SmartCable
User Manual

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**Please read through this user manual carefully.
It contains:**

› Information on the handling of the charging cable and possible risks when using the charging cable in an improper manner.

› User instructions for the SmartCable.

Please note:

› Please read and store carefully.

› Dimensions given in millimetres.

› This document is subjected to changes as technical improvements of the products may be made.

› Protected by copyright.

› Duplication, reprint and transfer, including partly, remain subject to written consent.

Danger!
Safety advice to hazard with high risk.
Can lead to severe injuries or death if disregarded.

Please note!
Safety advice to hazard with low risk.
Can lead to destruction or damage of the product if disregarded.

Safety Advice
for the usage of your SmartCable

> ⚠️ **Danger!**
> **Safety advice to hazard with high risk.**
> Can lead to severe injuries or death if disregarded.

ubitricity is putting charging infrastructure components (SmartCable and/or SimpleSockets) at your disposal.

1. The devices may only be used by people who have been informed about the safety advices and have read the user manual.

2. Please conduct a visual check before using the SmartCable. Damaged devices must not be used under any circumstances.

3. In case of functional disruptions (e.g. smoke, unusual smells or sounds, heat, or difficulties in plugging) or damage (e.g. cable or case break), the charging cable must not be used anymore. Please contact our support team.

In addition, the following safety instructions must be followed strictly:

Storage in dry locations.
The SmartCable should be stored in a safe place, e.g. the trunk of your car. Contact with ignitable materials must be prevented at all times. The components are rain-safe, but should not be overly exposed to liquids (e.g. dipping into water).

No excessive exposion to mechanical forces.
The SmartCable must not be subjected to excessive mechanical forces (e.g. severe hits or impacts, excessive pulling of the cable, falling from great heights). In severe cases, these impacts may affect the components' safety.

No opening of the case.
Opening the case results in loss of legal certification as well as loss of warranty of the SmartCable.

No usage of adapters or extended cables.
Usage of adapters to the vehicle or the SimpleSocket as well as extended cables are not permitted.

Safeguard traffic safety.
The user carries the legal duty to maintain traffic safety and is obliged to meet all necessary and reasonable precautions in this sense. It is especially important to make sure that other traffic participants (pedestrians, cyclists, motocyclists etc.) are not affected or hindered by the SmartCable.

Essential Functions

Authorisation / Connection	The SmartCable activates power in the SimpleSocket after authorisation of the user.
Charging at conventional charging spots	The SmartCable will act as a normal charging cable with all conventional standardised charging infrastructure. In this case, the billing conditions of the respective provider apply.
Consumption metering	The physical consumption is metered by an MID- certified electricity meter within the SmartCable.
Automatic billing	The amount of energy consumed is billed to the respective user of the SmartCable. The data on the charging transaction can be accessed in detail online.
Data transfer	Transaction data is transferred securely to the backend system via mobile communication. If no mobile connection is available at the time of charging, the data is saved temporarily and will be transferred afterwards.
Data security / Cryptography	Certificate-based authentication is provided by using Public Key Infrastructure (PKI) and encrypted communication between the systems.

Start Charging

1. Connect SmartCable to SimpleSocket

Connect the SmartCable to the SimpleSocket. Put the whole plug into the SimpleSocket in order to activate billing electronics within the SmartCable.
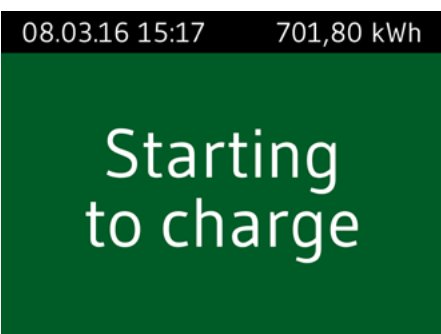

2. Observe display

The notification „Connect your vehicle" appears on the display of the SmartCable.

3. Connect SmartCable to vehicle

Now connect the SmartCable to the electric vehicle. Please pay close attention if the plug clicks into place, especially with a Type 1 plug. Security technology will now authorise the charging process and audibly lock the SimpleSocket.

08.03.16 15:17   701,80 kWh

Starting to charge

4. Charging session is activated

Your vehicle will now start the charging session. The display of the SmartCable shows „Starting to charge". The SimpleSocket's control lamp (LED) flashes green.
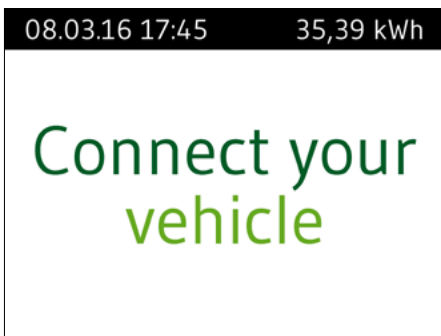
Interrupt and Finish Charging

New Charging Session
Please only start a new charging session when the SmartCable's display has been shut down completely.
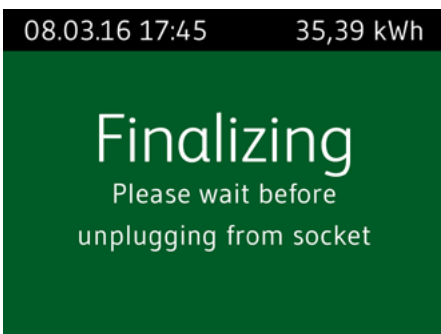

1. Unlocking at the vehicle

Unlock the SmartCable according to the requirements of your vehicle in order to interrupt charging.

08.03.16 17:45 35,39 kWh
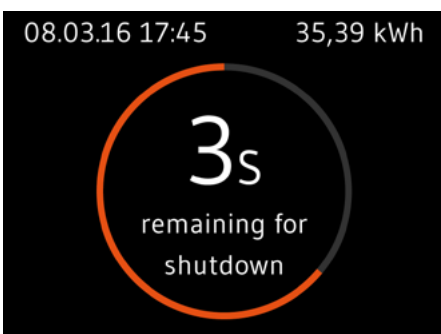
Connect your vehicle

2. Interruption notification

This notification appears as soon as the charging session is interrupted. As long as the plug remains connected to the vehicle, the transaction can be continued anytime on demand of the vehicle.

08.03.16 17:45 35,39 kWh

Finalizing
Please wait before unplugging from socket

3. Finishing the charging session

By disconnecting the SmartCable from the vehicle, the charging session is terminated. The SimpleSocket will then unlock the plug and flash orange. Please only disconnect the SmartCable from the SimpleSocket when it has been unlocked.

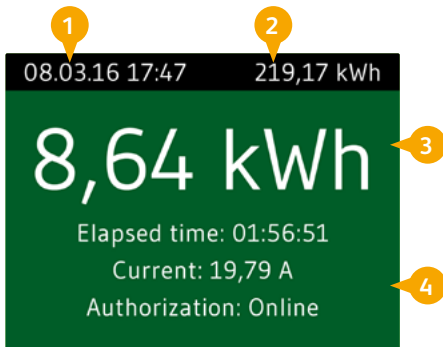08.03.16 17:45 35,39 kWh

3s
remaining for shutdown

4. Transferring transaction data

Once the session is terminated, the SmartCable will transfer the transaction data via mobile communication and shut down automatically. This will take a few seconds.
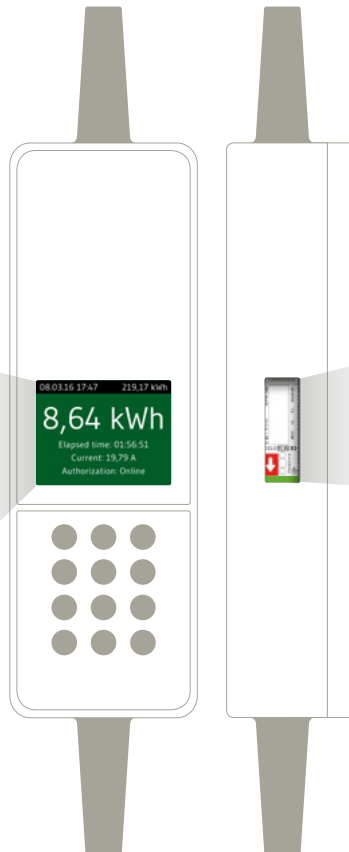
Information on Display and MID Meter

The Display:

neatly arranged

Charging notification

1. Date and time [dd:mm:yy hh:mm]

2. Informational meter reading according to reading of integrated MID meter [kWh]

3. Informational energy reading of current charging session [kWh]

4. Information on current charging session

The MID Meter:

relevant for billing

Display during charging

5. Serial number of the meter

6. Information on meter type

The MID meter features a rolling display of the total meter reading of all tariff registers (t1, t2, t3) of the integrated energy meter in kWh.

The register relevant for the billing of the SmartCable is register t2.

When using the SmartCable with charging infrastructure of external providers, energy is metered by the integrated meter with the register t1. This register is not relevant for billing.

Quicktips for Error Treatment

	Description of Error	Error treatment
The SmartCable is not waking up	On plugging the SmartCable into the SimpleSocket, the display remains dark or shuts itself off immediately. The vehicle cannot be charged at a SimpleSocket.	Verify once again if you have used the cable correctly. Disconnect the SmartCable from the SimpleSocket. Verify if the socket is connected, i.e. the LED lamp is gleaming blue. Then check if the SmartCable's connectors are damaged. Try to start a charging session once again. PinPad-wakeup: If the SmartCable doesn't wake up please press buttons "1" and "✓" at the same time for six seconds. The Cable wakes up and reboots the system. Everything should work fine again. Please let the cable remain connected about 4 hours in order to recharge the internal battery the SmartCable sufficiently. Please contact our service if the error appears repeatedly.*
The session does not start	The SmartCable wakes up, but the session is interrupted before electricity is flowing. The display is not switching into the mode „CHARGING". The plug is not locked in the SimpleSocket.	Verify once again if you have used the SmartCable and SimpleSocket correctly. Verify if the socket is connected, i.e. the LED lamp is gleaming blue. Then check if the SmartCable's connectors are damaged. Try to start a charging session once again and pay close attention to see if both plugs are allocated correctly. Please contact our service if the error appears repeatedly.*
The session is interrupted	The charging session starts normally, but interrupts itself without external influence after a short period of time.	Verify if the on-board plug is allocated correctly, the vehicle battery is sufficiently empty to instigate a charging demand from the car and if the vehicle is ready for charging. Please contact our service if the error appears repeatedly.*

*There may be a hardware or software error with your SmartCable.

Technical Specifications

Cable and Plug	
Material and Dimensions	Material: PC-ABS, Protection class: IP55 Dimensions of metering units: 270 x 89 x 56 mm (HxBxD) Weight: 2,35 kg (incl. cable) Cable length: ca. 5,5 m (7 m upon request)
Plugs	Infrastructure-based: Type 2 IEC 62196-2 (VDE-AR-E 2623-2-2) On-board Plug Connector: Type 2 IEC 62196-2 (VDE-AR-E 2623-2-2) or Type 1 62196-2 (SAE J1772)
Charging Power	Max. 4,6 kW (230V, 1ph, 20A)
Charging Mode	Mode 3 according to IEC 61815-1
Standard	IEC 61815-1

Integrated Energy Meter	
Legal Certification	An MID-certified energy meter made by inepro Metering and conform with legal standards is used within the SmartCable. The energy meter in your SmartCable carries the following marking:
Marking	INEPRO METERING PRO1-Mod-S1 kWh meter CE M15 0122 MID 1078-15 EN50470-1/3 230V -40°C~ +70°C 0,25-5(45)A 50Hz
Device Number	The relevant information of the marking of the energy meter can also be found on the marking of your SmartCable. The device number can be verified through the window opening on the side of your SmartCable.

Care, Maintenance, Storage and Disposal

Maintenance

Please conduct a visual check before using the SmartCable. The SmartCable does not require technical maintenance. Please remove stains only with wet or dry cloths and refrain from using high-pressure cleansing machines or chemical cleansers. Handle your SmartCable with care. Avoid excessive mechanical impacts on your SmartCable.

Repair

If your charging cable is out of order, shows external damages or unusual behaviour, stop usage immediately and contact our support via the contact address provided.

Disposal

Disposal of electronic devices must take place in accordance with national and regional legislation and regulations. Electronic devices and batteries must not be disposed of along with domestic residue. Please dispose of your electronic devices at a collecting point for electronic waste or with your specialist retailer. Please dispose of the packaging materials at the collecting points for paper and plastics.
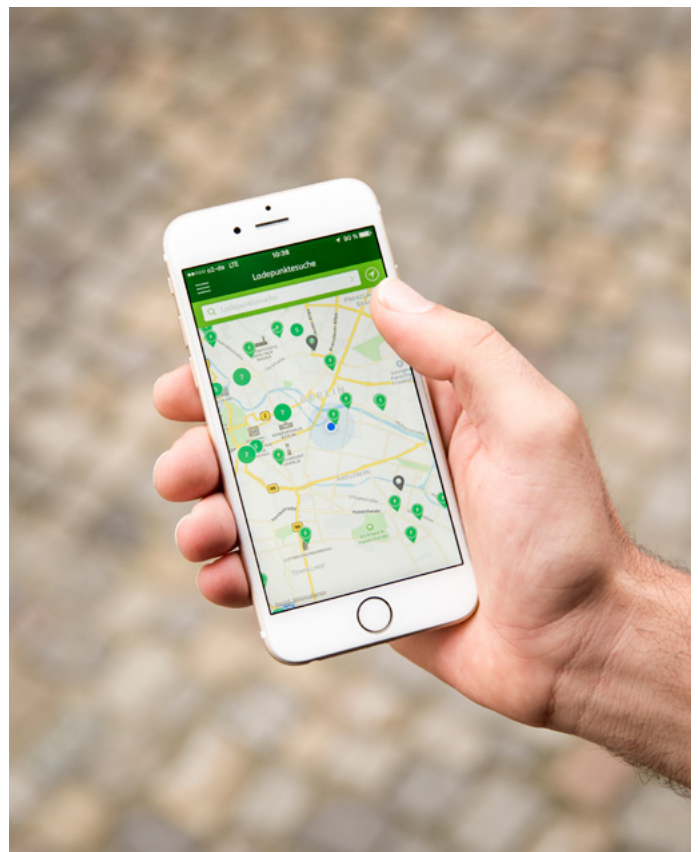
Loss

In case of loss, the SmartCable must be blocked immediately. Please inform us immediately via the contact data provided. Any charging transactions up to the blockage will be charged to the user's account.

Storage

Please store the SmartCable in dry locations, e.g. your garage or the trunk of your car.

The ConnectivityManager – your Consumption and Billing Data, accessible online at all times.

Your ConnectivityManager informs you about your consumption and billing data as well as your contracts and tariffs at all times. You will receive your log-in data in a separate e-mail.

In addition, you can find an overview of all SimpleSockets in your region online - including real-time information about occupancy.

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