



# 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.



**IQ Series Microinverters**  
The high-powered smart grid-ready IQ Series Microinverters (IQ6, IQ7, and IQ8 Series) dramatically simplify the installation process



**IQ System Controller**  
Provides microgrid interconnect device (MID) functionality by automatically detecting grid failures and seamlessly transitioning the home energy system from grid power to backup power



**IQ Battery**  
All-in-one AC coupled storage system that is reliable, smart, simple, and safe. It provides backup capability and installers can quickly design the right system size to meet the needs of both new and retrofit solar customers.



**IQ Load Controller**  
Helps prioritize essential appliances during a grid outage to optimize energy consumption and prolong battery life

### Smart

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

### 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 1547:2018 (UL 1741-SB, 3<sup>rd</sup> Ed.)



# IQ Gateway

MODEL NUMBER	
ENV-IQ-AM1-240, ENV2-IQ-AM1-240	
IQ Gateway ENV-IQ-AM1-240 ENV2-IQ-AM1-240 (IEEE 1547:2018)	IQ Gateway integrates revenue grade PV production metering (ANSI C12.20 ±0.5%), consumption metering (±2.5%), and battery metering(+/- 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	- 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
Consumption monitoring CT and IQ Battery 5P metering CT CT-200-SPLIT CT-200-CLAMP	Split-core and clamp style CTs with 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	
Power requirements	120/240 VAC split-phase maximum 20 A overcurrent protection required
Typical power consumption	5 W
CAPACITY	
Number of microinverters polled	Up to 300
MECHANICAL & ELECTRICAL DATA	
Dimensions (W×H×D)	21.3 cm × 12.6 cm × 4.5 cm (8.4 in × 5 in × 1.8 in)
Weight	1.09 lb
Ambient temperature range	-40°C to 65°C (-40°F to 149°F) -40°C to 46°C (-40°F to 115°F) if installed in an enclosure
Environmental rating	IP30. For installation indoors or in an NRTL-certified, NEMA type 3R or better rated enclosure, if installing outdoors.
Altitude	Up to 2,600 meters (8,530 feet)
Production CTs	- Limited to 200 A of continuous current - Internal aperture measures 0.76" to support 250 kcmil THWN conductors (max)
COMMUNICATION INTERFACES	
Integrated Wi-Fi	802.11b/g/n (2.4 GHz, 5 GHz), for connecting the 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)
Digital I/O	Digital input/output for grid operator control
USB 2.0	For Mobile Connect and Communications kit
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)	90-110 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 <a href="#">guide for local API</a>
LED indicators	From top to bottom: Cloud connectivity, Wi-Fi access point mode, PV production state, PLC communications state
Configured via	Enphase Installer App and Enphase Installer Platform

**POWER PRODUCTION/EXPORT LIMITING VIA THE IQ GATEWAY'S DIGITAL IO**

Maximum relays read	4
Capabilities supported	Power production limiting (Production CT/s required), power export limiting (Production CT/s required and Consumption CT/s – “Load with Solar” configuration)
Minimum IQ Gateway version	v7.3.120
Cable configurations	18 AWG, UL-Std.62, 600 V, 105°C, and min 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 <sup>2</sup>
Configuration via	Enphase Installer App, Enphase Installer Platform (site settings)

**SCOPE OF DELIVERY**

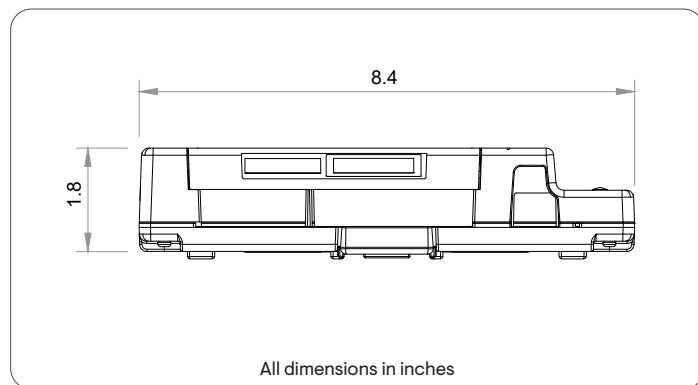
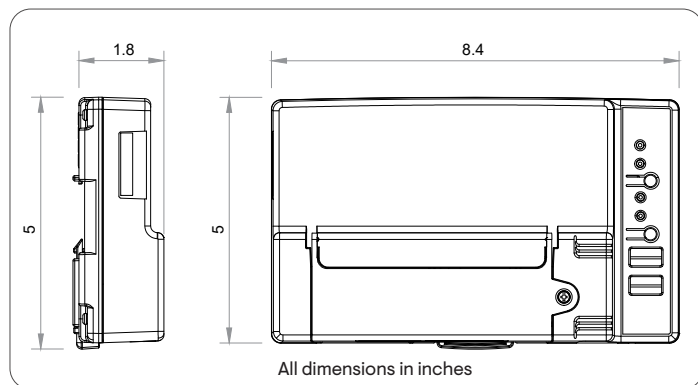
Package dimensions (H x W x D)	6.3 x 10.8 x 3.9 (in)
Package weight	2.2 lb
Aluminium DIN rail	4.9 in
Current Transformers (CTs)	One CT-200-SOLID included

**COMPLIANCE**

Compliance	CA Rule 21 (UL 1741-SA), IEEE 1547:2018 - UL 1741-SB, 3rd Ed.(ENV2-IQ-AM1-240), UL 61010-1 CAN/CSA C22.2 No. 61010-1 Title 47 CFR, Part 15, Class B, ICES 003 IEC/EN 61010-1:2010, EN50065-1, EN61000-4-5, EN61000-6-1, EN61000-6-2 Metering: ANSI C12.20 accuracy class 0.5 (PV production only)
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**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



## Accessories



### Enphase Mobile Connect

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 <0.5% error rate (replacement SKU)



### CT-200-CLAMP

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

# Revision history

REVISION	DATE	DESCRIPTION
DSH-00111-1.0	June 2023	Updated altitude and recommended maximum microinverters on a site.
Previous releases		