ENGLISH

IQ EV Charger 2

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IQ-EVSE-EU-3032-0005-1320
IQ-EVSE-EU-3032-0105-1300
IQ-EVSE-EU-3032-0105-1320

VERSION 1.0
MAY 2026

140-00515-01



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Contents

1. Introduction 5

2. Integration with the Enphase Energy System 5

3. Pre-installation checklist 6

4. What's in the box 7

4.1. Tethered Type-2 model 7

4.2. Socketed Type-2 model 8

5. Tools/Additional items required 8

6. Mounting the wall bracket 9

6.1. Mounting on a timber or concrete or brick wall 9

6.2. Mounting on a single vertical timber stud 10

7. Wall-mounting the IQ EV Charger 2 10

8. Mounting the connector holster 12

9. Power supply wiring 13

9.1. Supply wiring for the tethered Type-2 model 13

9.1.1. Preparation 13

9.1.2. Supply wiring through the rear cable entry 13

9.1.3. Supply wiring through the bottom cable entry 14

9.1.4. Completing supply wiring 15

9.2. Supply wiring for the socketed Type-2 model 15

9.2.1. Preparation 15

9.2.2. Supply wiring through the rear cable entry 16

9.2.3. Supply wiring through the bottom cable entry 17

9.2.4. Completing the supply wiring 18

9.3. Phase wiring diagrams for grid supply types 18

9.3.1. Grid supply with a TN or TT earthing (with neutral) 18

9.3.2. Grid supply with an IT earthing (without neutral) 19

10. Wiring connections for communication cables 20

10.1. Wiring connections for the tethered model 20

10.1.1. Rear entry for the communication cable 20

10.1.2. Bottom entry for the communication cable 21

10.2. Wiring connections for the socketed model 22

10.2.1. Rear entry for the communication cable 22

10.2.2. Bottom entry for the communication cable 23

11. Activating the IQ EV Charger 2 23

11.1. Activation through the Enphase Installer App 23

11.2. Activation through the Enphase App 24

12. Finishing the installation 24

13. Post-installation checklist 24

14. Device status 25

14.1. MID meter display 25

14.1.1. Requirements to be adopted for users of the charging equipment and users of the measured values 25

14.2. LED pattern of an uncommissioned device 27

14.3. LED pattern of an activated device 27

15. Accessories 28

16. Specifications 28

17. Safety information 30

18. Corporate headquarters contact information 31

19. Revision history 32

1. Introduction

The IQ EV Charger combines advanced hardware with energy management, making it easy to install and compatible with all Type-2 EVs. Regular over-the-air updates ensure that the charger remains future-proof. Whether used as a standalone unit or integrated with Enphase Energy Systems, users can seamlessly manage solar, battery, and EV charging through the Enphase App.

Save more with AI-driven home energy management, optimising for the lowest utility rates and efficient solar charging. Up to 100% of excess solar power can be directed to EV charging, maximising savings. Designed for all European grids, the IQ EV Charger 2 offers wired and wireless data connectivity for flexible installation. It also includes a built-in MID meter for accurate usage tracking and a Type-2 connector, suitable for all EVs in Europe. Access and control are managed easily through the Enphase App.

NOTE: The mention of IQ EV Charger 2 applies to both IQ EV Charger 2 and IQ EV Charger 2 Eichrecht.

2. Integration with the Enphase Energy System

The IQ EV Charger 2 integrates flawlessly with Enphase Energy Systems, allowing users to manage solar, battery, and EV charging—all from the Enphase App. The following figures show the system diagram of a few configurations in which the charger can be installed.

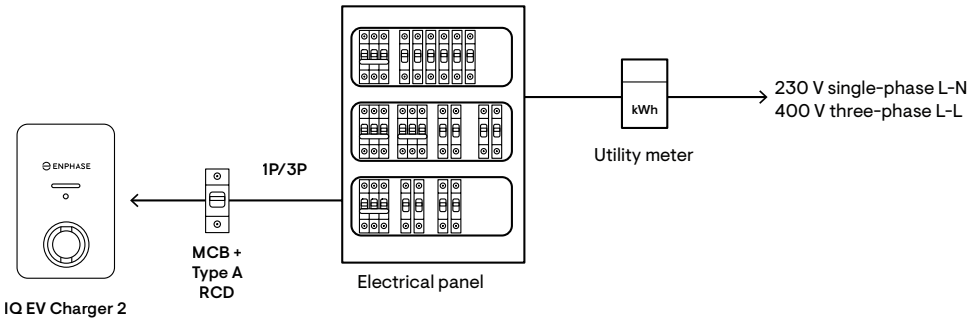


Figure 1: Standalone configuration

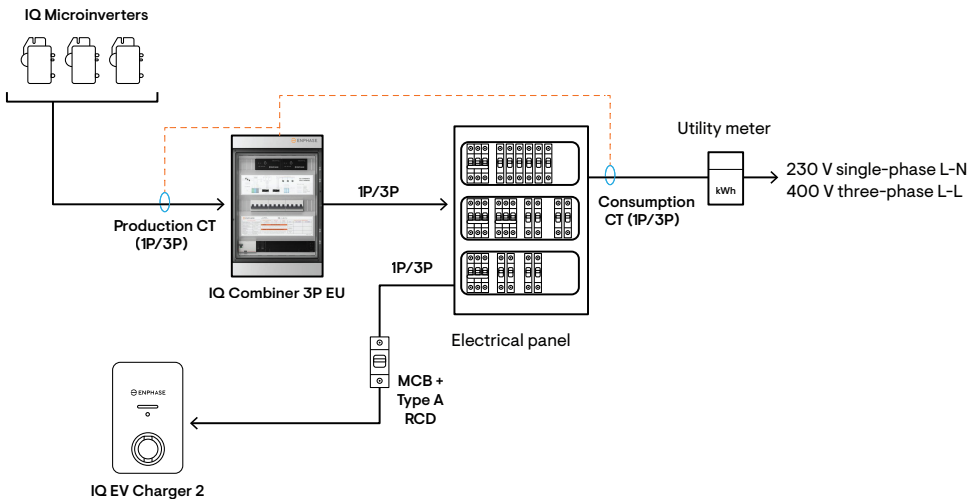


Figure 2: Integrated with an Enphase PV system configuration

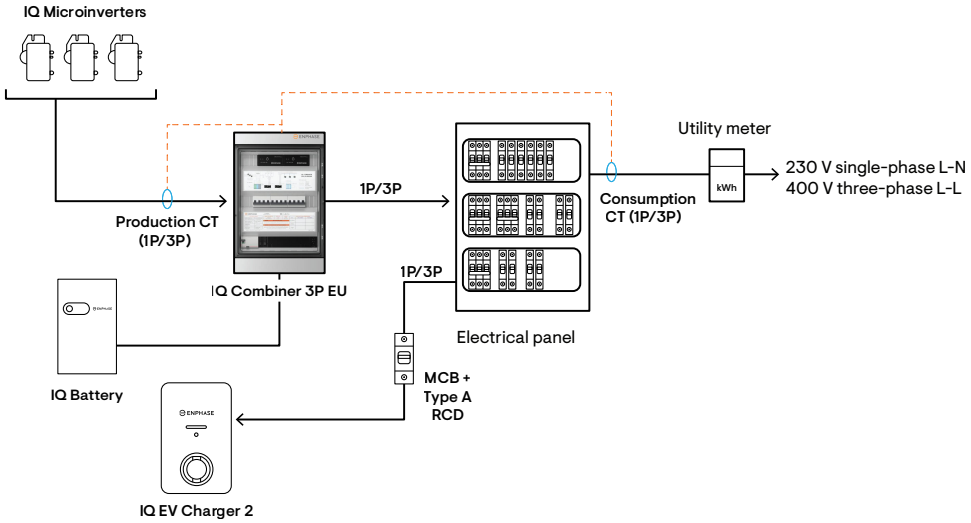


Figure 3: Integrated with an Enphase PV + Battery system configuration

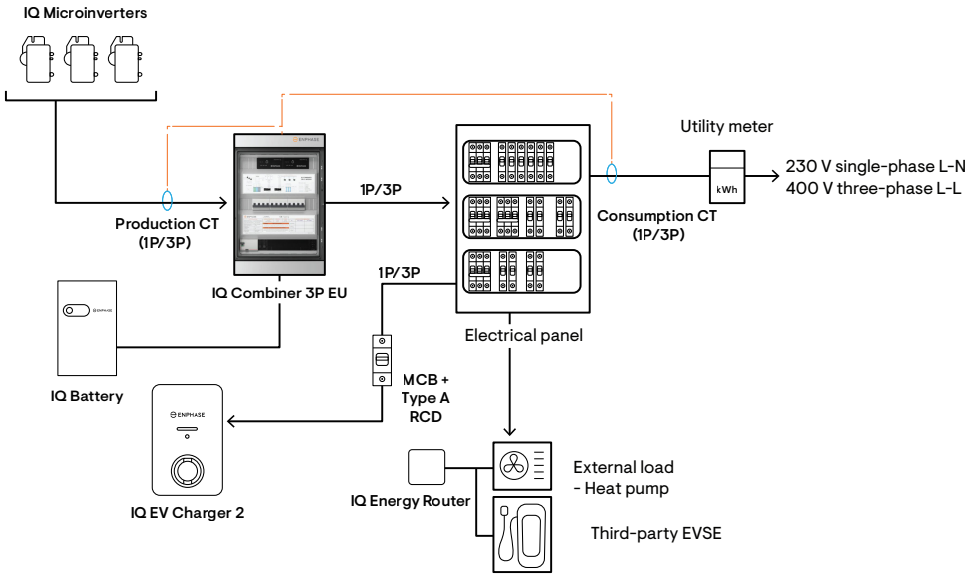


Figure 4: Integrated with an Enphase PV + Battery system + HEMS configuration

NOTE: The integration with an Enphase PV + Battery system + HEMS configuration is supported by Enphase only in a limited number of countries.

For more information on each of the supported configurations, see the *IQ EV Charger 2 installation configurations technical brief*.

3. Pre-installation checklist

Location considerations:

- Install the charger on any flat, vertical surface (wood, concrete, or single vertical stud) that supports its weight. The surface should be smooth with minimal irregularities and an incline of less than 5°.
- Mount the charger between 800 mm and 1200 mm above the floor level.
- For the tethered model, ensure the 7.5 m cable can comfortably reach the vehicle inlet (or socket). A 7.5 m cable is also available for purchase with the socketed model and can be purchased separately from the Enphase Store or from your distributor. To achieve the proper charging speed with your socketed model, use a cable that matches your charger's power rating.
- A Type-2 connector holster is included with the tethered model and is available with the socketed model. Install it near the charger to stow the cable and protect the connector.
- Ensure a stable internet connection through Wi-Fi or Ethernet to enable smart features.

Hardware considerations:

- Wiring from the circuit breaker supplying the IQ EV Charger 2 complies with IEC 60364 and local standards.
- Install the charger in one of the following ways:
  - A dedicated 30 mA Type A RCD/RCCB, along with an MCB (Curve C tripping characteristics), rated at 125% of the maximum charging station current, Energy Class 3, and a short circuit current limited to 6 kA or I^2t not exceeding 75,000 A^2s for the

socketed variant or 80,000 A^2s for the tethered variant, is required. For example, a 20 A circuit breaker is recommended for a 16 A charging current setting.

- An RCBO with 30 mA Type A RCD and Curve C tripping characteristics, rated at 125% of the maximum charging station current, Energy Class 3, and a short circuit current limited to 6 kA or I^2t not exceeding 75,000 A^2s for the socketed variant or 80,000 A^2s for the tethered variant, is required. For example, a 20 A circuit breaker is recommended for a 16 A charging current setting.

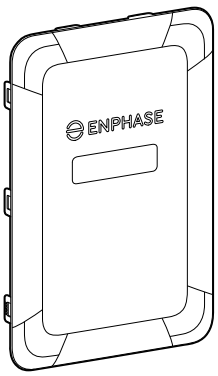
- The charger has an integrated ±6 mA RDC-DD for DC leakage protection in line with IEC 61851-1:2019 Cl. 8.5.
- The installation of the charger, including the RCD/MCB/RCBO, must comply with IEC 60364 and local regulations.

Other considerations:

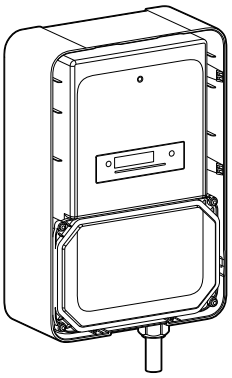
- For information on the supported configurations, see the *IQ EV Charger 2 installation configurations technical brief*.
- Hardware upgrades are recommended to leverage all smart features at the existing Enphase sites.
- Ensure Production CTs and Consumption CTs are installed correctly at PV-only sites for monitoring solar production and total home load. Ensure that all CTs are properly located and installed according to the *IQ EV Charger 2 installation configurations technical brief*.

4. What's in the box

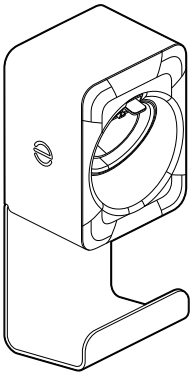
4.1 Tethered Type-2 model



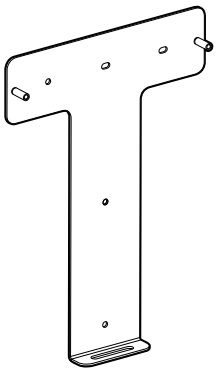
Aesthetic cover × 1



IQ EV Charger 2 enclosure × 1



Type-2 connector holster and cable tidy × 1

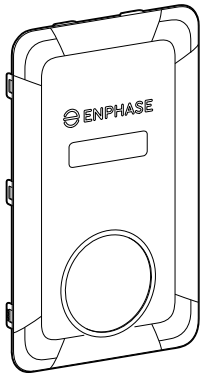


Mounting bracket × 1

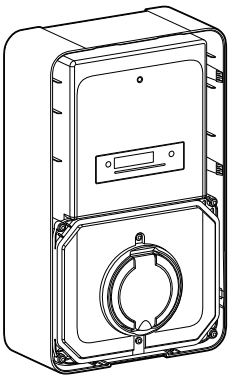
An accessories box that includes the following items:

- Tx25 x 50 chipboard screws × 8
- Expansion plugs × 8
- Tx25 x 60 chipboard screws × 2
- M32 cable gland × 1
- M25 cable gland × 1
- M32/M25 gland reducer × 1
- Sealing inserts and blanking plugs

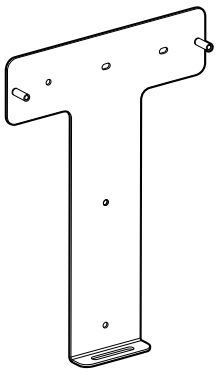
4.2 Socketed Type-2 model



Aesthetic cover × 1



IQ EV Charger 2 enclosure × 1



Mounting bracket × 1

An accessories box that includes the following items:

- Tx25 x 50 chipboard screws × 4
- Expansion plugs × 4
- Tx25 x 60 chipboard screws × 2
- M32 cable gland × 1
- M25 cable gland × 1
- M32/M25 gland reducer × 1
- Sealing inserts and blanking plugs

NOTE: The socketed model does not include a Type-2 connector holster and cable tidy kit or a Type-2 to Type-2 charging cable. These items can be acquired separately from the Enphase Store or through your distributor.

5. Tools/Additional items required

The following tools/items are provided by the installer:

- Spirit level
- Pencil
- Tape measure
- Power drill
- Power tool
- Tx25 bit
- Tx20 bit
- Tx10 bit
- 4 mm flathead screwdriver
- Wrench

- Multimeter
- Wire stripper
- Crimping tool

6. Mounting the wall bracket

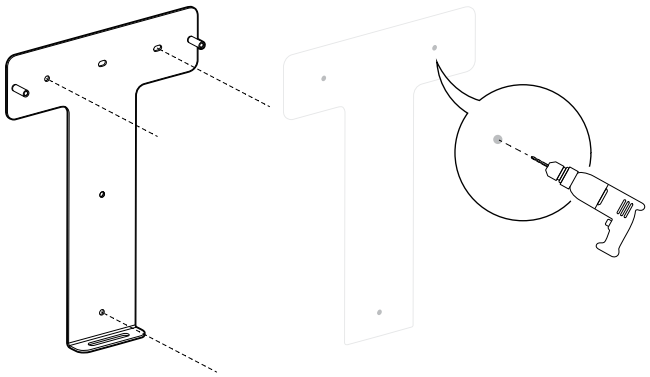
IQ EV Charger 2 can be mounted on a variety of surfaces.

- Mounting on a timber or concrete or brick wall on page 9
- Mounting on a single vertical timber stud on page 10

6.1 Mounting on a timber or concrete or brick wall

To mount on a timber or concrete wall, follow these steps:

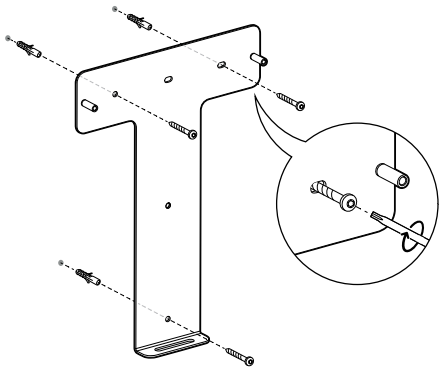
1. Starting at the installation position closest to the power source, mark a level line on the wall as a guide.
2. Using the mounting bracket as a template, mark out three drilling holes.



3. Drill to a minimum depth of 55 mm using an 8 mm diameter drill bit.

WARNING: Multiple risks. Do not drill into or attach to electric wiring or pipes in the wall.

4. Mount the wall bracket to the wall using the provided screws.

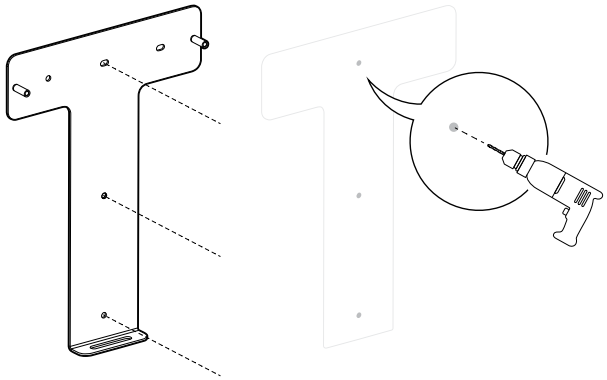


NOTE: Expansion plugs must be inserted into the hole before threading the screws into a concrete or a brick wall.

6.2 Mounting on a single vertical timber stud

To mount on a single vertical timber stud, follow these steps:

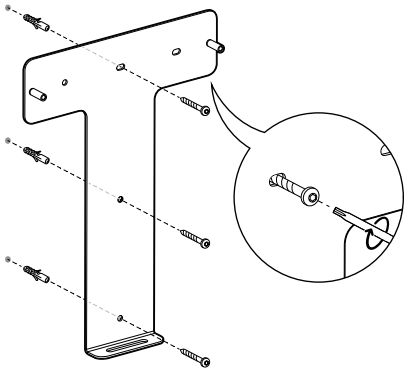
1. Starting at the installation position closest to the power source, mark a level line on the wall as a guide.
2. Using the mounting bracket as a template, mark out three drilling holes.



3. Drill to a minimum depth of 55 mm using an 8 mm diameter drill bit.

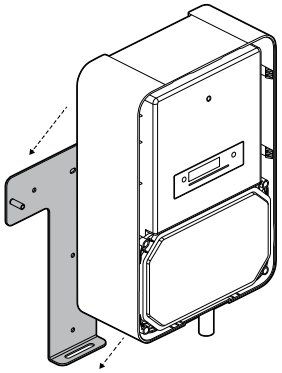
⚠ **WARNING:** Multiple risks. Do not drill into or attach to electric wiring or pipes in the wall.

4. Mount the wall bracket to the wall using the provided screws.

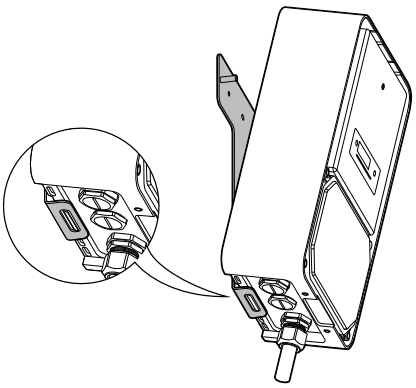


7. Wall-mounting the IQ EV Charger 2

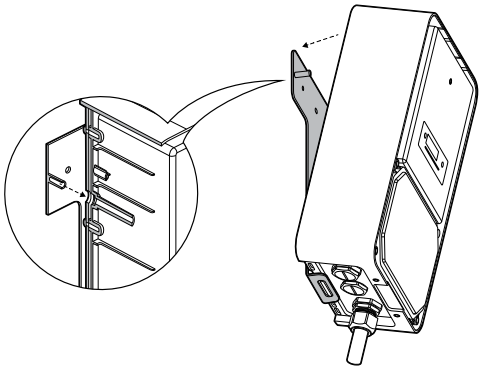
1. Lift and position the IQ EV Charger 2 next to the wall bracket.



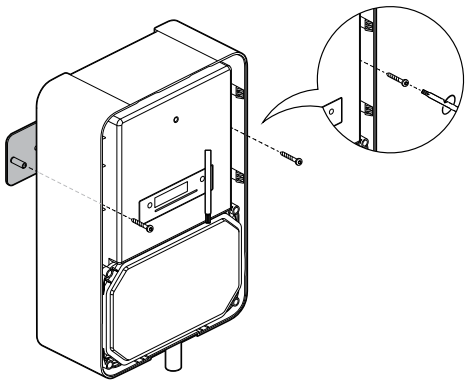
2. Secure the bottom of the charger by inserting the mounting guide protrusion at the bottom of the IQ EV Charger 2 into the corresponding socket on the base of the wall bracket.



3. Insert the charger into the wall bracket. Carefully align the prongs on the left and right sides of the wall bracket with the corresponding gaps on the back of the charger enclosure. Slide the prongs through the gaps until the charger is securely in place.



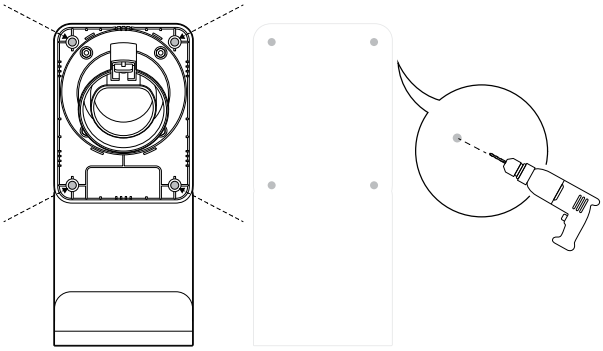
4. Fix the charging station onto the wall bracket using the screws provided—torque to 7 N m.



8. Mounting the connector holster

A Type-2 connector holster is included with the tethered model to keep the charging cable organised and accessible. For the socketed model, it can be purchased separately to enhance cable management and protection.

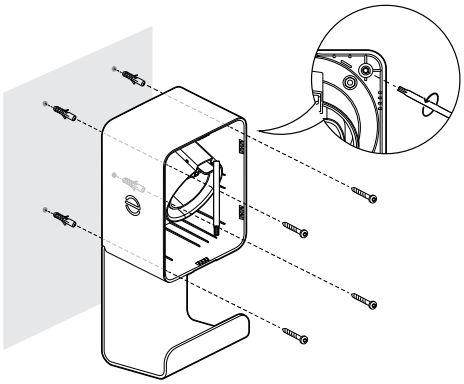
1. Mark a level line on the wall as a guide. Use the holster as a template to mark out drilling holes in the wall.



2. Drill to a minimum depth of 55 mm using an 8 mm diameter drill bit.

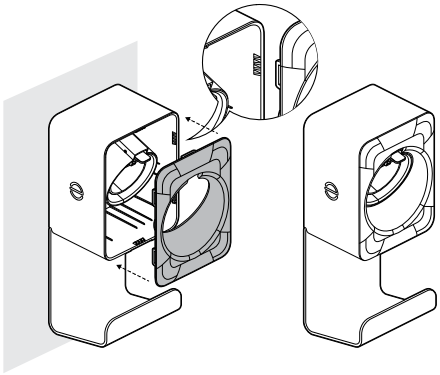
WARNING: Multiple risks. Do not drill into or attach to the electrical wiring or pipes in the wall.

3. Mount the holster to the wall using the provided screws.



NOTE: Expansion plugs must be inserted into the hole before threading the screws into the wooden wall.

4. Close the holster with the aesthetic cover.



9. Power supply wiring

WARNING: Turn off the power at the circuit breaker before connecting any supply wiring to the charger.

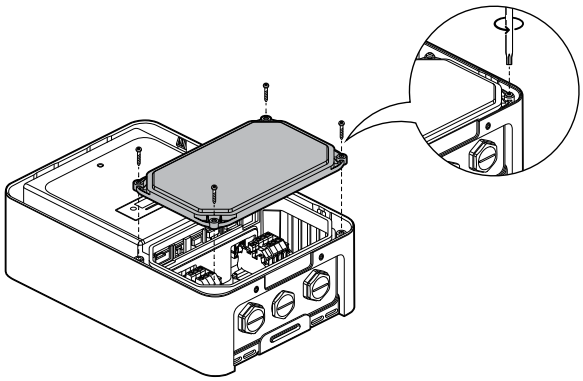
The IQ EV Charger 2 has both a tethered and socketed model. Based on the model, see one of the following topics:

- Supply wiring for the tethered Type-2 model on page 13
- Supply wiring for the socketed Type-2 model on page 15

9.1 Supply wiring for the tethered Type-2 model

9.1.1 Preparation

Access the service panel by removing the four corner screws.

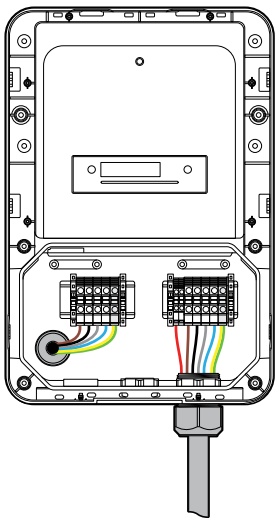


Supply wiring may be routed through two openings in the product. Based on whether the supply wiring will be routed through the rear or the bottom, see one of the following topics:

- Supply wiring through the rear cable entry on page 13
- Supply wiring through the bottom cable entry on page 14

9.1.2 Supply wiring through the rear cable entry

Pierce the sealing grommet with input cables from the rear of the IQ EV Charger 2 and terminate the conductors.



NOTE: The unused cable entry in the middle can be used for Ethernet communication. For more information, see Wiring connections for communication cables on page 20.

NOTE: Torque screws on the terminal block to 1.5 N m.

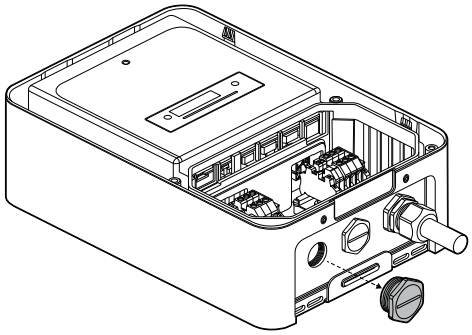
NOTE: Check the torque of all electrical connections, including the factory-made terminations, because they may loosen during transportation.

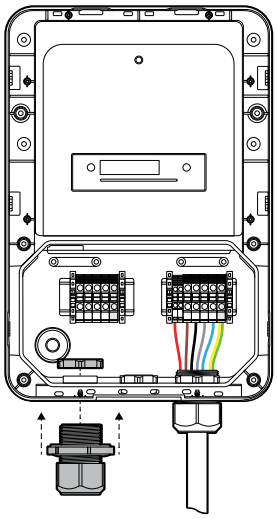
NOTE: To learn how to connect the IQ EV Charger 2 to suit your grid supply and earthing arrangement, see Phase wiring diagrams for grid supply types on page 18.

WARNING: Ensure the charger is installed using protective devices of the appropriate rating. For more information, see the Pre-installation checklist on page 6.

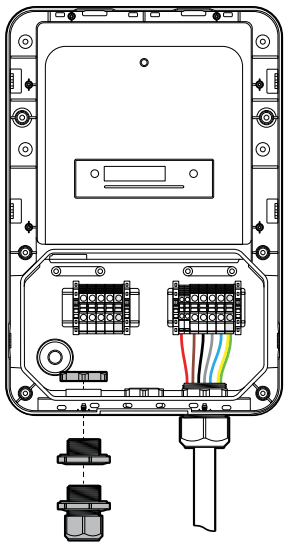
9.1.3 Supply wiring through the bottom cable entry

1. Replace the plug on the input side with the provided M32 cable gland. Torque this gland to 11.3 N m.

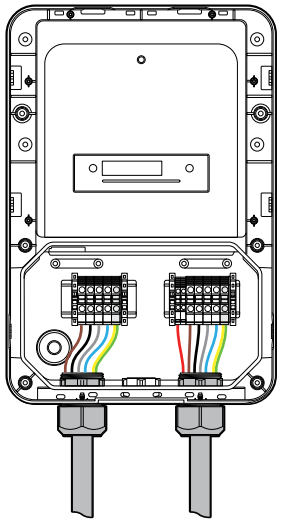




If the charger is being installed in a single-phase configuration, the provided cable gland and M32/M25 reducer can be used instead of the M32 cable gland.



2. Run the power supply wiring through the M32 cable gland and terminate the conductors.



NOTE: The unused cable entry in the middle can be used for Ethernet communication. For more information, see Wiring connections for communication cables on page 20.

NOTE: Torque screws on the terminal block to 1.5 N m.

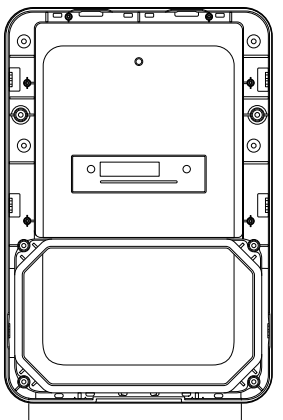
NOTE: Check the torque of all electrical connections, including the factory-made terminations, because they may loosen during transportation.

NOTE: To learn how to connect the IQ EV Charger 2 to suit your grid supply and earthing arrangement, see Phase wiring diagrams for grid supply types on page 18.

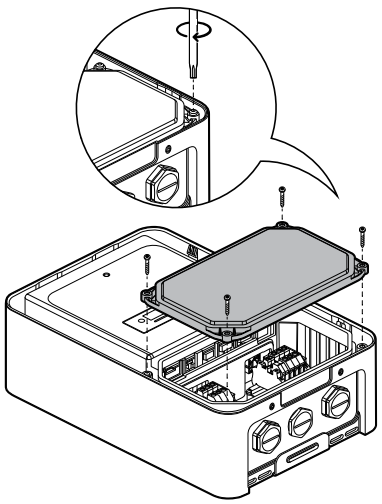
WARNING: Ensure the charger is installed using protective devices of the appropriate rating. For more information, see the Pre-installation checklist on page 6.

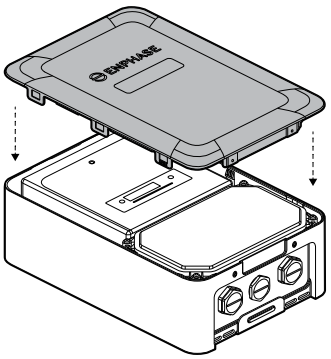
9.1.4 Completing supply wiring

Close the service panel using the four provided corner screws. Torque the screws to 1.8 N m.



Mount the front door with the bigger curved surface at the bottom edge



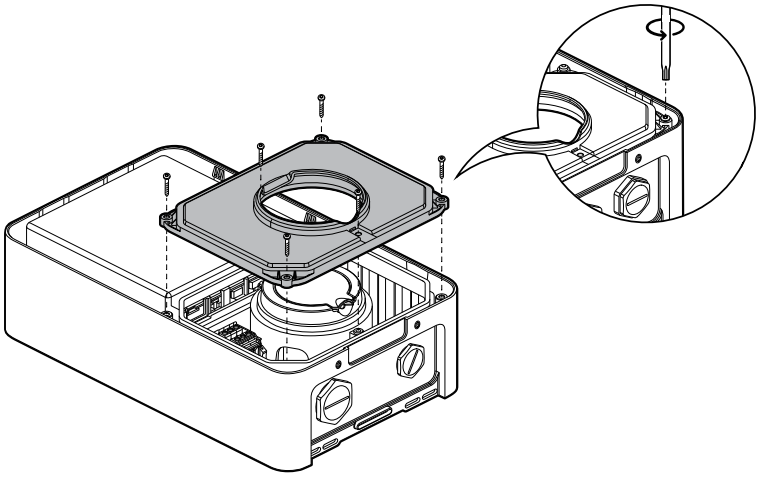


9.2 Supply wiring for the socketed Type-2 model

9.2.1 Preparation

Access the service panel by removing the four corner screws and two inner screws next to the socket.

NOTE: The two screws above and below the socket are longer relative to the four corner screws on the service panel.

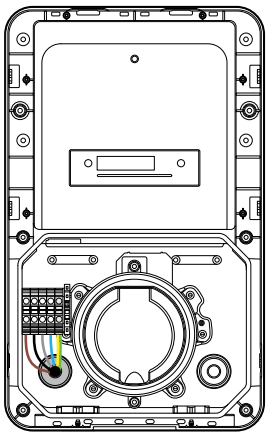


Supply wiring may be routed through two openings in the product. Based on whether the supply wiring will be routed through the rear or the bottom, see one of the following topics:

- Supply wiring through the rear cable entry on page 16
- Supply wiring through the bottom cable entry on page 17

9.2.2 Supply wiring through the rear cable entry

Pierce the sealing grommet with input cables from the rear of the IQ EV Charger 2 and terminate the conductors.



NOTE: The unused cable entry in the middle can be used for Ethernet communication. For more information, see Wiring connections for communication cables on page 20.

NOTE: Torque screws on the terminal block to 1.5 N m.

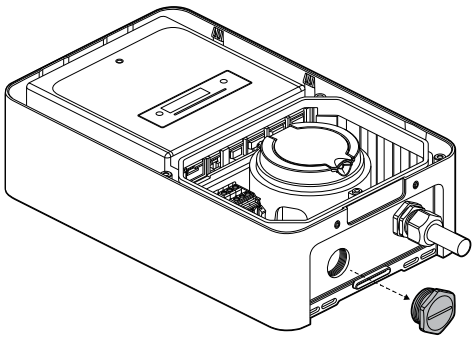
NOTE: Check the torque of all electrical connections, including the factory-made terminations, because they may loosen during transportation.

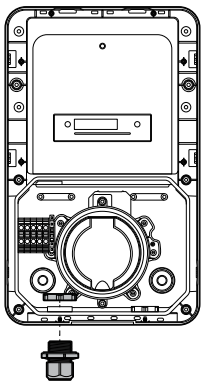
NOTE: To learn how to connect the IQ EV Charger 2 to suit your grid supply and earthing arrangement, see Phase wiring diagrams for grid supply types on page 18.

WARNING: Ensure the charger is installed using protective devices of the appropriate rating. For more information, see the Pre-installation checklist on page 6.

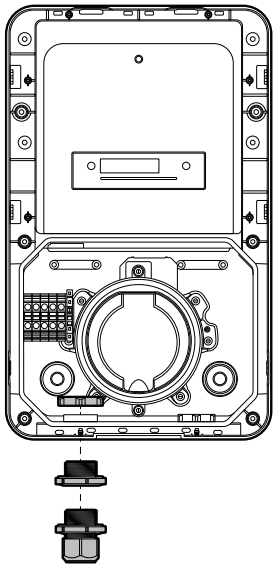
9.2.3 Supply wiring through the bottom cable entry

1. Replace the plug on the input side with the provided M32 cable gland. Torque this gland to 11.3 N m.

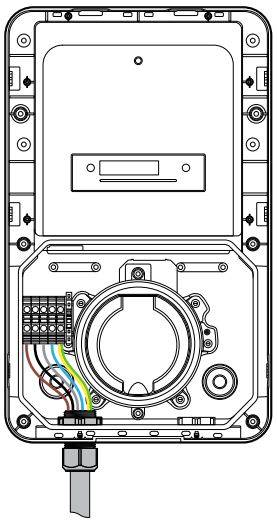




If the charger is being installed in a single-phase configuration, the provided cable gland and M32/M25 reducer can be used instead of the M32 cable gland.



2. Run the power supply wiring through the M32 gland and terminate the conductors.



NOTE: The unused cable entry in the middle can be used for Ethernet communication. For more information, see Wiring connections for communication cables on page 20.

NOTE: Torque screws on the terminal block to 1.5 N m.

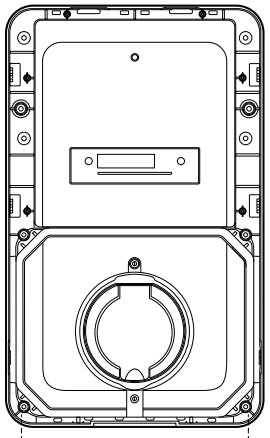
NOTE: Check the torque of all electrical connections, including the factory-made terminations, because they may loosen during transportation.

NOTE: To learn how to connect the IQ EV Charger 2 to suit your grid supply and earthing arrangement, see Phase wiring diagrams for grid supply types on page 18.

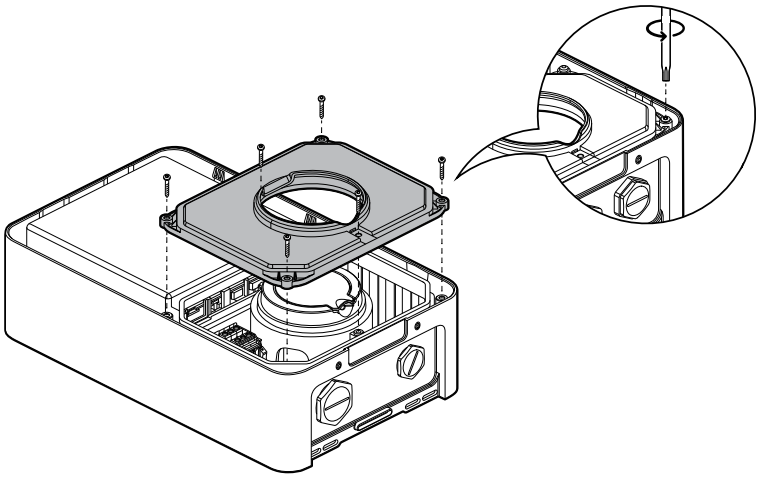
WARNING: Ensure the charger is installed using protective devices of the appropriate rating. For more information, see the Pre-installation checklist on page 6.

9.2.4 Completing the supply wiring

Close the service panel using the four corner screws and two inner screws. Torque the screws to 1.8 N m.



Mount the front door with the bigger curved surface at the bottom edge



9.3 Phase wiring diagrams for grid supply types

The IQ EV Charger 2 must be wired appropriately according to the earthing arrangement of the grid supply and the number of phases connected to the charger. Determine the configuration in which the charger will be installed and refer to the appropriate diagram.

- Grid supply with a TN or TT earthing (with neutral) on page 18
- Grid supply with an IT earthing (without neutral) on page 19

9.3.1 Grid supply with a TN or TT earthing (with neutral)

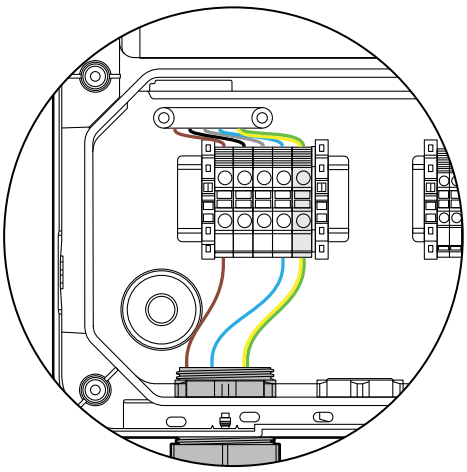


Figure 5: Wiring diagram of single-phase with neutral

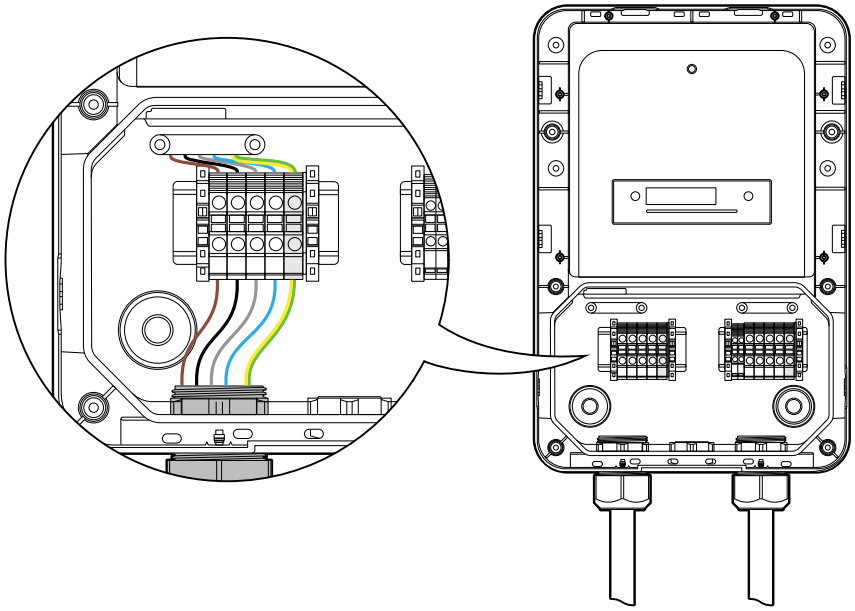
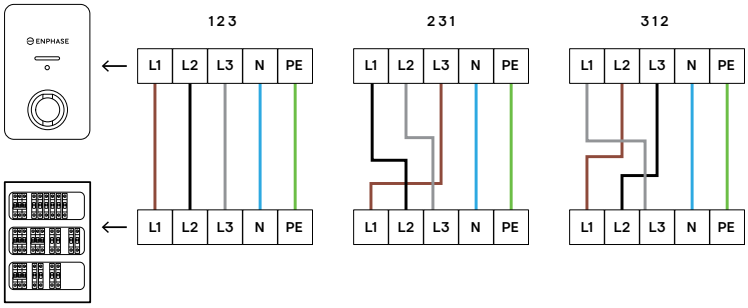


Figure 6: Wiring diagram of three-phase with neutral

NOTE: For three-phase installations with an IQ Gateway, ensure that the phase connected to the L1 terminal of the IQ EV Charger 2 matches the L1 phase of the IQ Gateway Metered.

Phase rotation is recommended for three-phase installations with multiple EV charging points, especially when vehicles that only charge on L1 are involved. This helps to avoid overloading L1. Additionally, capturing phase rotation information during the activation process (see Activating the IQ EV Charger 2 on page 23) is important to ensure accurate consolidation of consumption data.

The following figure shows the recommended phase rotation.



9.3.2 Grid supply with an IT earthing (without neutral)

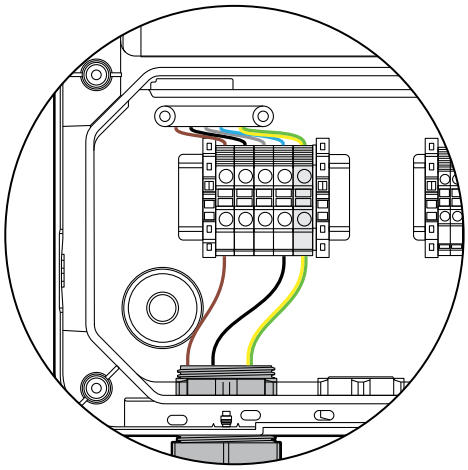


Figure 7: Wiring diagram of two-phase without neutral

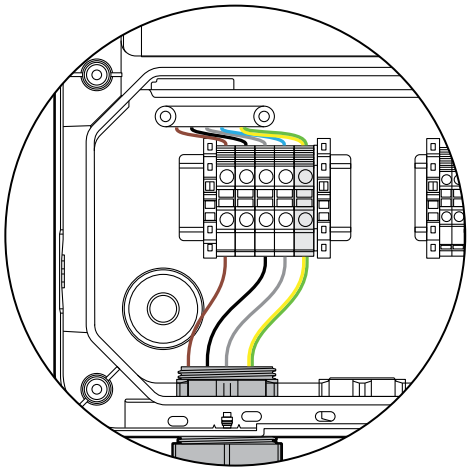
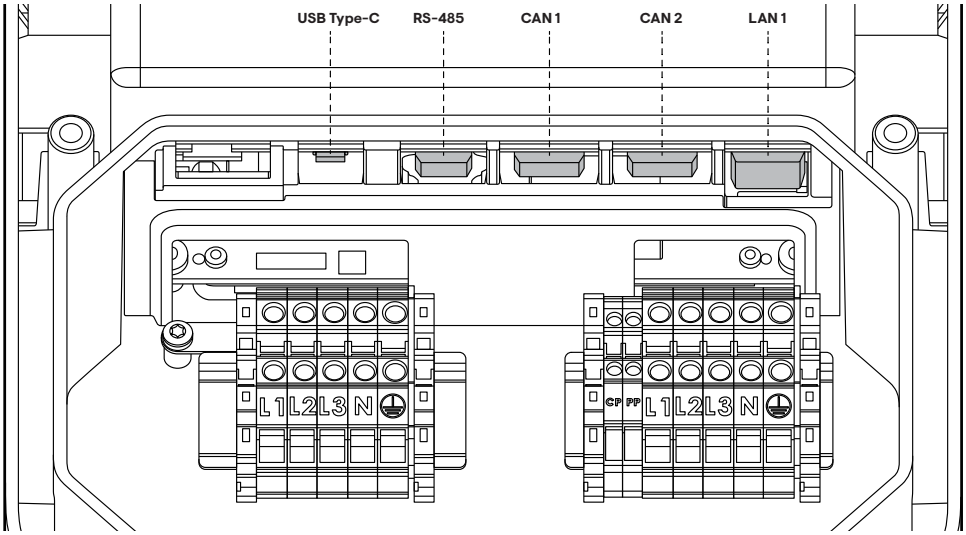


Figure 8: Wiring diagram of three-phase without neutral

10. Wiring connections for communication cables

The IQ EV Charger 2 hardware supports several forms of wired communication, as shown in the following figure.

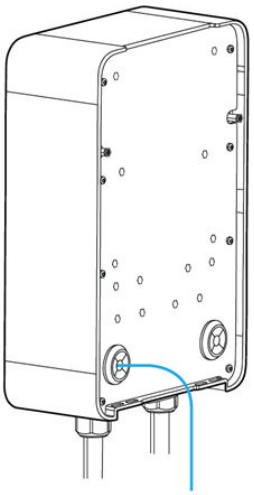


NOTE: CAN support will not be available at the launch.

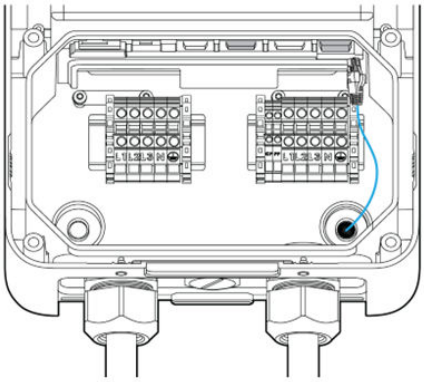
10.1 Wiring connections for the tethered model

10.1.1 Rear entry for the communication cable

1. Remove the head/plug of the Ethernet cable.
2. Pierce the sealing grommet with Ethernet cables from the rear of the IQ EV Charger 2.



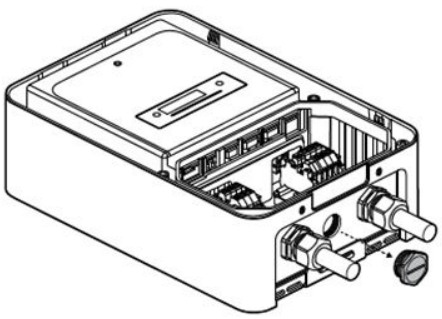
3. Re-crimp the Ethernet head/plug onto the cable.

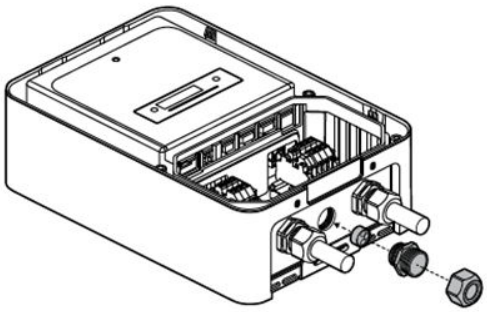


4. Plug the Ethernet cable into the respective LAN1 port on the IQ EV Charger 2.

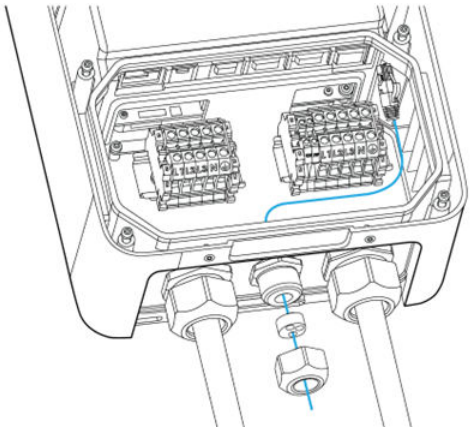
10.1.2 Bottom entry for the communication cable

1. Replace the plug at the bottom with the provided M25 cable gland and sealing insert. Torque the gland to 9 N m.





2. Remove the head/plug of the Ethernet cable.
3. Run the Ethernet cable through the holes in the sealing insert and M25 cable gland.

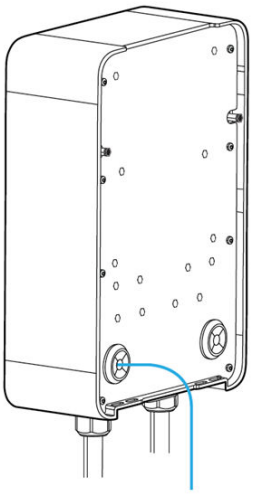


4. Re-crimp the Ethernet head/plug onto the cable.
5. Plug the Ethernet cable into the respective LAN1 port on the IQ EV Charger 2.
6. Use the provided blanking plugs to seal any unused holes of the sealing insert.

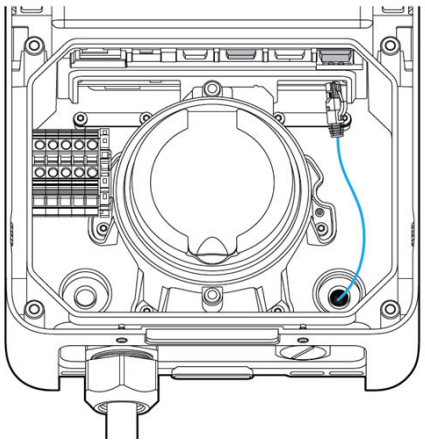
10.2 Wiring connections for the socketed model

10.2.1 Rear entry for the communication cable

1. Remove the head/plug of the Ethernet cable.
2. Pierce the sealing grommet with Ethernet cables from the rear of the IQ EV Charger 2.



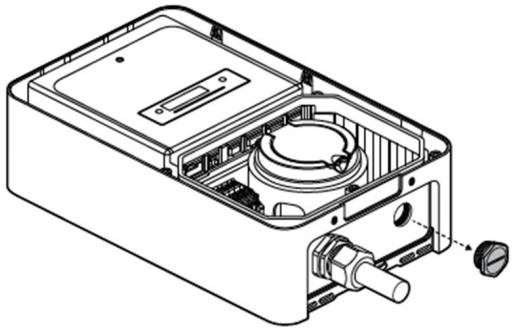
3. Re-crimp the Ethernet head/plug onto the cable.



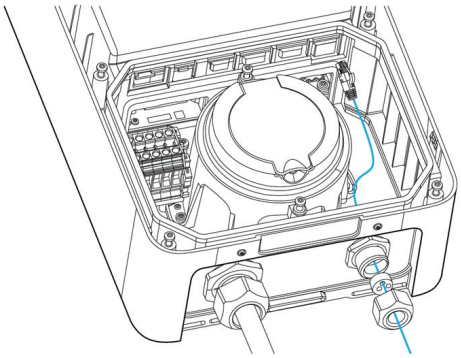
4. Plug the Ethernet cable into the respective LAN1 port on the IQ EV Charger 2.

10.2.2 Bottom entry for the communication cable

1. Remove the plug at the bottom of the unit.



2. Replace the plug with the provided M25 cable gland and sealing insert. Torque the gland to 9 N m.
3. Remove the head/plug of the Ethernet cable.
4. Run the Ethernet cable through the holes in the sealing insert and M25 cable gland.



5. Re-crimp the Ethernet head/plug onto the cable.
6. Plug the Ethernet cable into the respective LAN1 port on the IQ EV Charger 2.
7. Use the provided blanking plugs to seal any unused holes of the sealing insert.

11. Activating the IQ EV Charger 2

The IQ EV Charger 2 can be activated (commissioned) through the Enphase Installer App or the Enphase App. Activating the charger unlocks its smart features, including dynamic power adjustment to prevent overloading the main supply, AI-based optimisation for charging when electricity rates are lowest, and access control to prevent unauthorised usage. You can use the IQ EV Charger 2 without activation, though doing so limits its smart features.

The device requires internet access through Ethernet or Wi-Fi (configured during activation) to complete the activation.

11.1 Activation through the Enphase Installer App

NOTE: The Enphase Installer App is available primarily for Enphase-certified installers who have completed the Enphase training. If you want to become an Enphase-certified installer and join our network, visit https://enphase.com/installers/training/getting-started.

1. Download the version 4.4.0 Enphase Installer App from the App Store or Google Play.
2. Log in to your installer account using the account details.
3. Ensure that the white LED on the charger is illuminated before beginning the commissioning process.

NOTE: If you see a red LED at this step, double-check that the charger is properly grounded and that the phase wiring is connected to the correctly labelled phase terminals on the charger.

4. Follow the on-screen instructions and refer to the FAQs for further assistance in completing the activation.

11.2 Activation through the Enphase App

NOTE: The activation process involves technically intensive installation details that should only be addressed by a competent electrician. The homeowner must collaborate with the electrician to correctly complete the activation and setup process to ensure safe and correct operation. For more information, see the *IQ EV Charger 2 commissioning guide for electricians and homeowners*.

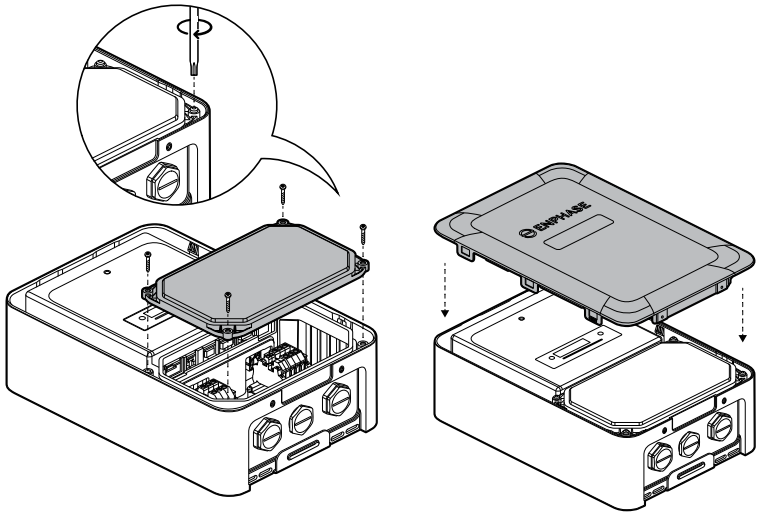
1. Download the version 4.0 Enphase App from the App Store or Google Play.
2. Have the homeowner create an account or log in to an existing Enphase Account with their account details.
3. Ensure that the white LED on the charger is illuminated before beginning the commissioning process.

NOTE: If you see a red LED at this step, double-check that the charger is properly grounded and that the phase wiring is connected to the correctly labelled phase terminals on the charger.

4. Follow the on-screen instructions and refer to the FAQs for further assistance in completing the activation.

12. Finishing the installation

1. After the activation of the charger, snap the aesthetic cover onto the front of the enclosure.
2. Secure the cover onto the enclosure at the bottom of the unit using the two provided M3 screws—torque to 0.6 N m.



3. Turn on the power to the breaker.

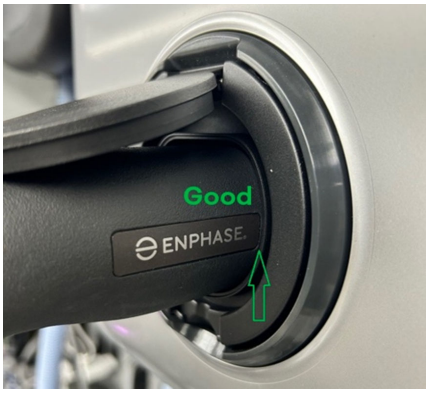
13. Post-installation checklist

- The device will display a **green LED indicator** after commissioning is complete. If the device has not been activated, the LED will remain **white**.
- Ensure that any unused cable entry points are sealed with the provided plugs to maintain weather integrity.

NOTE: This charger contains tamper-proof labels and sealed electronics. Any tampering or removal of these labels or seals will void the product's warranty.

- The socketed model is equipped with a **Type-2 shuttered socket** to prevent accidental contact with live terminals. The shuttered socket opens by applying slight pressure when inserting the Type-2 plug. The notch on the front of the connector aligns with the socket, ensuring a secure connection.
- Ensure the connector is fully inserted into the socket. Some friction may be encountered, and additional pressure might be required to ensure a complete connection.





NOTE: When properly connected, the Enphase logo on the connector should sit flush against the surface of the shuttered socket.

- The LED bar will change from static green to blue when the charger detects that the electric vehicle (EV) is correctly connected. If the EV is not correctly connected, the LED remains static green or white.

14. Device status

14.1 MID meter display

The IQ EV Charger 2 includes an integrated MID meter and display. Upon power-up, the device shows the MID firmware version and CRC, as required for MID compliance, followed by the charger's lifetime energy consumption—each displayed for 5 seconds before the screen goes blank. The display reactivates during an ongoing charging session, showing values in the following sequence.

Display value	Voltage (per phase)	Current (per phase)	Power (total)	Session energy
Duration	2 seconds	2 seconds	2 seconds	9 seconds

14.1.1 Requirements to be adopted for users of the charging equipment and users of the measured values

Requirements for users of the charging equipment

The user of the charging device is its operator, in accordance with the MessEG, clause 31, within the meaning of the Charging Station Regulation. The user only uses the charging device in compliance with the calibration law and in accordance with its intended use if he complies with the requirements and conditions imposed upon him in these operating instructions.

For this reason, the manufacturer will provide the following information together with the operating instructions:

Notes on accuracy of measurement according to type examination certificate I

Conditions for the operator of the charging device, which the operator must fulfil as a necessary prerequisite for the intended operation of the charging device.

The operator of the charging device is the user of the measuring device in the sense of § 31 of the MessEG.

1. The charging equipment is only considered to be used in accordance with and in compliance with the legal metrology regulations if it is not exposed to environmental conditions other than those for which its type examination certificate was issued.
2. When registering the charge points with the Federal Network Agency, the user of this product must also register the PK specified on the charging column for the charge points in their registration form! Without this registration, operation of the charging station in compliance with calibration regulations is not possible.

   Weblink: https://www.bundesnetzagentur.de/DE/Sachgebiete/ElektrizitaetundGas/Unternehmen_Institutionen/HandelundVertrieb/Ladesaeulen/Anzeige_Ladepunkte_node.html
3. The user of this product must ensure that the reverification period for the components in the charging device and for the charging device itself is not exceeded.
4. The user must permanently store the signed data packets read out from the charging device - in accordance with the pagination, (also) on hardware dedicated for this purpose in his possession ("dedicated memory"), - keep them available for authorised third parties (operation obligation for the memory). Permanently means that the data must be stored not only until the conclusion of the business transaction, but at least until the expiry of possible statutory appeal periods for the business transaction. For billing purposes, no substitute values may be formed for non-existent data.
5. The user of this product shall provide an operating manual in electronic format to users of measured values who receive these measured values from this product and use them in business transactions. In doing so, the user of this product must refer in particular to No. II "Requirements for users of measured values from the charging device".
6. The user of this product is subject to the obligation to notify according to § 32 MessEG (excerpt):

   § 32 Obligation to notify (1) Anyone who uses new or renewed measuring instruments must notify the authority responsible under state law no later than six weeks after commissioning.
7. To the extent deemed necessary by relevant authorities, the complete contents of the dedicated local memory or the memory present at the charge point operator, including all data packets of the billing period, must be made available by the user of the measuring device.

Requirements for users of the measured values

The user of the measured values from the charging device is, in accordance with § 33 of MessEG, the party to whom the customer owes payment for the supply of electrical energy received at the charging device, i.e., the Electro-Mobility Service Provider (EMSP). The EMSP will only be using the measured values in compliance with the calibration law if it complies with the requirements and conditions imposed upon it in these operating instructions.

For this reason, the manufacturer will attach the following information to the operating instructions:

II Requirements for users of measured values from the charging device (EMSP)

The user of the measured values must comply with § 33 of the MessEG:

§ 33 MessEG (citation)

§ 33 Requirements for the use of measured values

(1) Values for measured variables may only be specified or used in business or legal transactions or for measurements in the public interest if a measuring device was used as intended and the values can be traced back to the respective measurement result, unless otherwise stipulated in the statutory ordinance pursuant to Section 41 number 2. Other federal regulations that serve comparable protective purposes continue to apply.

(2) Anyone who uses measured values must ensure, within the scope of their possibilities, that the measuring device meets the legal requirements and must have the person using the measuring device confirm that they are fulfilling their obligations.

(3) Whoever uses measured values must

1. Ensure that invoices, insofar as they are based on measured values, can easily be traced by the party for whom the invoices are intended in order to check the measured values given, and
2. If necessary, provide suitable aids for the purposes specified in number 1.

For the user of the measured values, this regulation gives rise to the following specific obligations regarding the use of measured values in accordance with calibration law:

1. The contract between EMSP and customers must clearly state that the subject of the contract is only the supply of electrical energy and not the duration of the charging service.
2. The time stamps on the measured values come from a clock in the charging column that is not certified according to measurement and calibration law. They must therefore not be used for the purpose of tariffing the measured values.
3. EMSP must ensure that the electromobility service is sold using charging devices that enable monitoring of the ongoing charging process if there is no corresponding local display on the charging device. At least at the beginning and at the end of a charging session, the measured values must be available to the customer in a trustworthy manner.
4. The EMSP must make the billing-relevant data packages available to the customer at the time of billing, including the signature, as a data file in such a way that they can be checked for integrity using the transparency and display software. These can be provided via channels that have not been checked under the calibration law.
5. The EMSP must make available to the customer the transparency and display software associated with the charging device to check the integrity of the data packets.
6. The EMSP must be able to show in a verifiable manner which means of identification was used to initiate the charging process associated with a specific measured value. This means that it must be able to prove for every business transaction and billed measured value that it has correctly assigned the personal identification data to them. The EMSP must inform its customers of this obligation in an appropriate manner.
7. The EMSP may only use values for billing purposes that are available in a dedicated memory that may be available in the charging facility and/or in the memory of the operator of the charging facility. It is not permitted to create substitute values for billing purposes.
8. The measuring capsule is able to detect an error in the form of a difference in the meter register readings between charging processes. This error is displayed as the status term "meter reading difference" in the transparency software. The EMSP must monitor and evaluate this status term and must not use values for billing purposes for which a "meter reading difference" occurs. This also includes the charging process that precedes the process in which this "meter reading difference" was detected.
9. The EMSP must make appropriate agreements with the operator of the charging facility to ensure that the data packets used for billing purposes are stored for a sufficient period of time in order to be able to fully complete the associated business processes.
10. In the event of a justified notification of need for the purpose of carrying out verifications, diagnostic tests, and use of monitoring measures, the EMSP must provide suitable means of identification to enable authentication on the specimens of the product belonging to these operating instructions, used by them.
11. All of the above obligations apply to the EMSP as the meter user within the meaning of Section 33 MessEG, even if it obtains the meter readings from the charging facilities via a roaming service provider.

14.2 LED pattern of an uncommissioned device

LED color	LED sequence	Device status
Green	Laser pattern—left to right	Powering on
White	Static ON	No EV is connected
Blue	Static ON	Ready to charge, not currently charging
Blue	Fading in and out	EV charging in progress
Red	All LEDs indefinitely blinking ON/OFF	Fault/Error

14.3 LED pattern of an activated device

LED color	LED sequence	Device status
Green	Static ON	No EV connected
Green	First, middle, and last LED ON	Locked
White	Static ON	Network connectivity lost
Yellow	Boomerang—left to right, right to left	Activation in progress
Green	Static ON for 5 seconds	Activation/Update successful
Red	Blinking ON/OFF for 5 seconds	Activation/Update failed
Purple	Laser pattern—left to right	OTA update in progress
Green	Boomerang—left to right, right to left	Waiting for authorisation

LED color	LED sequence	Device status
Blue	Static ON	Ready to charge, not currently charging
Blue	Fading in and out	EV charging in progress
Green	Droplet pattern from the middle outwards	Charging authorised, but the device is not ready to charge
Red	All LEDs indefinitely blinking ON/OFF	Fault/Error

15. Accessories

Enphase offers various accessories compatible with the IQ EV Charger 2, available for purchase at https://enphase.com.

SKU	Description
TYPE2-CABLE-7.5M-32A-3P-WIRED	Three-phase, 32 A, Type-2 connector cable for tethered IQ EV Charger 2
TYPE2-CABLE-7.5M-32A-3P-SOCKET	Three-phase, 32 A, Type-2 connector cable for socketed IQ EV Charger 2
TYPE2-CONN-HOLSTER-EN	Enphase Type-2 connector holster with integrated cable management
IQ-EVSE-EU-INSTALL-KIT	Kit with all hardware required for the installation of the IQ EV Charger 2

16. Specifications

Electrical specifications	IQ-EVSE-EU-3032-0005-1300 IQ-EVSE-EU-3032-0005-1320		IQ-EVSE-EU-3032-0105-1300 IQ-EVSE-EU-3032-0105-1320	
Model name	IQ EV Charger 2 (socketed, three-phase/single-phase) IQ EV Charger 2 Eichrecht (socketed, three-phase/single-phase)		IQ EV Charger 2 (tethered, three-phase/single-phase) IQ EV Charger 2 Eichrecht (tethered, three-phase/single-phase)	
Nominal voltage (±15%)	400 V 3 × 230 V	230 V	400 V 3 × 230 V	230 V
Nominal frequency	50 Hz			
Maximum charging power (configurable[1])	Up to 22 kW (three-phase Wye) Up to 12.7 kW (three-phase Delta)	Up to 7.4 kW (single-phase)	Up to 22 kW (three-phase Wye) Up to 12.7 kW (three-phase Delta)	Up to 7.4 kW (single-phase)
Earthing arrangement	TN, TT, or IT			
Rated output current	32 A per phase			
Provided cable gland size	M32 gland (15–25.4 mm)	M25 gland (11–17.9 mm)	M32 gland (15–25.4 mm)	M25 gland (11–17.9 mm)
Socket or connector	Type-2 shuttered socket		7.5 m Type-2 connector cable	
Charging equipment components				
7.5 m Type-2 charging cable	Sold separately		Included	
Cable and connector holster	Sold separately		Included	

[1] For example, to limit the maximum charging power for a three-phase charger to 11 kW, configure the maximum charging current to 16 A at the time of commissioning.

Mechanical specifications		
Enclosure dimensions (L × W × D)	410 mm × 250 mm × 128 mm	370 mm × 250 mm × 118 mm
Weight	6 kg	11 kg (including the tethered charging cable)
Enclosure rating	IP55/IK10	
Supply cable entry options	Bottom or rear entry	

Environmental specifications	
Relative humidity range	5% to 95% (condensing)
Altitude	<2500 m
Operating temperature	–40°C to 55°C
Storage temperature	–40°C to 80°C

Communication options	
Wireless network	2.4/5 GHz Wi-Fi (802.11ax)
Bluetooth	BT/BLE 5.3
Cellular	4G LTE
Wired communication	Ethernet, RS-485, CAN
ISO 15118-20	Yes (software and hardware supported)
Meters supported	Linky (TIC protocol), P1 (DSMR 4.x and 5.0), and HAN

Features	
LED indicator	Animated line LED with RGB colours to indicate the state of the EV charger
MID meter display	Display voltage, current, and energy (kWh) consumption of the EV charger
Smart scheduling	Optimises charging with dynamic tariff rates and excess solar power
Self-consumption[2]	Charge EV on clean energy from the sun by using excess solar power with an Enphase Energy System
Smart charging	Automatically optimises EV charging based on departure time and driving range for lower costs and cleaner energy.
Automatic phase-switching[3]	Automatically switches between three-phase and single-phase to optimise charging from excess PV
Authentication	Available via the Enphase App RFID/NFC (ISO 14443 A/B or ISO 15693, 13.56 MHz)
Integration support	OCPP 1.6J, OCPP 2.0.1 API—Cloud, local MODBUS TCP

Safety and compliance	
Compliance	CE (LVD EU/2014/35, EMC Directive EU/2014/30, RED EU/2014/53, RoHS 3.0, REACH, IEC/EN 61851-1, IEC/EN 61851-21-2, IEC/EN 62196-1, IEC/EN 62955 (RDC-DD), IEC 61439-7, IEC/EN 60364-4-41), MID (EN 50470-1, EN 50470-3), RED DA (EN 18031), REA 6-A, PTB-A 50.7, and EV Ready
Product certification	MessEG/MessEV compliant billing ensures accurate, transparent, and legally valid per-kWh billing in Germany (Applicable SKUs: IQ-EVSE-EU-3032-0005-1320, IQ-EVSE-EU-3032-0105-1320)
Safety features	Overvoltage protection (265 V), RDC-DD (±6 mA), relay weld detection, overcurrent detection (+20%)
In-built sensors	Ambient light sensor, temperature sensor, humidity sensor, and tilt sensor
Metering accuracy	±1% (Class-B, MID-certified)

[2] Currently supported for a single IQ EV Charger 2.

[3] Applicable for three-phase SKUs only.

Safety and compliance	
Insulation category	Class 1[4]

Warranty	
Warranty duration	5 years

17. Safety information

IMPORTANT SAFETY INFORMATION. KEEP THIS DOCUMENT FOR FUTURE REFERENCE.

This guide contains important instructions you must follow during the installation and maintenance of the Enphase IQ EV Charger 2. Failing to follow any of these instructions may void the warranty (https://enphase.com/warranty).

Safety and advisory symbols

DANGER: This indicates a hazardous situation, which, if not avoided, will result in death or serious injury.

WARNING: This indicates a situation where failure to follow instructions may be a safety hazard or cause equipment malfunction. Use extreme caution and follow instructions carefully.

NOTE: This indicates information that is very important for optimal system operation. Follow instructions closely.

Safety instructions

DANGER: Risk of electric shock. Risk of fire. Do not attempt to repair or service the IQ EV Charger 2 alone. Only a certified electrician shall install, troubleshoot, or otherwise service the IQ EV Charger 2.

DANGER: Risk of electric shock. Do not use Enphase equipment in a manner not specified by the manufacturer or in the quick install guide (QIG). Doing so may cause death or injury to persons or damage to equipment.

DANGER: Risk of electric shock. Always de-energise the AC branch circuit during an emergency and/or before servicing the IQ EV Charger 2.

DANGER: Risk of electric shock. Do not place fingers or foreign objects inside the coupler end of the Type-2 connector.

DANGER: Risk of electric shock. Risk of fire. If using a converter accessory (adapter), ensure that it is appropriately rated and compatible with your EV and the IQ EV Charger 2.

DANGER: Risk of electric shock. Do not allow children to operate this device. Adult supervision is mandatory when children are in proximity to an IQ EV Charger 2 that is in use.

WARNING: Do not install or use the IQ EV Charger 2 or its components that have been damaged in any way.

WARNING: You must install the IQ EV Charger 2 only on a suitable wall or pedestal mount (Enphase accessory) using the provided mounting bracket.

WARNING: The IQ EV Charger 2 is intended only for charging electric vehicles that do not require ventilation while charging.

WARNING: Only use the IQ EV Charger 2 with electric vehicles that have an IEC 62196 Type-2 (Mennekes) charge port. Refer to the vehicle owner's manual to determine if the vehicle is equipped with the correct charge port.

WARNING: Ensure the charging cable is positioned so as not to be stepped on, tripped over, or subjected to damage or stress.

WARNING: DO NOT operate the IQ EV Charger 2 or attempt to use the Type-2 connector if it is physically open, cracked, frayed, or otherwise visibly damaged. Immediately contact Enphase Support for service, referring to the Enphase Support section in this manual.

NOTE: Perform installation and wiring, including protection against lightning and resulting voltage surges, following all applicable local electrical codes and standards.

NOTE: Install correctly rated overcurrent protection as part of the system installation.

NOTE: To ensure optimal reliability and to meet warranty requirements, the IQ EV Charger 2 must be installed and/or stored according to the instructions in this guide.

[4] The EV charger has been qualified for the insulation resistance test as per IEC 60068-2-78 with 500 VDC. But due to the presence of the overvoltage protection component, the insulation testing shall be performed on the finished product only at 250 VDC.



Disposal

In accordance with European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in national law, used electrical devices must be collected separately and recycled in an environmentally responsible manner. Ensure that you return your used device to your dealer or obtain information regarding a local, authorised collection and disposal system. Failure to comply with this EU Directive may result in a negative impact on the environment.

Instructions pertaining to the risk of fire or electric shock

- Use the electric vehicle (EV) charging point only with electric vehicles that have an IEC 62196 Type-2 (Mennekes) charge port. Refer to the vehicle owner's manual to determine if the vehicle is equipped with the correct charge port.
- Ensure the charging cable is positioned so as not to be stepped on, tripped over, or subjected to damage or stress.
- **DO NOT** operate the EV charging point or attempt to use the Type-2 connector if it is physically open, cracked, frayed, or otherwise visibly damaged. Immediately contact Enphase Support for service.
- **DO NOT** place fingers inside the coupler end of the Type-2 connector.
- If using a converter accessory (adapter), ensure that it is appropriately rated and compatible with both your EV and this EV charging point.
- **DO NOT** allow children to operate this device. Adult supervision is mandatory when children are in proximity to an EV charging point that is in use.
- Using the EV charging point outside the conditions specified in this product's technical documentation may result in undesired consequences.
- **DO NOT** attempt to repair or service the EV charging point on your own. Only a qualified electrician is permitted to install, service, repair, or relocate the EV charging point.

Additional safety information



WARNING: Turn off the input power to the electric vehicle supply equipment (EVSE) at the circuit breaker panel before servicing or cleaning the unit.

18. Corporate headquarters contact information

Enphase Energy, Inc.
Het Zuiderkruis 65, 5215 MV 's-Hertogenbosch, The Netherlands
Ph: +31 852 082 305

To view the latest version of the product warranty, see https://enphase.com/warranty.

To view the latest version of the product user manual, scan the following QR code.

This documentation has undergone a thorough review before being published and contains the most updated information at the time of release. Enphase Energy, Inc. reserves the right to make changes to this product without further notice. Changes or modifications to this product by other than an authorised service facility may void the product warranty. Enphase Energy, Inc. does not assume any liability for damage or defects, in the broadest sense, from or related to the use or interpretation of this document.

19. Revision history

Revision	Date	Description
140-00515-01	May 2026	• Removed the references of the SKUs "IQ-EVSE-EU-3032-0005-1400; IQ-EVSE-EU-3032-0105-1400" and added the Eichrecht SKUs "IQ-EVSE-EU-3032-0005-1320; IQ-EVSE-EU-3032-0105-1320". • Added a new subsection "NMI installation guide" valid for Eichrecht SKUs.
	January 2026	Updated the "Pre-installation checklist", "Power supply wiring", "Wiring connections for communication", "Activating the IQ EV Charger 2", "Finishing the installation", and "Specifications" sections.
	November 2024	Initial release.

Enphase Support: https://enphase.com/contact/support.

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140-00515-01-EN-2026-05-29
Applicable regions: Europe

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