# Enphase Mobile Connect quick install guide - EN

(CELLMODEM-07-NA-05)

# SAFETY

**IMPORTANT SAFETY INSTRUCTIONS.**
**SAVE THIS INFORMATION.**

Follow all safety and assembly instructions when installing the Enphase Mobile Connect.

## Safety instructions

| | |
|---|---|
| ⚠ | **DANGER:** Risk of electric shock. Risk of fire. Do not attempt to repair the Enphase Mobile Connect; it contains no user-serviceable parts. Tampering with or opening the Enphase Mobile Connect will void the warranty. Warranty void if cover removed. If the Enphase Mobile Connect fails, contact Enphase Support for assistance (https://enphase.com/contact/support). |
| ⚠ | **DANGER:** Risk of electric shock. Do not use Enphase equipment in a manner not specified by the manufacturer. Doing so may cause death or injury to persons or damage to equipment. |
| ⚠ | **WARNING:** Perform all installations following all national and local regulations regarding the use of radio equipment. |
| ⚠ | **WARNING:** This cellular device may cause interference with other electronic equipment if the equipment is inadequately protected. |
| ⚠ | **WARNING:** Follow restrictions imposed for any environment in which the device may operate, such as fuel depot, chemical plants, or where blasting operations are in process. |

## Overview

The Enphase Mobile Connect (CELLMODEM-07-NA-05) provides internet connectivity to the IQ Gateway and the

IQ Combiner 5. It is shipped by default in the IQ Combiner 5C. While it is not shipped with the IQ Combiner 3 and IQ Combiner 4 variants, it can mechanically fit into both enclosures, ensuring backward compatibility. This unit has a 5-year warranty and is sold with a data pack for 5 years from installation.

The report setting for an IQ Gateway with The Enphase Mobile Connect is low bandwidth mode, which transmits data to the Enphase App four times daily. The transmission times occur within a five-minute window, at 3 a.m. (03:00), 9 a.m. (09:00), 3 p.m. (15:00), and 9 p.m. (21:00). After transmission, the data may take several minutes to display in the Enphase Installer Platform.

⚠ **WARNING:** Ensure all devices are powered down if installed for the first time.

## Kit contents

The following items are available as part of the box:

- Mobile Connect with a SIM card pre-installed
- USB cable
- Mounting bracket and two mounting rivets
- QIG
- External antenna

## Preparation checklist

The following items are required for the installation:

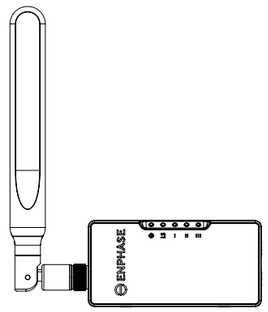
1. Tools:
   a. One screwdriver
   b. Two M4 screws for securing the mounting bracket (in case of not installing it in an Enphase IQ Combiner)
2. Ensure that the IQ Gateway is on version 8.2.36x. If the IQ Gateway is at a lower software version, upgrade the software version before installation.
3. Enphase Installer App version 4.3 or later is recommended, though not mandatory.
4. If the modem is used with an IQ Gateway, place the modem and the IQ Gateway inside an enclosure rated NEMA 3R or higher.
5. If the modem is used with an IQ Gateway, turn off the IQ Gateway before installation.

## Installation steps

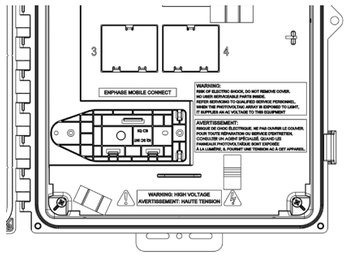
Perform the following steps to install Mobile Connect:

**Inside IQ Combiner series**

1. Screw the antenna to the SMA connector on the Mobile Connect.

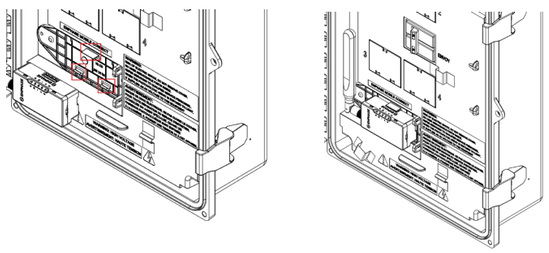



2. Line up the mounting holes on the mounting bracket and the dead front and secure them in position using the mounting rivets. The following figure shows the slot in an IQ Combiner. If you are installing in another enclosure, find an appropriate location with sufficient space for the antenna.




3. Place the Mobile Connect on the mount in the position shown in the following figure.

✓ **NOTE:** Align the Mobile connect modem along the shorter hooks and snap down the longer hook.



4. Connect the USB cable provided with the package to the Mobile Connect.
5. Connect the other end of the USB cable to the IQ Gateway.
6. The device is fully operational, and the LEDs shall glow once the IQ Gateway powers on.

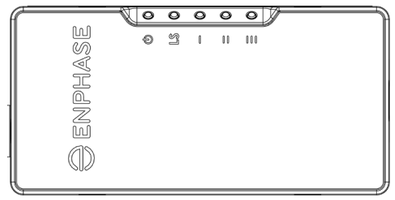
**Mount the Modem on a Flat Surface**

You can also rest the modem on a flat, stable surface with the status LEDs in a visible position.

## Mobile Connect status LEDs

The Mobile Connect has the following status LEDs

- Power ( )
- Link Status (LS)
- Signal




The following tables list the LED indicator status. LEDs may be difficult to see if you view them from an angle. View the LEDs straight on.

**Power**

| LED | Indicates |
|---|---|
| Off | DC power via USB is not present |
| On | DC power via USB is present |

**Link**

| LED | Indicates |
|---|---|
| Flashing slowly (200 ms high/1800 ms low) | Searching for network |
| Flashing slowly (1800 ms high/200 ms low) | Idle |
| Flashing quickly (125 ms high/125 ms low) | Data transfer in progress |

**Signal**

| LED | Indicates | |
|---|---|---|
| | All off | Very weak signal |
| | Bar 1 ON | Weak signal |
| | Bar 1 and 2 ON | Good signal |
| | Bar 1, 2, and 3 ON | Very good signal |

**Troubleshooting**

| Issue | Action |
|---|---|
| No communication with the Enphase Installer Platform after connecting the Mobile Connect to the IQ Gateway. | 1. Disconnect the USB cable.<br>2. Power cycle the IQ Gateway.<br>3. Wait until the IQ Gateway boots completely.<br>4. Reconnect the cellular modem USB cable. |
| I want to disconnect the Mobile Connect and use it at a different site. | Moving the Mobile Connect to a different IQ Gateway deactivates the Mobile Connect. Contact Enphase Support if you need to reinstall the Mobile Connect at a different site. |

## Commissioning

When installing on a site, the Enphase Installer App will direct you to wait for 1 minute before moving ahead. This is to ensure that there is an adequate signal. Enphase Mobile Connect (CELLMODEM-07) smartly switches between multiple operators to ensure there is good connectivity. If there is not enough signal connectivity, the Enphase Installer App might direct you to connect to Wi-Fi or install an extendable antenna for better connectivity.

## Regulatory notices

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, under part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used by the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the Mobile Connect.
- Increase the separation between the equipment and the receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Contact Enphase Support for assistance (https://enphase.com/contact/support).
- Changes or modifications not expressly approved by the party responsible for compliance may void the user's authority to operate the equipment.
- This Class B digital apparatus complies with Industry Canada ICES-003.

EMC, Safety, and R&TTE Directive Compliance

The CE mark is affixed to this product to confirm compliance with the following European Community Directives: Council Directive 2004/108/EC of 15 December 2004 on the approximation of the laws of Member States relating to electromagnetic compatibility; and Council Directive 2006/95/EC of 12 December 2006 on the harmonization of the laws of Member States relating to electrical equipment designed for use within certain voltage limits; and Council Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment; and Council Directive 1999/5/EC of 9 March 1999 on radio equipment and telecommunications terminal equipment and the mutual recognition of their conformity.

Restriction of the Use of Hazardous Substances (RoHS)

Enphase Energy, Inc. Certificate of Compliance 2011/65/EU

2011/65/EU Enphase Energy, Inc. confirms that its embedded products comply with the chemical concentration limitations outlined in the directive 2011/65/EU of the European Parliament (Restriction of the use of certain hazardous substances in electrical and electronic equipment – RoHS).

140-00500-01

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Data subject to change. 2024-07-24

These Enphase products do not contain the following banned chemicals:

- Lead[1], [Pb]<1000 PPM
- Mercury, [Hg]<1000 PPM
- Hexavalent Chromium, [Cr+6]<1000 PPM
- Cadmium, [Cd]<100 PPM
- Polybrominated Biphenyl, [PBB]<1000 PPM
- Polybrominated Diphenyl Ether, [PBDE]<1000 PPM

Environmental considerations:

- Moisture sensitivity level (MSL) = 1
- Maximum soldering temperature = 26°C (in SMT reflow oven)

Lead usage in some components is exempted by the following RoHS annex, therefore higher lead concentration would be found in some modules (>1000 PPM); Resistors containing lead in a glass or ceramic matrix compound.

## Precautions

Potential interference with pacemakers and other medical devices

Radiofrequency energy (RF) from cellular devices can interact with some electronic devices, causing electromagnetic interference (EMI). The FDA helped develop a detailed test method to measure EMI of implanted cardiac pacemakers and defibrillators from cellular devices. This test method is part of the Association for the Advancement of Medical Instrumentation (AAMI) standard. This standard allows manufacturers to ensure that cardiac pacemakers and defibrillators are safe from cellular device EMI.

The FDA continues to monitor cellular devices for interactions with other medical devices. If harmful interference occurs, the FDA will assess the interference and work to resolve the problem.

Precautions for pacemaker wearers

EMI can affect a pacemaker in one of three ways:

- Stop the pacemaker from delivering the stimulating pulses that regulate the heart's rhythm.
- Cause the pacemaker to deliver the pulses irregularly.
- Cause the pacemaker to ignore the heart's rhythm and deliver pulses at a fixed rate.

Based on current research, cellular devices do not pose a significant health problem for most pacemaker wearers. However, people with pacemakers may want to take simple precautions to avoid EMI from cellular devices:

- Keep the device on the opposite side of the body from the pacemaker to add extra distance between the pacemaker and the device.
- Avoid placing a turned-on device next to the pacemaker (for example, do not carry the device in a shirt or jacket pocket directly over the pacemaker).

Device maintenance

| | |
|---|---|
| ⚠ | **DANGER:** Risk of electric shock. Risk of fire. Only qualified personnel should troubleshoot the Enphase Mobile Connect. |
| ⚠ | **DANGER:** Risk of equipment damage. Choose an area for installation where the ambient temperature does not exceed 46°C. |
| ⚠ | **WARNING:** To ensure optimal reliability and to meet warranty requirements, you must install the Enphase Mobile Connect according to the instructions in this guide. |
| ⚠ | **WARNING:** Risk of equipment damage. Exposure to liquids can damage the Mobile Connect. |
| ⚠ | **WARNING:** Do not place the Mobile Connect near computer discs, credit or travel cards, or other magnetic media. It may affect the information contained in magnetic media. |

Environmental protection electronic device: DO NOT THROW AWAY. Waste electrical products should not be disposed of with household waste. Refer to your local codes for disposal requirements.

Mobile Connect (Cellular modem) terms and conditions

These following Cellular Modem Terms and Conditions ("Terms and Conditions") will apply to anyone who purchases or uses ("you", "your") the Enphase Mobile Connect to enable internet connectivity for an Enphase IQ Gateway device ("Mobile Connect Terms"). These Mobile Connect Terms are incorporated into and made an integral part of the Agreement.

1. Cellular Modem description, use, unauthorized use limitation on use: The Cellular Modem must be used only in conjunction with Enphase IQ Gateway/ IQ Combiner products. The Cellular Modem shall not be used for any unlawful purpose(s).
2. Limited Warranty: The Cellular Modem comes with and is covered by a 5-year limited warranty which is included in the standard Enphase limited warranty which can be found at https://enphase.com/installers/resources/warranty.

   ("Limited Warranty"). Except as expressly provided in this section, to the maximum extent permitted by applicable law, the Cellular Modem is provided on an "AS IS" basis without warranty whatsoever, and Enphase expressly disclaims all warranties, express, implied, and statutory including the implied warranties of merchantability, satisfactory quality, fitness for a particular purpose, title, and non-infringement. Any use of the Cellular Modem other than as expressly stated in these Terms and Conditions shall constitute a breach of the limited warranty and render it null and void. The Cellular Modem will contain a SIM card provided by a network provider. The SIM card (a) must not be removed from the Cellular Modem, nor (b) used with any other device. Any such removal or use shall constitute a breach of the limited warranty and render the limited warranty null and void.
3. Territory: The Cellular Modem shall only be used in the countries listed in this quick installation guide. Enphase in its sole discretion reserves the right to amend the QIG to add or delete counties wherein the Cellular Modem may be used.
4. Network coverage: Network coverage is dependent upon network availability which is the responsibility of the network service provider. Enphase shall have no responsibility, nor any liability to any end user for the network service provider's non-coverage, lack of coverage, defective coverage, or termination of the coverage.
5. Connectivity: Cellular Modem connectivity is subject to the telecommunication regulations policies and terms of th network service providers, and the applicable laws of the country where the Mobile Connect is located and installed. Enphase makes no representation or warranties as to such connectivity and Enphase shall have no responsibility, nor any liability to you for the network service provider's failure to provide connectivity nor any responsibility or liability due to the network service provider's termination of connectivity.
6. Acceptable use policy: You must conform to the applicable acceptable use policy ("AUP") posted on the applicable network provider's website, and you alone will be responsible for ensuring compliance with its terms. You will indemnify, defend, and hold Enphase harmless against any claims or losses suffered by Enphase because you breach the AUP.

For Mobile Connect with:

AT&T connectivity – The terms available at https://www.att.com/legal/terms.aup.html shall apply.

T-Mobile connectivity – The terms are available at https://www.sprint.com/en/legal/acceptable-use-policy.html.

## Revision history

| REVISION | DATE | DESCRIPTION |
|---|---|---|
| 140-00500-01 | July 2024 | Initial release. |