

# IQ Gateway

The IQ Gateway delivers solar production and energy consumption data to Enphase Installer Portal monitoring and analysis software for comprehensive, remote maintenance, and management of Enphase systems.

With integrated production metering and optional consumption monitoring, the IQ Gateway is the platform for total energy management. It integrates with the IQ System Controller and IQ Battery.



Key specifications	ENV-IQ-AM1-240, ENV2-IQ-AM1-240
AC power requirements	120/240 V, 120/208Y V, or 127/220Y V Three-wire 60 Hz
Typical power consumption	5 W
Dimensions (W x H x D)	8.4 in x 5 in x 1.8 in (21.3 cm x 12.6 cm x 4.5 cm)
Weight	1.09 lb (0.5 kg)
Enclosure environmental rating	IP30. For installation indoors or in a NRTL-certified, NEMA type 3R or better-rated enclosure, if installing outdoors

## Simple

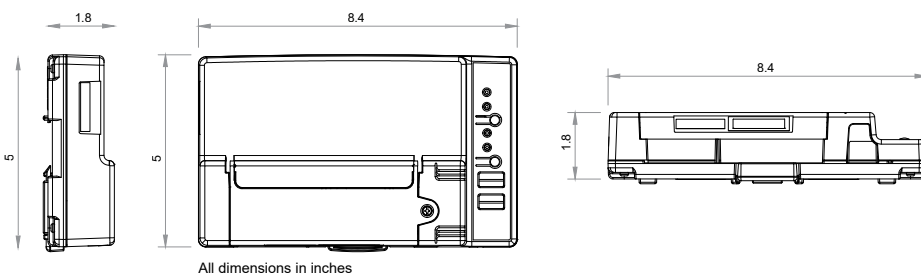
- Easy system configuration using Enphase Installer App
- Flexible networking with Wi-Fi, Ethernet, or cellular

## Reliable

- Designed for installation indoors or outdoors in a NEMA 3R rated enclosure
- 5-year limited warranty
- ENV2-IQ-AM1-240 complies with IEEE 2030.5<sup>1</sup>

## Smart

- Enables web-based monitoring and control
- Provides bidirectional communications for remote upgrades
- Supports power export limiting and zero-export applications



<sup>1</sup> ENV2-IQ-AM1-240 gateway runs with IEEE 2030.5 protocol and has been used in the IEEE 1547:2018 testing and certification.

Model number	ENV-IQ-AM1-240, ENV2-IQ-AM1-240
IQ Gateway ENV-IQ-AM1-240 ENV2-IQ-AM1-240	IQ Gateway integrates revenue-grade PV production metering (ANSI C12.20 $\pm$ 0.5%), consumption metering ( $\pm$ 2.5%), and battery metering ( $\pm$ 2.5%) with IQ Battery 5P. Includes one 200 A continuous rated Production Current Transformer (CT).

Accessories – order separately	
Mobile Connect COMMS-CELLMODEM-M1-06 CELLMODEM-M1-06-SP-05 CELLMODEM-M1-06-AT-05 CELLMODEM-07-NA-05	Includes COMMS-KIT-01 and CELLMODEM-M1-06-SP-05 with 5-year sprint data plan 4G based LTE-M1 cellular modem with 5-year sprint data plan 4G based LTE-M1 cellular modem with 5-year AT&T data plan LTE CAT 4 based cellular modem with 5-year AT&T and T-Mobile data plan
Consumption monitoring CT and IQ Battery 5P metering CT CT-200-SPLIT CT-200-CLAMP	Split-core and clamp-style CTs with $\pm$ 2.5% accuracy enable whole home and IQ Battery 5P metering
Communications Kit COMMS-KIT-01 COMMS-KIT-02	Installed at the IQ Gateway. For communications with IQ Battery and IQ System Controller. Includes USB cable for connection to IQ Gateway or IQ Combiner and allows wireless communication with IQ Battery and IQ System Controller

Power requirements	
AC power requirements	120/240 V, 120/208Y V, or 127/220Y V. Three-wire. 60 Hz
IQ Gateway breaker	2-pole and maximum 20 A overcurrent protection required
Typical power consumption	5 W

Capacity	
Number of microinverters polled	Up to 300

Mechanical and electrical data	
Dimensions (W × H × D)	8.4 in × 5 in × 1.8 in (21.3 cm × 12.6 cm × 4.5 cm)
Weight	1.09 lb (0.5 kg)
Ambient temperature range	-40°F to 149°F (-40°C to 65°C) [ENV-IQ-AM1-240] -40°F to 122°F (-40°C to 50°C) [ENV2-IQ-AM1-240] -40°F to 115°F (-40°C to 46°C) if installed in an enclosure
Environmental rating	IP30. For installation indoors or in a NRTL-certified, NEMA type 3R or better-rated enclosure, if installing outdoors
Altitude	Up to 3,000 m (9842 feet)

Communication interfaces	
Integrated Wi-Fi	802.11 b/g/n (2.4 GHz, 5 GHz), for connecting the Enphase Cloud via the internet
Wi-Fi range (recommended)	10 m
Ethernet	Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud via the internet.
Mobile Connect	CELLMODEM-M1-06-SP-05, CELLMODEM-M1-06-AT-05 (to be purchased separately, mandatory for sites with IQ Battery), CELLMODEM-07-NA-05
Digital I/O	Digital input/output for grid operator control
USB 2.0	For Mobile Connect and Communications Kit

Communication interfaces	
Access point (AP) mode	For a connection between the IQ Gateway and a mobile device running the Enphase Installer App
Metering ports	Up to two Consumption CTs, one Production CT, and one battery CT (for IQ Battery 5P)
Power line communication (PLC)	90 kHz–110 kHz (Class B), to microinverters
Web API	Refer to <a href="https://developer-v4.enphase.com">https://developer-v4.enphase.com</a>
Local API	Refer to the guide for <a href="#">local API</a>
LED indicators	From top to bottom: Cloud connectivity, Wi-Fi access point mode, PV production state, PLC communications state
Configured through	Enphase Installer App and Enphase Installer Platform

Power production/export limiting through the IQ Gateway's digital IO	
Maximum relays read	4
Capabilities supported	Power production limiting (Production CT(s) required), power export limiting (Production CTs required and Consumption CTs – Load with solar configuration)
Minimum IQ Gateway version	8.2.127
Cable configurations	18 AWG, UL-Std. 62, 600 V, 105°C, and minimum 0.03 inches average thickness
Signal voltage range	2.5 V–5 V (digital high), 0 V–1.9 V (digital low)
Terminal blocks	Five terminals, up to 0.002 in
Configuration through	Enphase Installer App, Enphase Installer Platform (site settings)

Scope of delivery	
Package dimensions (H × W × D)	6.3 in (160.02 mm) × 10.8 in (274.32 mm) × 3.9 in (99.06 mm)
Package weight	2.2 lb (0.99 kg)
Aluminium DIN rail	4.9 in (124.46 mm)
Current transformers (CTs)	One CT-200-SOLID included

Compliance	
Compliance	CSIP (IEEE 2030.5) CAN/CSA C22.2 No. 61010-1 Title 47 CFR, Part 15, Class B, ICES 003 IEC/UL 61010-1:2010, Metering: ANSI C12.20 accuracy class 0.5 (PV production only)

Compatibility	
IQ System Controller	SC200D111C240US01, SC200G111C240US01, EP200G101-M240US01, EP200G101-M240US00
IQ Battery	IQBATTERY-5P-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA
Microinverter	IQ6, IQ7, and IQ8 Series Microinverters

**Manufacturer:**

Enphase Energy Inc., 47281 Bayside Pkwy., Fremont, CA, 94538, United States of America, PH: +1 (707) 763-4784

**Importer:**

Enphase Energy NL B.V., Het Zuiderkruis 65, 5215MV, 's-Hertogenbosch, The Netherlands, PH: +31 73 3035859

# Components of the Enphase Energy System



## **IQ Series Microinverters**

IQ Series Microinverters pack more power into less space than other rooftop solar systems and make rooftop solar more productive, reliable, smart, and safe.



## **IQ System Controller**

The IQ System Controller connects the home to the grid power, IQ Batteries, generator and solar PV with microinverters.



## **IQ Battery**

All-in-one AC-coupled storage solution that integrates seamlessly with your solar energy system, providing reliable backup power and intelligent energy management for maximum performance and energy savings.



## **IQ Load Controller**

Helps prioritize essential appliances during a grid outage to optimize energy consumption and prolong battery life.

# Accessories

## Enphase Mobile Connect



LTE CAT 4 based cellular modem with a 5-year data plan (CELLMODEM-07-NA-05 for AT&T, T-Mobile)

4G-based LTE-M1 cellular modem with a 5-year data plan

(CELLMODEM-M1-06-SP-05 for Sprint and CELLMODEM-M1-06-AT-05 for AT&T)

## Circuit breakers



BRK-10A-2-240V Circuit breaker, 2-pole, 10 A, Eaton BR210

BRK-15A-2-240V Circuit breaker, 2-pole, 15 A, Eaton BR215

BRK-20A-2P-240V Circuit breaker, 2-pole, 20 A, Eaton BR220

BRK-15A-2P-240V-B Circuit breaker, 2-pole, 15 A, Eaton BR215B with hold-down kit support

BRK-20A-2P-240V-B Circuit breaker, 2-pole, 20 A, Eaton BR220B with hold-down kit support

## CT-200-SOLID



200 A revenue-grade solid-core Production CT with <math><0.5\%</math> error rate (replacement SKU)

## CT-200-CLAMP



200 A clamp-style consumption and battery metering CT with <math><2.5\%</math> error rate (replacement SKU)

## CT-200-CLAMP-2A



200 A clamp-style consumption metering CTs with color coded cables and 2.5% error rate

# Revision history

Revision	Date	Description
DSH-00111-5.0	April 2025	Updated the altitude and cell modem data.
DSH-00111-4.0	December 2024	Updated the IEEE compliance data.
DSH-00111-3.0	December 2023	Updated power requirement and added IG Gateway breaker values.
DSH-00111-2.0	August 2023	Updated temperature specification for ENV2-IQ-AM1-240.
DSH-00111-1.0	June 2023	Updated altitude and recommended maximum microinverters on a site.