are not deleted

Sometimes OCPP messages which were obsolete, are not deleted from the KeContact P30.

23 Version Package 1.8.1

Date of release: 18.12.2018

Notice
*The Software Package 1.8 can **only** be installed on devices which already have Software Package 1.7 installed.*

23.1 Package components

The name file of the package is **P30x_SW_1_8_1.keb**

The current package contains the following components.

Release Version: 1.8.1	
Component	**Version**
P30 PDC	3.9.19
CPM	4.8.0
KEEP	5.2.0
OS	1.9.0
WebUI	1.9.0

23.2 Implemented features, changes and improvements

23.2.1 Configuration changes without a restart

The P30 can perform almost all configuration changes via the WebUI or via OCPP without a restart. Changes of the operation mode, the network settings, the proxy settings and the central system address require a restart.

When changing the configuration via USB, the system still needs to reboot.

23.2.2 Certificate handling on WebUI

Certificates for secure communication over HTTPS via WebUI and OCPP can be uploaded and deleted in the WebUI.

23.2.3 APN username and password are filled automatically if left empty

The connection to the mobile network is not established when the APN username and/or password are left empty. If these values are left empty, the value “blank” is inserted to establish a connection.

23.2.4 DIP switch settings

The DIP switch setting can be read out in the WebUI for every connected P30.

23.2.5 Replace GSM and WLAN log on the WebUI

The GSM and the WLAN log are no longer visible in plain text. In the Status Menu the current state of the network connections is visible.

23.2.6 Time based log level

The log level can be turned on only for a limited time (1, 3 or 7 days) to avoid unnecessary logs and improve system stability.

23.2.7 Turn on/off Remote Service Interface

The Remote Service Interface for KEBA technicians can be turned off and on via the WebUI and OCPP.

23.2.8 Improved rollback mechanism

In case of an unsuccessful update, all components are rolled back to their previous version.

23.2.9 Reboot of a single connector

It is now possible to reboot a single connector via the WebUI.

23.2.10 Time synchronization tolerance

The time is now resynched with the backend if the buffer is changed to 30 seconds. Additionally the system ignores the time synchronization if the response message takes longer than 30 seconds to arrive.

23.2.11 New teaching RFID cards section

The RFID Teaching Table has been moved to a specific section in the WebUI.

23.3 Fixed bugs

In this paragraph there is a list and short description of the fixed bugs.

23.3.1 Status notification messages were not resent

Upon a reconnection to the OCPP backend, messages stored while offline were not sent from the KeContact P30 x-series. This occurred especially on connections with a bad GSM signal.

23.3.2 Display messages did not change through the use of the “Apply” button

The display messages did not change until an action was performed at the charging station.

23.3.3 Displaying the wrong wallbox state

After a reboot some clients were displayed as suspended, although they were charging.

23.3.4 Improved RFID teaching process

It is now possible to teach RFID cards over the WebUI and directly at the charging station on the same KeContact P30 x-series.

23.3.5 Meter values were not send

In some installations the meter values were not send correctly for all types of meter values.

23.3.6 OCPP URL not complete

When updating from software version 1.7 to 1.8, the address of the OCCP backend is split into several parts - if certain parameters have not been entered beforehand, it is possible that default values are used incorrectly which prevent further communication with the backend.

24 Version Package 1.7

Date of release: 01.08.2018

Notice
*The Software Package 1.7 can **only** be installed on devices which already have installed the Software Package 1.6.1 or 1.6.3.*

24.1 Package components

The name file of the package is **P30x_SW_1_7.keb**

The current package contains the following components.

Release Version: 1.7.0	
Component	**Version**
P30 PDC	3.9.14
CPM	4.6.0
KEEP	5.2.0
OS	1.7.0
WebUI	1.7.0

24.2 Implemented features, changes and improvements

24.2.1 Stop charging with the RFID card

The charging session can now be stopped, when swiping the same RFID Tag, which was used to start the charging session.

24.2.2 Error message on the web interface, when update fails

If an error occurs during the update, then a message will be visible in the web interface.

24.2.3 Diagnostic Files saved as “*.tar.gz”-Files

To reach a higher compression rate, the Log-Files are now compressed as “*.tar.gz”- files.

24.2.4 Hubject compatibility

The compatibility with Hubject Intercharge App has been improved. When plugging the EV to the KeContact P30 x-Series, then no StatusNotification <Occupied> will be sent to the backend. This will allow to authorize the charging session via App.

24.2.5 Change Availability

The KeContact P30 x-series now supports the OCPP command Change Availability in OCPP 1.5.

24.2.6 Configurable verification of the RFID Tag

It is possible to configure the modality how to verify the RFID Tag. The Tag can be verified first locally on the wallbox (standard behavior) or an Authorize Request is always sent, when using an RFID tag in online mode.

In offline cases it can be configured if the P30 is using its whitelist or accepts every RFID tag and tries to synchronize it when the P30 is back online.

24.2.7 Stop Transaction includes the RFID tag

The KeContact P30 x-series is now sending the RFID tag also in the Stop Transaction.

24.2.8 RFID Teaching with the WebUI

The RFID Tag can be taught with the WEBUI. It is also possible to delete or change single entries.

24.2.9 RFID Tag combined with serial number

The RFID Tag can be assigned to a specific serial number in the WebUI. The Tag is combined with the serial number of the connector in the form: “RFID-Tag_SerialNumber”. This information is contained both in the Authorization and in the StartTransaction.

24.2.10 Meter Values configurable via WebUI or USB

It is now possible to configure the Meter Value Sample and the ClockAligned Data Intervals via WebUI or USB. A value of “0” deactivates the meter values.

24.2.11 Status Notifications in error cases

In case an error occurs on the charging station, then the KeContact P30 x-series, reports the code and a description of the error to the OCPP Backend.

24.2.12 Disable Remote Service interface

It is now possible to deactivate the Remote Service interface via the WebUI.

24.2.13 Disable USB Updates

It is now possible to deactivate the update via USB

24.2.14 Reported Software Version to the Backend

Until now the KeContact P30 x-Series reported the Firmware Version of the CPM component. The P30 will now send the currently Installed SW package Version in the BootNotification and the getConfiguration command via OCPP.

24.2.15 Improved GSM reconnection mechanism

In case of a loss of GSM signal, the P30 tries to reconnect, also when a DNS error occurs.

24.3 Fixed bugs

In this paragraph there is a list and short description of the fixed bugs.

24.3.1 Stop Transaction with invalid ID

A lock failure does not longer cause a Stop Transaction Request with an invalid ID.

24.3.2 Unsuccessful Update freezes the WebUI

After a failed update, the rollback mechanism does not longer freeze the WebUI.

24.3.3 Wrong Results with GSM signal test

The GSM Test delivered sometimes wrong signal test results, when there was no GSM available.

24.3.4 Wrong Display Messages

The content of the display message was wrong in corner case flows.

24.3.5 Status Available before Stop Transaction

The P30 sometimes sent a Status Notification “Available” before the Stop Transaction, although it is specified in the other way round.

24.3.6 Shift of Heartbeats

By long time operation, sometimes the heartbeats slightly shifted in time.

24.3.7 Update Loop of clients

In some occasions the KeContact P30 x-series did not recognize the firmware of the client and tried to update the MIDLED component every time. This led to a loop of update retries.

24.3.8 Load Management calculation

In some cases the available current was not correctly distributed to the connectors. This led to the activation of the round robin load management, although it was not necessary.

24.3.9 SendLocalList did not update the Whitelist correctly

When sending a SendLocalList command via OCPP, not all the tags of the Whitelist were updated correctly.

24.3.10 Modified Display Messages are changed during the update

User modified display messages are no longer changed back while updating.

25 Version Package 1.6.3

Date of release: 18.05.2018

Notice
*The Software Package 1.6.3 can **only** be installed on devices which already have the Software Package 1.5 or 1.6.1.*

25.1 Package components

The name file of the package is **P30x_SW_1_6_3.keb**

The current package contains the following components.

Component	Version
CPM	4.4.0
KEEP	5.1.0
P30 PDC	3.9.10
OS	1.4.0
WebUI	1.4.0

25.2 Implemented features, changes and improvements

25.2.1 Reducing the amount of Logs

To improve the system stability, the amount of logs and their content are reduced.

25.2.2 Changing of Log Level

The log level has been set to the info level. It can be changed from info level to debug level in the user settings. In case of unexpected behaviour, the Log level can be switched via the WebUI to a debug level again, to log more information. This enables the KEBA technician to read out further details.

25.2.3 XPU error is reported to the backend

In case the XPU suffers from a logging error, a Status Notification is sent to the OCPP Backend with relevant data signalling that the KeContact P30 x-series is no longer working properly.

25.3 Fixed bugs

This paragraph includes a list and short description of the fixed bugs.

25.3.1 Boot Notification for errors caused by customer-specific wallboxes

The product code for customer-specific wallboxes was longer than the permitted length of the charge point model field, thus causing an error at some backends. Now all outgoing messages are proofed and trimmed, if necessary.

25.3.2 Logging consumes the capacity of the data storage

Due to the logging mechanism by huge master/client systems, the logs consumed the capacity of the data storage. The creation of logs is now limited and the capacity of the data storage is no longer consumed.

26 Version Package 1.6.1

Date of release: 11.01.2018

Notice
*The SW package 1.6.1 is **encrypted** therefore it can **only** be installed on devices which already have installed the SW package 1.5.*
The Wi-fi feature is NOT supported for master and clients use cases. The Wi-fi feature is supported only for stand-alone P30 x-series.

26.1 Package components

The name file of the package is **P30x_SW_1_6_1.keb**

The current package contains the following components.

Component	Version
CPM	4.4.0
KEEP	5.1.0
P30 PDC	3.9.10
OS	1.4.0
WebUI	1.4.0

26.2 Implemented features, changes and improvements

26.2.1 Text messages on the display

The KeContact P30 is able to provide additional information via its display concerning the authorization process and the charging, e.g. swipe card, card accepted, invalid card, charging suspended etc.. The display messages can be configured via web interface.

26.2.2 Proxy server

In case a proxy server is used to connect to the backend (OCPP) it can be activated via web interface.

26.2.3 Connector ID assignment

The user can assign the connector ID to a specific serial number directly via the web interface.

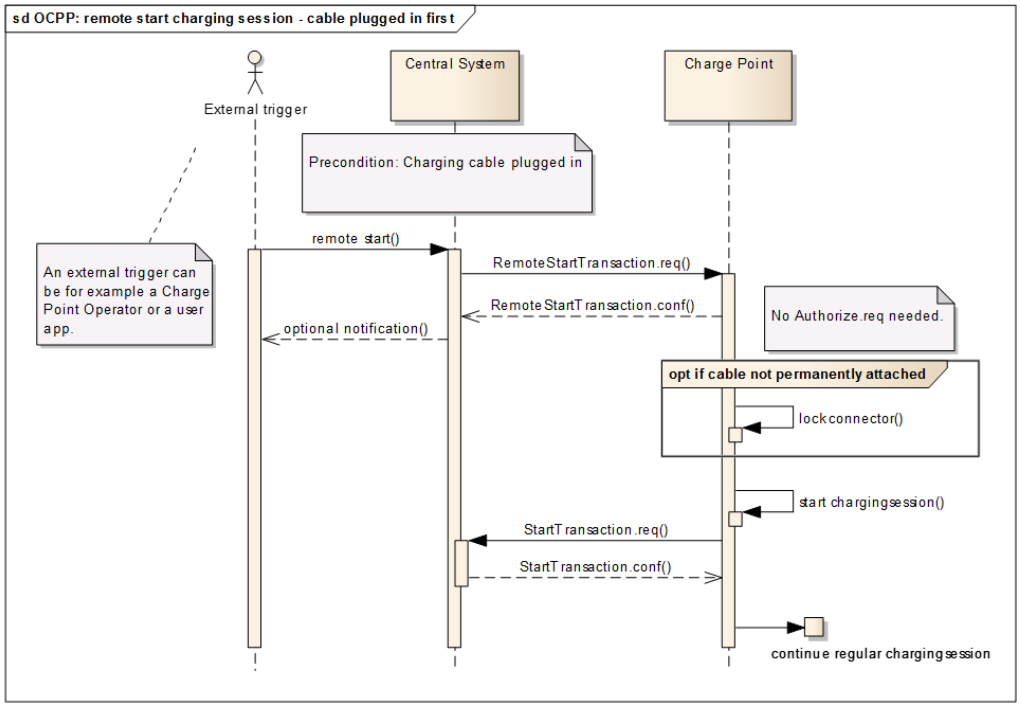
26.2.4 Phase Assignment

The user can assign if a wallbox is connected on 1 or 3 phases and on which phase the Wallbox is connected via the web interface.

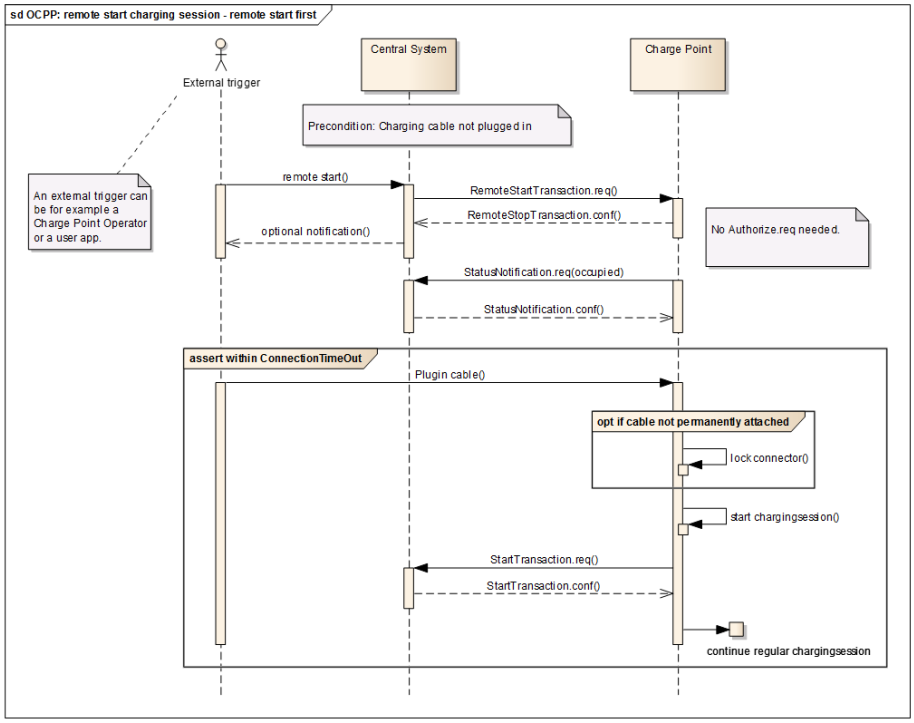
26.2.5 Remote Start Transaction sequence

The Remote Start Transaction sequence has been modified so that the P30 replies immediately after receiving the Remote Start Transaction request.

Remote start charging session – cable plugged in first



Remote start charging session – remote start first



26.2.6 Remote Stop Transaction

The Remote Stop Transaction command will also unlock the cable.

26.2.7 External meter for single chargepoint

The KeContact P30 can be connected via TCP to an external meter. The Station will adapt the charging current, depending on the measured load of a connected domestic meter. Refer to the configuration manual for more detailed information.

26.2.8 Wi-fi for single charge point

The feature Wi-fi is supported by a single KeContact P30 x-series. In case of master/client configuration then the Wi-fi function will be automatically deactivated.

26.2.9 Messages during update

While updating the KeContact P30 will display the upgrade steps on the WebUI and on the display.

26.2.10 BootNotification SIM card information

The BootNotification contains additional information like ICCID and IMSI.

26.2.11 BootNotification Charge Point Model

The BootNotification contains also the product code additionally to the product name KeContact P30.

26.3 Fixed bugs

In this paragraph there is a list and short description of the fixed bugs.

26.3.1 Update via FTP not fully supported

The Kecontact P30 can now support the MLST extension.

26.3.2 Meter values reseted

The energy meter does not reset anymore after reaching the value 9999,999 kWh.

26.3.3 Missing GetDiagnostic file name

The file GetDiagnostic is again correctly uploaded with its identification name.

26.3.4 No Id Tag in Start Transaction request

The ID Tag is now contained in the Start Transaction request.

26.3.5 Forth led segment switched off

When the KeContact P30 is online then it shows always four blinking segments.

26.3.6 Wrong Connector ID

The KeContact P30 does not mix up its connector IDs automatically in case of offline modus or restart.

26.3.7 Transaction requests with same ID

The KeContact P30 does not send anymore transaction requests with the same timestamp and transaction ID.

26.3.8 No loadmanagement recalculation when P30 disconnected

In case a client disconnects from a master, the available current is recalculated.

26.3.9 Data not copied on the USB

It was not a systematic failure. The KeContact P30 always copies the configuration file and the logs on the USB stick.

26.3.10 Configuration not applied

It was not a systematic failure. Any valid change of the configuration file is always applied by the KeContact P30.

26.3.11 Unexpected TransactionID -1

The KeContact P30 does not transmit a StopTransaction request with ID equal to -1.

26.3.12 RemoteStartTransaction rejected

The KeContact P30 x-series correctly handles a RemoteStart transaction with no connector ID if already charging.

26.3.13 Wrong current assignement

In case of restart of the KeContact P30 the current is correctly assigned.

27 Version Package 1.5

Date of release: 27.10.2017

Notice
The Software Package 1.5 can only be installed on devices which already have installed the Software Package 1.4.
This software brings a new system architecture. Therefore the old database will be deleted during the update and a new database is created. Unfortunately, not all user-specific data is transferred. Therefore it could be, that the ConnectorIDs are reassigned. Also the local whitelist is deleted and RFID Tokens have to be taught again.
Furthermore the configuration parameter names might change. Please refer to the configuration manual for detail information.
Please consider this by the updating of your system, and check if any user specific data has been changed during the update.

27.1 Package components

The name file of the package is kemove-bundle-p30-oneoff-1.5.0_40044.keb

The current package contains the following components.

Component	Version
CPM	4.3.0
KEEP	5.0.1
P30 PDC	3.08.7
OS	1.2.0
WebUI	1.2.0

27.2 Implemented features and improvements

27.2.1 Improvement of the Housekeeping

The performance of the system has been improved by reducing the CPU usage and overall system load.

27.2.2 Reduction of the Boot time

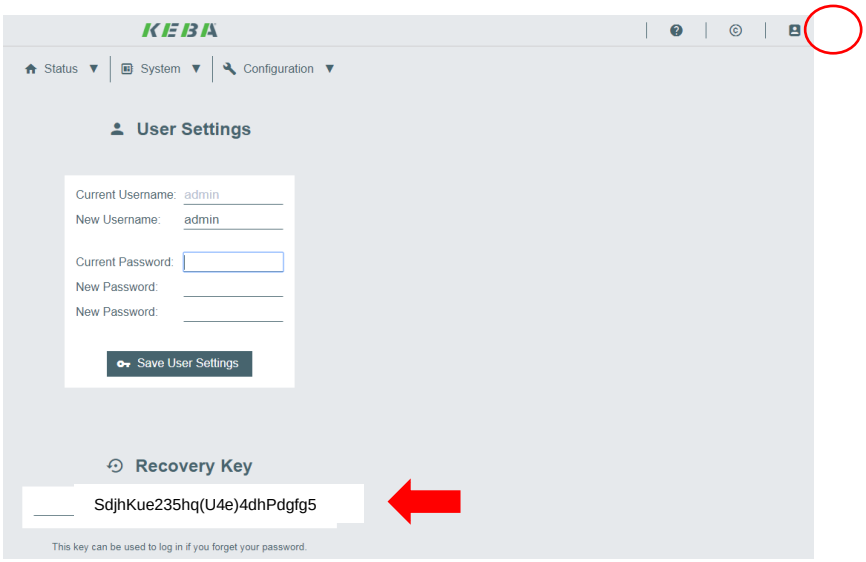
The time needed to reboot the P30 has been reduced.

27.2.3 WebUI password reset

In case you forget your password, you can use the unique recovery key of your P30 x-series to reset the password.

You can find your recovery key in the User settings.

Please check the configuration manual for detailed information.



27.2.4 Improvement NTP synchronisation

During the start-up of the wallbox the system tries to synchronise the time (UTC) via NTP. If the system has no internet access, the last available date is set as the valid time for the usage of the certificates.

27.2.5 Load management improvement: available current recalculation

On a master/client installation, the calculation of the available current is triggered even when an EV has stopped charging but it is still plugged in.

27.2.6 Behaviour in case of power cut

After a power cut, all ongoing charging sessions are closed and new charging sessions are started if the EVs are still plugged in.

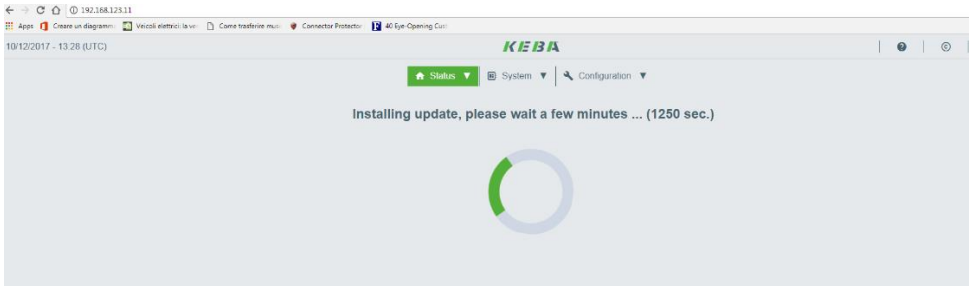
27.2.7 Security improvement

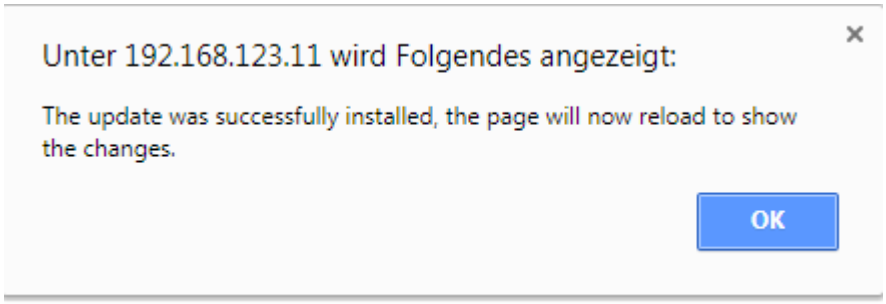
Updates are now encrypted instead of just being protected with the password.

27.2.8 Update feedback

The visual feedback during update has been improved. The WebUI shows the actual status of the update and provides feedback on whether the update has been successfully completed. During the update the 4 LED segments flash orange (breathing mode).

No charging session is possible during the update.





27.2.9 New feature: WIFI

With this new feature it is now possible to activate the already built-in WI-FI module in the electronics of the KeContact P30 x-series.

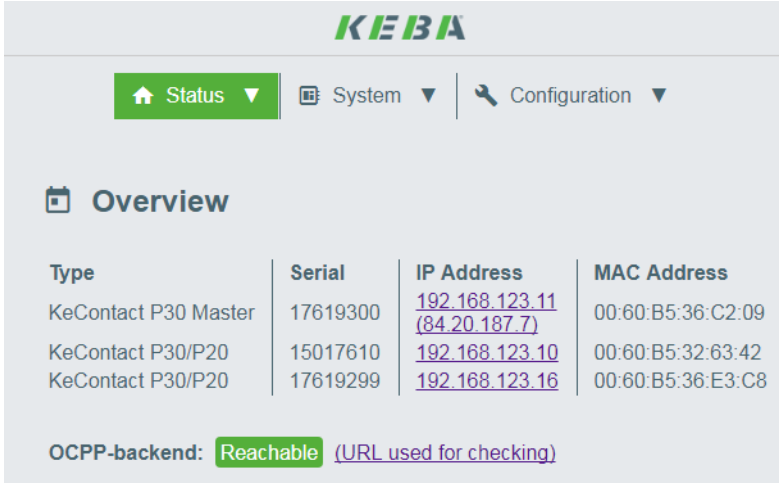
You can configure your KeContact P30 x-series to connect to an existing WI-FI network or to be used as hotspot. For more details on how to configure and use the WI-FI function please read the configuration manual.

27.2.10 More information in the logs

The logs and diagnostics downloads have been enhanced to deliver more information on the wallbox. The WebUI includes all logs to download.

27.2.11 More information in the WebUI

In the overview section of the WebUI the IP Addresses and MAC Addresses of the master and client wallboxes are shown.



27.2.12 RFID whitelist

The master broadcasts its RFID whitelist to the clients. Each client can only store the first 20 RFID tags. Should any client go offline, they will only be able to use their local whitelist based on a maximum of 20 RFID tags. Please read the configuration manual for more details.

27.2.13 Authorization Disabled

When the Authorization in the WebUI is set to OFF, the LEDs of the P30 Master and clients will flash green.

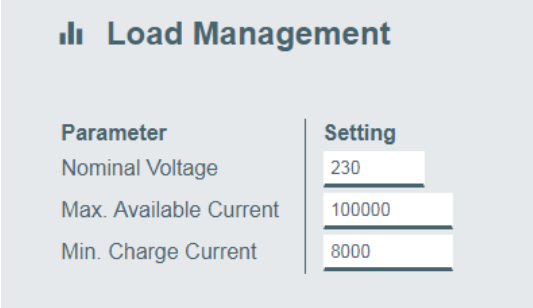
27.2.14 RFID Teaching

The teaching process has been changed. Please read the configuration manual where you can find detailed information about this process.

27.3 Fixed bugs

27.3.1 Keyboard inputs

It is now possible to select the value of the maximum or minimum current and input a new value.



27.3.2 Load management recalculation

In the past, if a master/client installation had no backend connection and the backend connection was established again during the charging session, it was possible for the load management to execute an incorrect calculation. The KeContact P30 is now able to manage the case of disconnection to the backend and execute correct calculations.

27.3.3 OCPP GetDiagnostic

GetDiagnostic upload now works with all FTP servers. Error on FTP Code 150 is fixed.

27.3.4 OCCP ResetRequest

A bug is fixed where the Reset command could randomly stall.

27.3.5 OCPP UnlockConnector

The UnlockConnector command no longer stalls.

27.3.6 Configuration of the serial numbers of clients via WebUI

Now the configuration of more than 10 clients serial numbers via the WebUI does not stall the system.

27.3.7 GSM communication

GSM stability and reconnection capabilities has been improved.

27.3.8 Load management recalculation

In a master/client installation, if an EV stops the charge because it is fully loaded, the load management will now correctly recalculate the available current for the other still charging EVs.

27.3.9 RFID authorization

It is not possible to restart a charging session with the RFID card on an EV that has been temporarily suspended by the load management function.

27.3.10 Load management charge rotation

The charge rotation of the load management now rotates correctly between all EVs.

27.3.11 OCPP communication: GetConfiguration

GetConfiguration returns the serial numbers of the connected connectors. In the past only the serial numbers of the first 2 connectors were acknowledged.

27.3.12 OCPP: Missing Transaction ID

In the past, the ID tag was sometimes missing in offline Start Transaction request. The KeContact P30 is now able to recover the ID Tag.

28 Version Package 1.4

Date of release: 24.03.2017

28.1 Package components

The current package contains the following components.

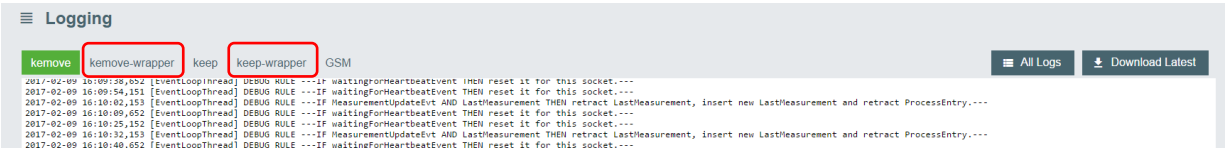
Component	Version
CPM	4.0.72
KEEP	4.0.23
P30 PDC	3.08.1
P20 PDC	2.5a4
MID-LED	2.3.6
OS	1.1.0

28.2 Implemented features

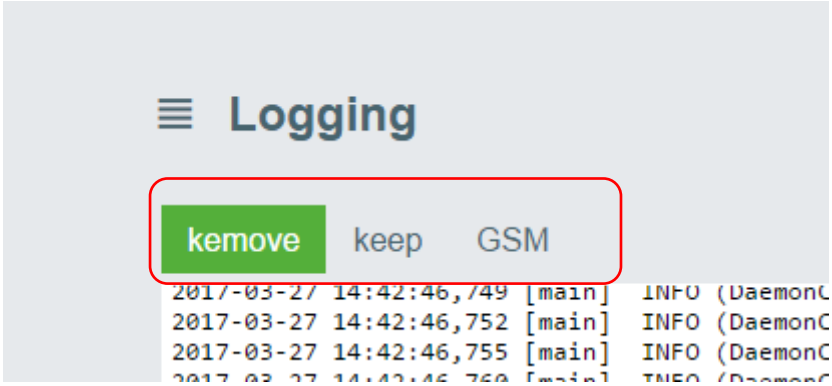
28.2.1 Unused logs have been removed

Unused tabs like "kemove-wrapper" and "keep-wrapper" have been removed from the logging web page.

Old web page



New web page



28.3 Fixed bugs

28.3.1 Update process interrupted by Master with no P20 clients

During the update process of a standalone master (no clients connected), the master tried to update broadcast the firmware of the P20 even though no P20 was in the system and as consequence the whole update process was interrupted because the master did not receive any response of P20.

28.3.2 Heartbeats were sent but no transaction possible

The Wallbox seemed to be offline because showed 3 leds flashing blue, but even though was sending regularly HeartbeatRequest to the backend and HeartbeatRequest were received successfully.

No OCPP messages like authorizeRequests, startTransactionRequests or meterValuesRequests could be sent except HeartbeatRequests.

28.3.3 GSM connection dropped every hour

Every hour the connection with the backend dropped due to the synchronisation with the NTP server and not always recovered in few minutes as expected.

28.3.4 Updates via HTTP not stable

Updates via HTTP could not be resumed due to no timeouts.

28.3.5 Housekeeping causes a disconnection to backend

Every day circa ten minutes after start of the Housekeeping (00:00 UTC), the connection to the backend was interrupted and the P30 was not able to recover and stayed offline.

28.3.6 Wrong logging of the P30

After copying kemove.log to backup files at least one process still was writing in the old file. This resulted in log entries missing in the current storage file.

28.3.7 Wrong version of WebUI

In the software update page of the WebUI it was displayed the wrong version of the WebUI, 1.0.6 instead of 1.0.8.

29 Version Package 1.3

Date of release: 09.02.2017

29.1 Package components

The current package contains the following components.

Component	Version
OSSCRIPT	1.0.8
WebUI	1.0.6
P20 PDC	2.5a4
P30 PDC	3.07.1a1
CPM	4.0.71
KEEP	4.0.22
MID-LED	2.3.6

29.2 Compatibility information

This firmware is compatible with all KeContact P30 x-Serie charging stations and connected KeContact P30 c-series in client mode.

To identify your charging station, please compare your product code with the product codes table in the installation manual.

Follows a list of most important implemented features and fixed bugs.

All the features and fixed bugs related to the FW 3.07.1a1 included in this software package are reported in the release notes of the firmware 3.07.1a1.

29.3 Implemented features

29.3.1 Added firewall ports

The ports as PortCP and portHost are now taken into account in the firewall.

29.3.2 Save charging sessions

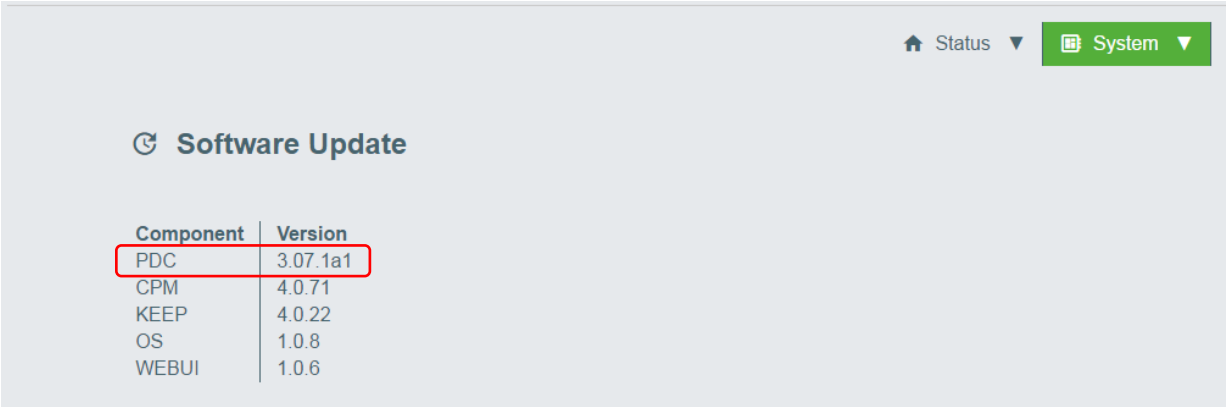
When the P30 is powered off during the charge, the date of the charging sessions are saved.

29.3.3 Logging - Outbound message

The P30 log all communication between master and clients.

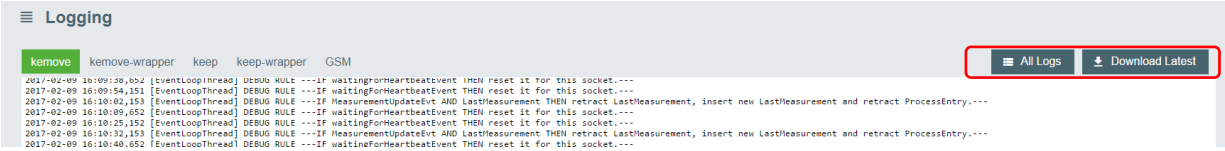
29.3.4 WebUI – visualisation of firmware

Added firmware version of the PDC.

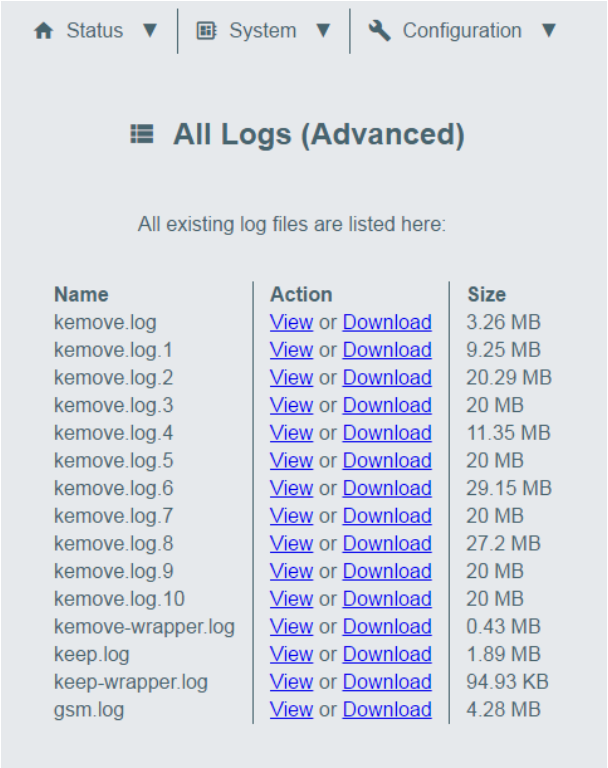


29.3.5 WebUI – Logging

Added "All Logs" button to "Logging" tab, allows individually viewing and downloading every single log file.



Here is shown a screen shot of what the user can see if clicking on “ All Logs”.

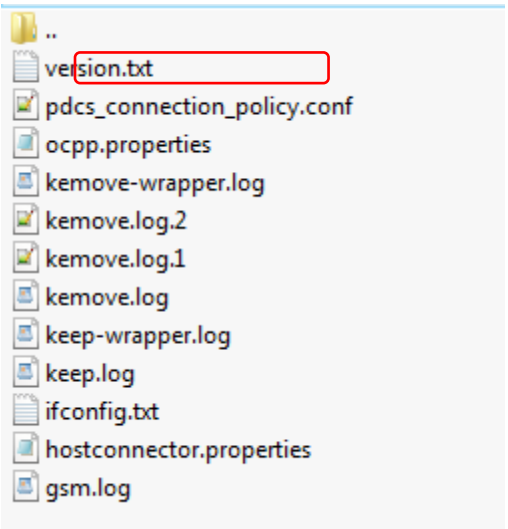


29.3.6 WebUI - Wording

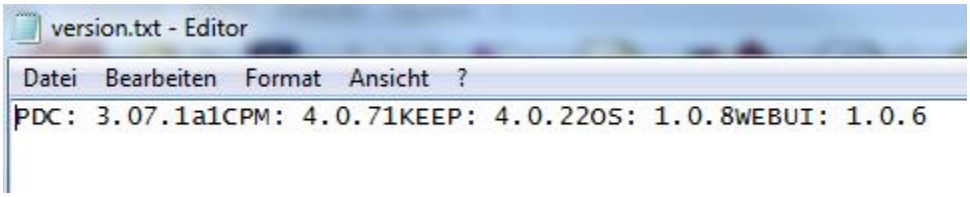
Renamed "Download All" to "Download Latest" in "Logging" tab (see 2.3.5).

29.3.7 WebUI – component version

Added the text file “version.txt” in zip file accessible by clicking on "Download Latest".



In this file are enclosed the information related to the versions of the software component.



29.3.8 WebUI - Browser responsiveness

Improved responsiveness on outdated versions of Microsoft Internet Explorer.

29.4 Fixed bugs

29.4.1 Update via GSM failed

While updating the P30 with a FirmwareUpdateRequest via GSM the download failed because the FTP server timed out.

Improvements have been implemented in this software package to reduce the possible time outs of the FTP server.

29.4.2 FileKeyStore Failure

Sometimes the Keystore was corrupted and could not be opened. Improvements have been done to reduce the probability of corruption of the Keystore.

29.4.3 House keeping

After a long running installation, in case the host communication was down, a lot of host communication session objects were created. The Housekeeping function did not clean up all the host communication sessions causing an overload of data.

29.4.4 OCPP - Improve reconnection after failure

In case the connection is bad, then the GSM connection could fail, or transmitting data could be slow causing a timeout. A reconnection function has been implemented to restore the connection.

29.4.5 OCPP –ResetRequest

The ResetRequest did not work as expected. The P30 did not restart.

29.4.6 OCPP – Bootnotification not compliant

The Bootnotification was not compliant because the field ChargeBoxSerialnumber had more than 25 characters, maximum prescribed in the ocpp specifications. The BootNotification will now contain only the charge point serial number.

29.4.7 Connector ID mismatch

The P30 did assign the same connector ID to two different sockets. This mismatch has been fixed in this release.

29.4.8 OCPP –StatusNotification errorCode field

When the P30 had an error and status=failed in the StatusNotification, then the errorCode was missing. Now the field errorCode is included in the Statusnotification.

29.4.9 OCPP – ChargePointService

When the GSM connection was restarted by the P30 because of a connection problem, the ChargePointSercvice was not republished and the P30 did not respond to remote commands through the new IP address. A solution has been implemented so that the ChargepointService will be republished with its new IP address.

29.4.10 Update rollback

In case of an update failure the rollback did not work properly.

29.4.11 Firmware Updates of KeContact P20 as a client

The P30 master was not able to update the connected P20.

29.4.12 GSM – Connection Timeout

In case of bad connection, timeouts occurred and the P30 did not handle them properly. This is improved in this release.

29.4.13 Load management

The P30 did not recalculate the current after a vehicle unplugged or did a wrong recalculation. This is fixed in this release.

29.4.14 Logging - files size

The log files had no size limitation causing a data overload. This is improved in this release.

30 Version Package 1.2

Date of release: 17.11.2016

30.1 Package components

The current package contains the following components.

Component	Version
OSSCRIPT	1.0.8
WebUI	1.0.2
P20 PDC	2.5a4
P30 PDC	3.04.2a1
CPM	4.0.68
KEEP	4.0.18

30.2 Compatibility information

This firmware is compatible with all KeContact P30 x-series charging stations.

To identify your charging station, please compare your product code with the product codes table in the installation manual.

30.3 Implemented features

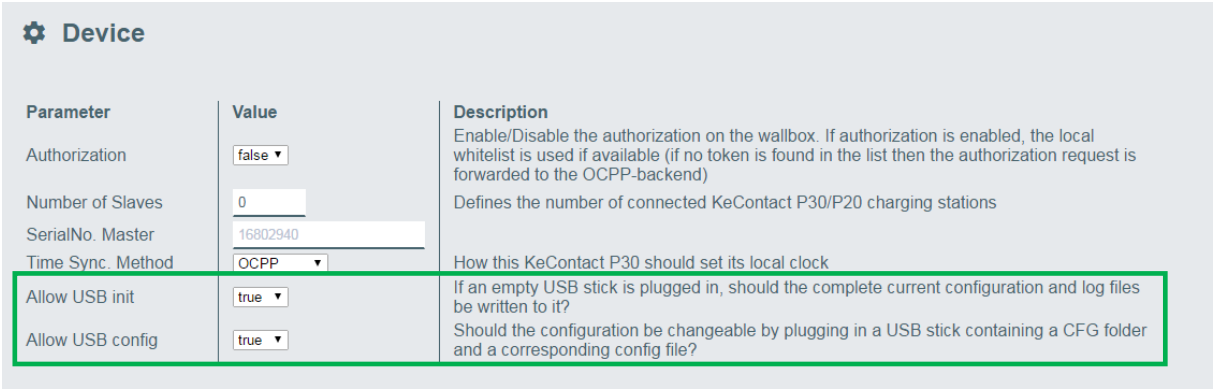
30.3.1 The security of the updates has been improved

All SW Version starting from 1.2 will be encrypted. This imply that future updates from version 1.0 or 1.1 to version 1.3 won't be possible

30.3.2 The usability of the WebUI has been improved.

30.3.3 The use of the USB-stick can be deactivated

It is possible to disable the USB functions via the web-user interface. This means that it will be possible to avoid that non authorised personal could copy data of the P30 into a usb stick or that the P30 could be updated. With this new feature of the wallbox higher safety standards are guaranteed.



30.3.4 Increased timeouts of FTP downloads for weak network connections.

With this feature the download of updates is more stable.

30.3.5 More logs are attached to the log-download via the WebUI.

30.3.6 Improvement of the GSM reconnection functionality.

The P30 monitors the GSM connection and in case the GSM connection goes down the P30 will restart the connection procedure. This feature is available already in the previous version and has been improved in the present version.

30.3.7 On the WebUI is available a GSM signal test function to test the GSM signal strength for the current installation.

30.3.8 Timing of “Remove USB” improved

The message "Remove USB" on the display of the wallbox was shown only one time by the use of a USB-stick. Now the message is shown endless until the USB-stick is removed.

30.3.9 Time synchronisation improved

The wallbox tries to synchronize the system time via a NTP time server during the boot of the system. If the synchronization is successful then a further synchronization via the OCPP backend is not necessary and the second reboot of the application is not needed.

30.3.10 Load management improvement

On master/client installations the recalculation of the charging plans for all EVs was adapted in the case a vehicle is getting unplugged.

30.3.11 Security improvement in the commissioning mode

Power will be turned off if a EV is plugged during commissioning mode.

30.3.12 Security improvement

Security improvement in the case of a contactor fault during power on. Charging will be prohibited right after the start up and an error code is shown by the HMI Leds.

30.3.13 Unlock command

Via smart-home it is possible to send a UDP command "unlock" to unlock the cable

UDP command:	unlock
Reply:	"TCH-OK :done"
Description:	For this command you have to stop the charging process first. For this, please use the command „ena 0". Afterwards you can unlock the socket.

30.3.14 Unlock procedure improved

If an unlock is executed but the charging cable is not plugged off from the socket, the unlock is executed again twice.

30.3.15 Improvement on Logging

More information will be provided on the WebUI concerning of the start-up of the system.

30.3.16 Improvement of the PWM signal

Short spikes that used to appear before PWM starts have been removed

30.3.17 China norms and standards compatibility

The P30 firmware includes parameters for current monitoring that if activated bring the P30 compatible to Chinese norms and standards.

30.3.18 Authorisation with KEY switch implemented

30.3.19 “output” UDP command settings

Settings of number of pulse are now limited to a maximum of 150.

30.4 Fixed bugs

30.4.1 WebUI occp status

Although the connection to a HTTPS OCPP backend was established, the visualisation on the WebUI showed the status as "Unreachable".

30.4.2 WebUI – special signs in ocpp URL

Configuring the OCPP backend URL via the WebUI didn't work if the URL contained a "=" character.

30.4.3 OCPP – encrypted connection

Importing a zip file via USB-stick containing certificates for setting up an encrypted OCPP connection caused a NullPointerException.

30.4.4 Diagnostics – Download of large log files

The download of large log files (>14MB) via WebUI took longer than the default maximum execution time of 30 seconds. The download of large files was then interrupted. The timeout has been adapted and the download of large log-files is now possible.

30.4.5 WebUI – SIM card PIN visualisation

Even though the wallbox was configured with a PIN of the SIM, the “GSM SIM PIN” was shown as an empty field in the WebUI. This does not allow to verify if a PIN was configured or not. Now if a SIM-PIN is configured it is also shown on the WebUI.

30.4.6 Charging in offline mode

Misbehaviour of the wallbox in the case of starting a charging session in offline mode. As soon as the Wallbox was online again, the backend rejected the charging session but the wallbox continued to charge.

30.4.7 Update of P20 via master

P20 c-series client firmware update via a P30 x-series Master did not work.

Now is possible to update a P20 c-series clients via the P30 x-series master.

30.4.8 Wrong Metervalues

On some master/client installations happened that MeterValues of the client and master were mixed and wrongly registered by the OCPP backend

30.4.9 Configuration of serial numbers of clients

On a master/client installation there was only the possibility to configure the serial number of two clients. Additional serial numbers were ignored by the system.

Now it is possible to configure up to 15 clients serial numbers.

30.4.10 Single phase charging with a Zoe

The P30 checks the phases only with contactor off, not during charging.

30.4.11 iMiev - Delay time

It has been removed a delay time of 3 seconds ahead of charging to solve a compatibility problem with the i-Miev

30.4.12 OCPP – Unlock command

Under certain circumstances the OCPP unlock command did not work as expected because right after the unlock command the P30 locked again the cable.

30.4.13 Problem with Loxone

Automatically turn enable ON (ena 1) when connection to CPM is established (3 blue leds blinking) for FAILSAFE logic in case of on PDC without XPU.

30.4.14 Tesla charging switching from single phase to three phase

This feature has been implemented to avoid that the P30 detects an overcurrent failure in case of switching the supply line from single phase to three phase while charging a Tesla.

With this release is now possible to switch from single phase to three phase without a failure being detected.

31 Version Package 1.1

Date of release: 01.09.2016

31.1 Package components

The current package contains of the following components.

Component	Version
CPM	4.0.67-RC
KEEP	4.0.15-SNAPSHOT
OS	1.0.7
WebUI	1.0.1
PDC	3.02.4

31.2 Compatibility information

This firmware is compatible with all KeContact P30 charging stations of the type KC-P30-xxxxxxxx-x0x-xx.

31.3 Implemented features

Description
WebUI - Added GSM Signal Test for testing the signal strength
WebUI - Extended log file download to receive more logs
WebUI - Improvement of the update procedure
WebUI - new symbols, adapting naming and descriptions
LED - to notification "Remove USB" on the .Matrix is shown longer

31.4 Fixed bugs

Description
GSM - Reconnecting procedure of a GSM connection which is down had timing problems
WebUI - OCPP Availability Check didn't work when a "=" was included in the OCPP backend URL
WebUI - timeout occurred when downloading large log-files.

32 Version Package 1.0

Date of release: 07.04.2016

32.1 Package components

The current package contains of the following components.

Component	Version
CPM	4.0.67-RC (05.04.2016)
KEEP	4.0.14
OS	1.0.6
WebUI	1.0.0
PDC	3.02.4

32.2 Compatibility information

This firmware is compatible with all KeContact P30 charging stations of the type KC-P30-xxxxxxxx-x0x-xx.

32.3 Resolved issues

This is the first version for the customer