

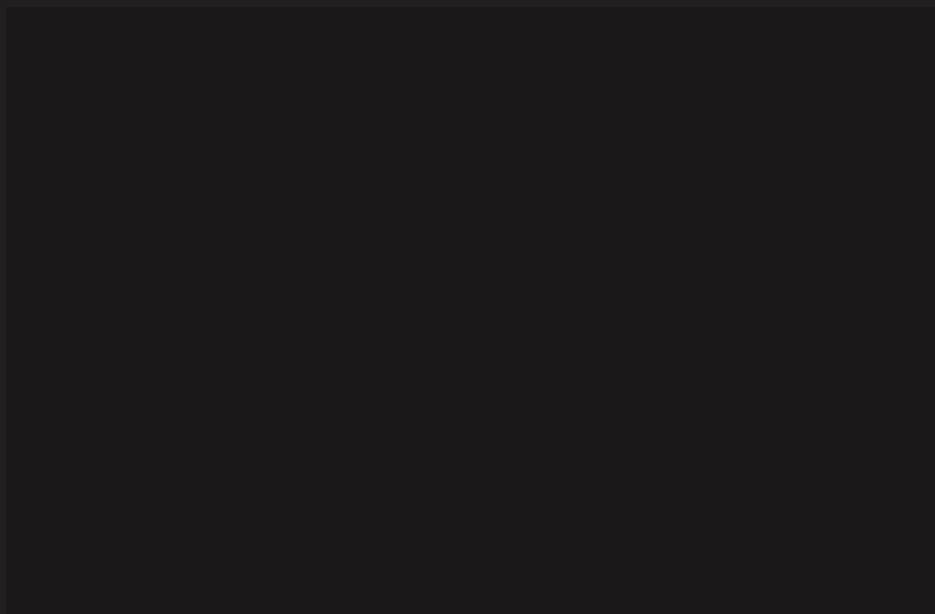
Green Cell

HabuDen

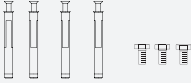
Charging Point for Electric Vehicles

User Guide

General Warranty Conditions



WHAT'S IN THE BOX

WALLBOX MODULE WITH TYPE 2 CHARGING CABLE	
CABLE HOLDER	
TWO SETS OF STEEL MOUNTING SCREWS AND PLASTIC DOWELS 8x65 – 4 PCS, 6x3 – 3 PCS)	
ADDITIONAL STRAIN RELIEF	
TEMPLATE FOR DRILLING MOUNTING HOLES	
USER GUIDE	
NFC/RFID 13.56 MHZ CARD (EVGC021B2250, EVGC021B2275)	

SAFETY RULES

Caution is required while using and disposing of the device. Incorrect usage and not following the guidelines below may pose a threat to life or health and property.

Note: It is required to install a residual current circuit breaker Type A (RCD A) and a 40 A overcurrent circuit breaker (C40) in the power network before installing HabuDen.*

* HabuDen is equipped with RDC-DD (Residual Direct Current Detecting Device) conforming to IEC62955, so that you only need to install the RCD Type A.

/ General precautions

Carefully read all of the following precautions before using the device.

- The device is intended for use only with electric vehicles with a Type 2 connector.
- The power rating of the device must match that of the power supply network.
- Make sure that the input voltage, frequency and other parameters of the device comply with specification of your vehicle and the power grid before the device is powered on.
- Use and store the device in temperature -25 °C to 40 °C (-13 °F to 104 °F).
- Do not install the device where it is exposed to fire or extreme temperatures and direct sunlight for long hours. If the device is exposed to strong sunlight or heat for a long period of time, its temperature may exceed the permitted operating range.
- Protect the device from excessive dust and fumes.
- Keep the device away from flammable materials and gases or explosive materials.
- Always keep the connector completely dry and clean.
- Do not put any objects or parts of your body into the device.
- Do not handle the device with wet hands.
- Do not use extension cords.
- It is required that the electrical installation you use for charging your EV is inspected by an electrician.
- Keep the device away from children, unauthorized persons and animals.
- Persons with reduced capabilities or lack of experience and knowledge must be supervised or previously instructed before using this device.
- Use the device in accordance with general safety rules and safety requirements for working with electrical equipment applicable to a given country or region.
- Make sure you know what to do in case of accidents involving electricity and what to do in case of fire.
- Use the device in accordance with local requirements and limitations.
- When installing, using, maintaining and servicing the device, observe local environmental protection and waste disposal regulations to avoid environmental pollution.
- Observe health and safety regulations when installing, using, maintaining and servicing the device.

/ Mounting precautions

- It is recommended that the device be installed by an electrician with the appropriate qualifications and certificates.
- Use insulated tools when mounting the device.
- Strictly follow the device instructions and applicable norms and standards.

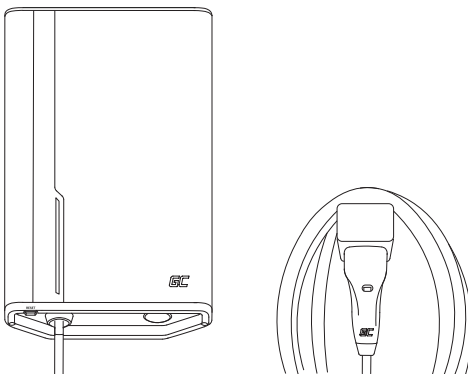
- Report any accident that occurs to your supervisor.

General criteria for the site selection

The device was constructed for the indoor and outdoor area. Accordingly, it is necessary to ensure the correct set-up requirements and the protection of the device at the installation site. The following criteria must be taken into account when selecting a location:

- Take into account the local electrical installation regulations, fire prevention measures and accident prevention regulations as well as emergency routes at this site.
- The device may only be installed in stationary applications.
- Mount the device so that it is not located in the direct flow of passersby and so that no one can trip over connected charging cables and so that the charging cable does not cover or cross passing pedestrian and motorized traffic.
- Install the device in such a way that it can be used by people with disabilities.
- Do not install the device at locations where it is exposed to ammonia or ammonia gas (e.g., in or at stables).
- The mounting surface must be sufficiently stable in order to withstand the mechanical forces.
- Do not install the device at locations where falling objects could damage the device (e.g., hung up ladders or automobile tires).
- The device must not be exposed to direct spray water (e.g., neighboring manual car wash facility, high-pressure cleaner, garden hose).
- The device should be protected against direct rain as far as possible to prevent icing, hail damage or similar.
- If possible, the device should be mounted protected from direct sunlight.
- Install the device outside the potentially explosive zone.
- Observe the internationally valid installation standards (e.g., IEC 60364-1 and IEC 60364-5-52) and comply with the nationally applicable installation standards and regulations.

Note: If the charger is installed in a location where it is not protected from the rain, always hang the cable on the holder included in the set. Remember to keep the connector in proper orientation (see the picture), as it covers pins from rain drops, ensures quicker evaporation of moisture and prevents corrosion.



/ Operating precautions

- Check for any damage to the packaging and the device that may have occurred during shipping. Do not use the device if you notice any damage to it. In such case, contact the manufacturer's warranty service.
- Do not use any sharp objects to open the packaging. This may damage the device.
- Do not leave the packaging or its components near children. The packaging components in the hands of children may lead to choking.
- Regularly check the device for visible damage to the structure that may pose a risk of electric shock when working with a defective charging station.
- Before charging, make sure that the device is not damaged and the connector is dry and clean.
- Connect the device only to a correctly installed and properly grounded power supply network.
- Never open the device housing on your own. Touching live parts may be lethal.
- To avoid exposure to electric shocks, never unplug the connector while it is under load. Stop the charging process in the vehicle first before disconnecting the charging cable.
- Never use the device with a cable tangled or coiled. This may lead to overheating. If this happens, do not touch the cable with your bare hands.
- Do not use the device if it is visibly damaged or suspected of being damaged, or if it indicates any critical malfunction.
- The device shall not be used if it fails to operate correctly in accordance with the instructions. In such case, seek advice from the manufacturer, responsible vendor or an electrician.
- If you discover damage to the device during operation, stop the charging process in the vehicle first. Then, unplug the cable from the vehicle.
- If the device is damaged, it can be repaired only by the manufacturer.
- Unauthorized modification or interference with the construction, electronics or software of the device is prohibited.
- Failure to comply with any of the above precautions will void the warranty and may result in damage to the device, the electrical system or the vehicle.
- Improper use of the device by not following any of the above precautions may result in fire, and in extreme cases, may lead to loss of health or life as a result of electric shock.
- The manufacturer is not responsible for property damage, loss of health or life in case of failure to comply with any of the above precautions.

At the end of its useful life, do not dispose of this product with your normal household waste. For proper treatment, recovery and recycling, take it to a designated collection point.

The section "Fire Precautions" refers to the requirements of the Office of Technical Inspection in Poland

/Fire Precautions

If you notice a fire, immediately alert the occupants of the danger zone and call the fire department (phone 998 or 112).

In the event of a fire, perform the following actions:

- disconnect the HabuDen and, if possible, other electrical equipment,
- activate the ROP button (manual call point) if possible,
- notify the State Fire Service,

- notify people in the vicinity of the fire to evacuate,
- start extinguishing the fire with fire extinguishing agents.

Note: Live electrical equipment must not be extinguished with water, foam or other solutions containing water due to the risk of electric shock. Powder, snow or sand extinguishers can be used to extinguish them.

REGULATORY INFORMATION

Hereby, CSG S.A. declares that the radio equipment type EVGC02 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <https://greencell.global/>.

Data given here is the maximum radio-frequency power transmitted in the frequency band(s) in which the radio equipment operates.

TECHNOLOGY, BAND	MAX. RF OUTPUT POWER
Bluetooth (LE) 2400–2483.5 MHz	9 dBm
WiFi (2412–2484 MHz)	18 dBm 802.11n
	20.5 dBm 802.11b
NFC (13.56 MHz)	30 dBm
433 MHz	8 dBm

RoHS Compliance

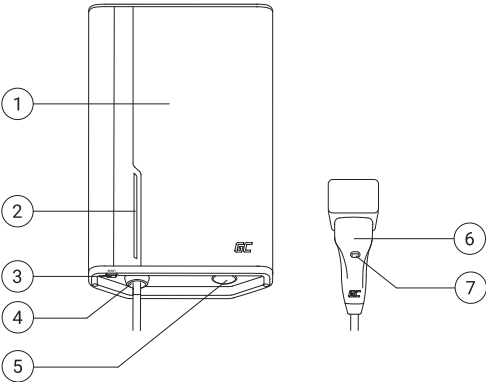
This product is in compliance with Directive 2011 /65/EU of the European Parliament and of the Council of 8 June 2011, on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS) and its amendments.

REACH (Registration, Evaluation, Authorization and Restriction of Chemicals, EC No 1907/2006) is the EU chemical substances regulatory framework. CSG S.A. complies with all requirements of the regulation and we are committed to providing our customers with information about the presence of REACH Substances of Very High Concern (SVHCs).



The WEEE symbol means that according to local laws and regulations your product and its battery(ies) should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities for safe disposal or recycling. The separate collection and recycling of your product, its electrical accessories, and its battery will help conserve natural resources, protect human health, and help the environment.

DEVICE DESCRIPTION



- 1

Wallbox module
- 2

LED ambient
- 3

Reset button
- 4

Cable strain relief
- 5

Cable cap
- 6

Type 2 connector
- 7

Button

Wallbox module	LED indicator in the front indicates charger status (startup, standby, charging, firmware update, error, warning, and others)
	Provides communication (Bluetooth, WiFi, NFC)
	Allows an electrician to set the maximum charging current of the charger to 6 A, 8 A, 10 A, 13 A, 16 A, 20 A, 25 A or 32 A, adjusting it to particular power supply network
	Monitors correctness of the power supply network parameters (V, A)
	Contains sensors that measure temperature, voltage, current and leakage current
Type 2 connector	The button opens charging port flap in particular cars (e.g. Tesla) and/or stops the charging process
	Used for charging/stopping the charging process once plugged in/unplugged from the vehicle's charging port

FUNCTIONS

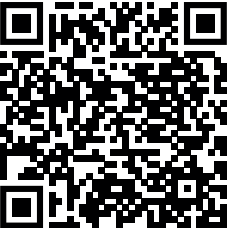
RADIO COMMUNICATION 433 MHZ	Used for opening the charging port flap in particular vehicles, e.g. Tesla
BLUETOOTH LE	Used to control the device, observe its status and perform firmware updates
WIFI	Used to send log data to the cloud, control the device and observe its status
NFC/RFID 13.56 MHZ (EVGC02B2250, EVGC02B2275)	Allows for authorizing the use of the device with card*/phone with NFC enabled
MOBILE APP	Enables remote control of the device and the charging process, authorizes use of the device and start of a firmware update, enables modifying charging parameters and displaying charging session statistics
POWER REGULATION	Allows for adjusting the charging power up to the max. charge current set by the electrician
CURRENT AND VOLTAGE SENSOR	Measures current and voltage to control correctness of the charging process
ENERGY METER	Measures energy consumed by the vehicle
QUIESCENT CURRENT SENSOR	Measures leakage current and protects you and your vehicle
UNDERVOLTAGE AND OVERVOLTAGE PROTECTION	If the power supply network voltage is too high or too low, the device will not start the charging process or interrupts it until the voltage is within the allowable range

* HabuDen supports ISO15693, ISO14443A (1 pcs included in the set) and ISO14443B type cards.

INSTALLATION INSTRUCTIONS

CAUTION! The device must be installed by a qualified electrician only. Do-it-yourself installation will void the warranty and may damage the device resulting in electric shock, fire or loss of health or life.

Note: To properly install and configure the charger, the electrician must use the Installation Guide, which can be downloaded here: <https://docs.greencell.global/manuals/GC-HabuDen-Installation.pdf> or by scanning the QR code below:



INSTRUCTIONS OF USE

/ Mobile app

What are the benefits?

The device can be operated both with or without the use of a dedicated free mobile app: GC App.

Both ways are easy and intuitive. However, we recommend you to take advantage of the app as it provides you with far more possibilities:

- Allows additional actions, such as adjusting the charging parameters, configuring the WiFi connection, authorizing the use of the device, remote firmware update, etc.
- Enables remote control of the device and the charging process;
- Contains charging session statistics: time, energy consumed and average power, presented in different time perspectives;
- Provides detailed description of warnings, errors and instructions what to do if they occur;
- Presents information about the device.

How to get the app?

If you want to take advantage of the app, download (and install) it for free from Google Play Store or App Store.

How to start using the app to control my device?

Once the app is installed on your phone:

1. Open the app and create your account.

Note: A given account is dedicated for one phone only. If you want to control your device from a different phone, you must create another account in the app.

2. Pair your phone with the device:

2.1. Enable Bluetooth communication on your phone.

2.2. In the app, choose option ADD DEVICE.

2.3. Follow the displayed instructions.

3. Enjoy using the app for remote control of your HabuDen.

How to enable authorization of charging via NFC/RFID 13.56 MHz card or phone/device with NFC module in GC App?

1. Open the GC App.

2. Pair with selected HabuDen via Bluetooth.

3. Go to the Account menu -> My Cards tab.

4. Check the "Authorize access via NFC" option.

5. In the tab, you can add cards, tags or phones that will be used to authorize the charging process.

Note: If authorization for charging via NFC is enabled, touch the NFC/RFID 13.56 MHz card or a phone/device with enabled NFC to the designated field on the HabuDen. Note where the NFC antenna is located on your phone model.

/ Charging

Once the device is installed by an electrician, you can start using it. To start charging your EV:

1. Have your car parked near the device.
2. Verify if the device is connected to the power supply network.
3. Check if the device and the connector are dry, clean and not damaged.
4. Make sure that the cable is uncoiled and there are no loops.
5. If you have a Tesla, press the button to open the flap in the car's charging port.
6. If the device is ready to use, plug the connector into the charging port. During the charging session, you can adjust the charging parameters in the app.

Note: If authorization for charging via NFC is enabled, touch the NFC/RFID 13.56 MHz card or a phone/device with enabled NFC to the designated field on the HabuDen. Note where the NFC antenna is located on your phone model.

7. When the charging is completed, or when you want to stop it, press the button on the connector and unplug it from the vehicle. Session summary can be viewed in the app.

8. Coil the cable and hang the connector on the holder.

/ Troubleshooting

If the device LED indicates a warning or an error during charging (refer to the table with explanation of LED indications):

1. Stop the charging process and unplug the device from your EV.
2. Check the app for more details and follow instructions on what to do.

Note: In case of error, do not try to repair the device on your own. Do not remove the device cover or attempt to open the enclosure. This may lead to electric shock. Refer repair (and servicing) to an electrician or qualified service personnel.

/ Maintenance and cleaning

Follow these instructions to keep your device clean and safe:

- Clean only the outside of the device.
- Use slightly moist or antistatic cloth.
- Do not use any detergents or chemicals to clean the device.
- Always keep the connector dry and clean. If it is wet, let it dry completely before use.

SPECIFICATION

Name	HabuDen
Model	EVGC02
Electrical data	
Voltage	200–260 VAC (1-phase) 380–440 VAC (3-phase)
Rated current	32 A (Max.)
Max. charge current settings	6 A / 8 A / 10 A / 13 A / 16 A / 20 A / 25 A / 32 A
Rated frequency	50 Hz
Total power	22 kW
Protection grade	IP54
IK rating	IK10
Overvoltage category	III
Rated residual operating current	6 mA DC
Residual non-operating current	3 mA DC
Residual current circuit breaker	RDC-DD* * RCD A must be additionally installed
Earthing/grounding system	TT/ TN-C-S/ TN-S/ IT
Physical Properties	
Wallbox module dimensions (mm)	338 x 211 x 73

Cable length	5 m (EVGC021A2250, EVGC021B2250) / 7.5 m (EVGC021A2275, EVGC021B2275)
Weight	5.51 kg (with 5 m cable) 6.72 kg (with 7.5 m cable)
Environmental conditions	
Operating temperature	-25–40 °C (-13–104 °F)
Storage and transportation temperature	-25–40 °C (-13–104 °F)
Altitude	< 2000 m
Humidity	Outdoor: up to 100% at +25 °C
Standards	
Conformity with	EN 61851-1 PN-EN 61439-7 EN 61851-21-2 EN 62196-1 EN 62196-2 EN 62955
Output (vehicle connector)	Type 2
EV charging mode	Mode 3
EMC classification	Environment B

GENERAL WARRANTY CONDITIONS

- CSG S.A., with its seat in Cracow (ul. Kalwaryjska 33, 30-509 Kraków, Poland), hereinafter referred to as the Guarantor, guarantees proper and failure-free operation of the product throughout the warranty period.
- The warranty period shall last for 24 months and is calculated from the date of delivering the product to the Purchaser.
- Territorial scope of warranty protection covers the European Union, countries of the European Economic Area, the United Kingdom, Russia, Ukraine, Turkey and Albania.
- The warranty does not exclude, limit or suspend the rights of the Purchaser resulting from the implied warranty for defects.

- In order to benefit from the warranty, contact the seller via e-mail: support@greencell.global. The handling of the complaint will be accelerated by a completed complaint form available at: greencell.global.
- The Guarantor will inform the Purchaser about the method of processing the warranty complaint (i.e., acceptance or refusal of acceptance) within 14 days from the receipt of the product. In case the Guarantor acknowledges the validity of the complaint, the defect of the product will be removed by the Guarantor or the defective product will be replaced with one without defects within 14 days from the date of informing the Purchaser of the validity of the complaint. The Guarantor decides how the complaint will be handled, taking into account the Purchaser's request in the complaint form, if possible. If removal of defects due to the degree of difficulty requires a large amount of work or additional measures, this period may be extended, but the Guarantor will make every effort to repair the product as soon as possible.
- In the case of acknowledging the validity of the complaint, the Guarantor covers the cost of delivery of the defective product to the Guarantor service and the cost of delivery of the repaired or replaced product to the Purchaser.
- The Guarantor's liability covers only defects resulting from causes inherent in the product.
- Applies to batteries, rechargeable batteries and products containing batteries/rechargeable batteries: Batteries are subject to natural wear and tear. In the event of a reduction in battery capacity, a reduction in battery capacity below 80% of the nominal value may be grounds for warranty.
- The warranty does not cover a product:
 - with broken warranty seal;
 - damaged by external factors (damage caused by lightning, surges in low voltage installation and power supply network, flooding, fire, intentional mechanical and thermal damage, etc.);
 - damaged due to improper use or use inconsistent with the manual;
 - damaged due to improper connection of other peripheral devices;
 - with traces of unauthorized repairs, unauthorized modifications or design changes.