



IQ Gateway

The IQ Gateway is the platform for energy management and integrates with the IQ Microinverters and IQ Batteries to provide complete control and insights into the Enphase Energy System. The IQ Gateway delivers solar production and energy consumption data to the Enphase App monitoring and analysis software for comprehensive, remote maintenance and management of the Enphase Energy System.



IQ Microinverters with integrated MC4 connectors

Connect PV modules quickly and easily to the IQ Microinverters that has integrated MC4 connectors.

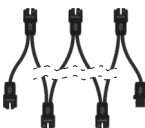


IQ Battery

IQ Battery is a fully integrated AC battery system with embedded IQ8X-BAT Microinverters. These are designed for maximum safety, longevity and quick and easy plug-and-play installation. (Available in selected countries only).



IQ Relay single-phase and multi-phase
Production and storage, circuit integrated, network and system protection device with PLC-phase coupler (multi-phase) and DC current injection monitoring.*



IQ Cabling

Install microinverters quickly and safely with IQ Cabling. With multi-phase IQ Cabling, the installed capacity is automatically distributed evenly across all three phases.

Smart

- Enables web-based monitoring and control
- Bidirectional communication with IQ Microinverters, IQ Battery and the Enphase Cloud for remote upgrade

Simple

- Easy system configuration using the Enphase Installer App
- Flexible networking with Wi-Fi, Ethernet, or cellular data
- DIN rail mounted

Reliable

- Designed for installation indoors or in an outdoor enclosure
- Five-year warranty



*IQ Relay is not required in all countries, check local grid connection requirements to confirm.

IQ Gateway

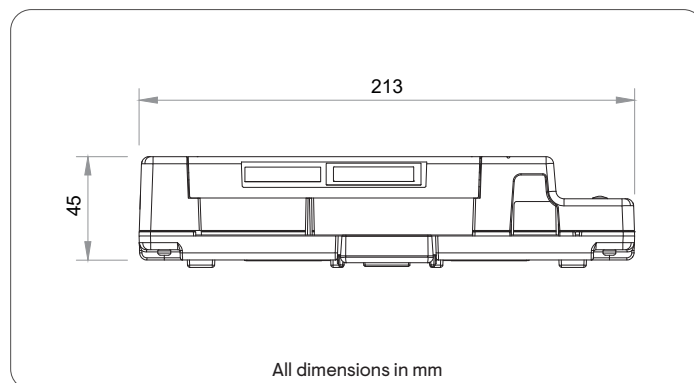
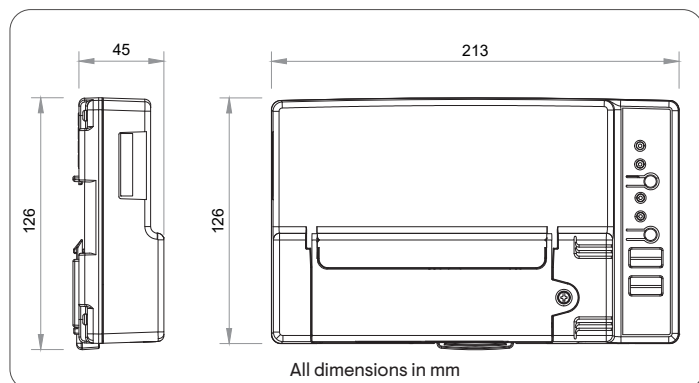
PRODUCT DETAILS		UNITS		ENV-S-WB-230	ENV-S-EM-230
Name	—	IQ Gateway Standard		IQ Gateway Metered	
Description	—	Communications gateway with basic PV production monitoring (±5%) via PLC		Communications gateway with integrated PV and consumption metering. Includes two CTs (100 A primary circuit current).	
Power measurment accuracy	—	Not supported		Production and consumption meter: ±1% accuracy	
POWER REQUIREMENTS		UNITS		ENV-S-WB-230	ENV-S-EM-230
Nominal grid voltage	V	230 (L-N)		230 (L-N), 230/400 (L-N/L-L) Wye	
Minimum/Maximum grid voltage	V	184/276			
Nominal frequency	Hz	50			
Minimum/Maximum frequency	Hz	45/55			
Maximum over current protection	A	20 (characteristic B)			
Maximum power consumption	W	5			
Average continuous power consumption	W	3		3 or 4 (with Communications Kit)	
CAPACITY		UNITS		ENV-S-WB-230	ENV-S-EM-230
Maximum number of microinverters polled	—	Up to 300**			
Maximum number of IQ Battery	—	Not supported		12 IQ Battery 3T or 4 IQ Battery 10T	
MECHANICAL DATA		UNITS		ENV-S-WB-230	ENV-S-EM-230
Dimensions (H × W × D)	mm	126 × 213 × 45			
Mounting	—	DIN rail			
DIN rail units width	modules	12			
Weight	kg	0.5			
Ambient air temperature range	°C	-40 to 65 (if installed outdoors), -40 to 46 (if installed in an enclosure)			
Relative humidity	%	85			
Overvoltage class AC port	—	III			
Overvoltage class relay port	—	II			
Environmental rating	—	IP30. If installed outdoors, use an outdoor-rated enclosure.			
Maximum altitude	m	2500			
USB ports	—	Two USB 2.0 ports, auto-sensing, auto-negotiation			
AC terminal block	—	N, L1 up to 6 mm ²		N, L1, L2, L3 up to 6 mm ²	
CT terminal block	—	Not supported		Six double terminals, up to 1.5 mm ²	
Digital I/O terminal block	—	Not supported		Five terminals, up to 1.5 mm ²	
COMMUNICATION INTERFACES		UNITS		ENV-S-WB-230	ENV-S-EM-230
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)	m	10			
Ethernet	—	Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included), for connecting to the Enphase Cloud via the internet.			
Mobile Connect	—	Optional, CELLMODEM-M1-06-AT-05*** (not included)			
Digital I/O	—	Not supported		Digital input/output for grid operator control****	
USB 2.0	—	For Mobile Connect		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	—	Not supported		Up to three Consumption CTs, Up to three Production CTs	
Power line communication	—	Power line communication (PLC) 110 kHz– 120 kHz (Class B), narrowband 200 Hz, to microinverters, IQ Relay and ACB 1.5			
Web API	—	Refer to https://developer-v4.enphase.com			
Local API	—	Refer to guide for local API			

** Depends on geographic location and site configuration.

*** Available in select countries.

**** Function activated in Germany, Austria, and Switzerland.

COMMUNICATION INTERFACES		UNITS	ENV-S-WB-230	ENV-S-EM-230
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		
STANDARDS		UNITS	ENV-S-WB-230	ENV-S-EM-230
Grid compliance	—	EN50549-1, VDE-AR-N 4105, G100		
Safety	—	EN 61010-1, EN 62311		EN 61010-1, EN 61010-2-030, EN 62311
EMC	—	EN 61000-6-2, EN 61000-6-3, EN IEC 61000-3-2, EN 61000-3-3, EN 50065-1, EN 50065-2-2		
RED standard	—	EN 300 328, EN 301 489-1, EN 301 893		
Product labelling	—	CE, UKCA & RCM		
SCOPE OF DELIVERY		UNITS	ENV-S-WB-230	ENV-S-EM-230
Package dimensions (H × W × D)	mm	160 × 276 × 98		
Package weight	kg	1		
Aluminium DIN rail	mm	125		
Current Transformers (CTs)	—	Not supported		Two CT-100-SPLIT-ROW included



IQ Gateway accessories (order separately)



CELLMODEM-M1-06-AT-05 Mobile Connect

The Enphase Mobile Connect cellular modem delivers easy and reliable networking for Enphase Energy Systems—with multiple carrier options.



COMMS-24-EXT-01 Wireless Range Extender

Plug-and-play wireless USB dongle used to extend the range of 2.4 GHz wireless network between the IQ Gateway and IQ Battery units.



CT-100-SPLIT-ROW Current Transformers (CTs)

Pack of four 100 A rated split-core (CT), with accuracy $\pm 1\%$. For use with IQ Gateway Metered in multi-phase applications, designed for smaller main panels with conductors up to 16 mm².



COMMS-KIT-EU-01 Communications Kit

Wireless communication adapter for communication with IQ Battery. Includes USB cable for plugging into the IQ Gateway.

Manufacturer:
Enphase Energy, Inc. 47281 Bayside Pkwy.
Fremont, CA 94538,
United States of America

Importer:
Enphase Energy NL B.V, Het Zuiderkruis 65,
5215MV, 's-Hertogenbosch,
The Netherlands

IQG-DSH-00011-2.0-EN-INT-2024-02-19

Revision history

REVISION	DATE	DESCRIPTION
DSH-00011-2.0	February 2024	Updated the “Compliance” section and the CELLMODEM-M1-06-AT-05 details.
DSH-00011-1.0	May 2023	Initial release of consolidated IQ Gateway Datasheet (IQ Gateway Standard and IQ Gateway Metered).
Previous releases.		