

IQ Combiner 2 EU 3P

The IQ Combiner 2 EU 3P consolidates interconnection equipment into a single enclosure and streamlines solar and storage installations, leading to significant installation time savings. It includes the IQ Gateway Metered, two IQ Relays, a Communications Kit, two 4-pole circuit breakers, an IQ Gateway circuit breaker, a residual current device (RCD), and supporting components pre-installed on a 3 DIN rail assembly.



Key specifications	X-IQ-EURO-230-3P-4-2
System voltage	400 Y/230 VAC
Maximum circuit rating (each circuit)	16 A
Configurations supported	1 PV + 1 storage circuit, or 2 PV circuits, or 2 storage circuits (max. 16 A each)
Dimensions (H x W x D)	600 mm x 400 mm x 132 mm
Weight	12 kg
Installation location	Indoor
Production metering	±1% accuracy, three Production CTs pre-installed
Consumption metering	±1% accuracy, three Consumption CTs provided with the product

All-in-one solution

- A pre-wired plug-and-play solution with IQ Gateway Metered, three-phase IQ Relays, Communications Kit 2, circuit breakers, and RCD
- Consolidates required system components into one box

Simple

- Easy wall mounting
- Top cable entry for all field wiring
- Significant installation time savings
- Push-in terminals for quick and safe termination
- IP54 rated, and suitable for indoor usage

Hassle-free metering

- Pre-installed and pre-wired Production CTs
- Quick installation of Consumption CTs with push-in terminals

Electrical specifications	Units	X-IQ-EURO-230-3P-4-2
Rated frequency (f_n)	Hz	50
Related diversity factor	—	1
System voltage (U_n)	VAC	400 Y/230
Maximum circuit rating (each circuit)	A	16
Maximum circuit rating (assembly)	A	32
Configurations supported	—	1 PV + 1 storage circuit, or 2 PV circuits, or 2 storage circuits (maximum 16 A each)
Rated insulation voltage (U_i)	V	500
Rated impulse withstand voltage (U_{imp})	V	6000
Rated peak withstand current (I_{pk})	A	1000
Rated conditional short-circuit current (I_{cc})	A	6000
DBO Type (distribution boards intended to be operated by ordinary persons)	—	Type B (for use by ordinary person)
EMC Classification	—	Installation class 3, Class B
Mechanical data	Units	X-IQ-EURO-230-3P-4-2
Dimensions (H × W × D)	mm	600 × 400 × 132
IP rating	—	IP54
Weight	kg	12
Mechanical impact rating	—	IK08
Pollution degree	—	2
Environmental specifications	Units	X-IQ-EURO-230-3P-4-2
Altitude	m	Up to 2500
Operating temperature range	°C	-25 to 40
Storage temperature range	°C	-25 to 60
Installation location	—	Indoor
Humidity	%	Up to 85
Communication interfaces	Units	X-IQ-EURO-230-3P-4-2
Communication	—	Wired control communication (Communications Kit 2)
Integrated Wi-Fi	—	802.11 b/g/n (2.4 GHz, 5 GHz) for connecting to the Enphase Cloud through the internet
Wi-Fi range (recommended)	m	10
Ethernet	—	Optional 802.3, Cat5E (or Cat6) UTP Ethernet cable (not included) for connecting to the Enphase Cloud through the internet
Mobile Connect	—	Optional, CELLMODEM-M1-06-AT-05/CELLMODEM-07-INT-05 (not included)
Digital I/O	—	Digital input/output for grid operator control
USB 2.0	—	For Mobile Connect
Metering ports	—	Up to three Consumption CTs, up to three Production CTs

Communication interfaces	Units	X-IQ-EURO-230-3P-4-2
Power line communication (PLC)	—	110–120 kHz (Class B), narrowband 200 Hz, to IQ Microinverters and IQ Relay
Web API	—	Refer to https://developer-v4.enphase.com
Local API	—	Refer to the guide for local API
LED indicators	—	From top to bottom: Cloud connectivity, Wi-Fi access point mode, PV production state, PLC communications state
Configured through	—	Enphase Installer App, Enphase Installer Platform
IQ Relay	Units	X-IQ-EURO-230-3P-4-2
Overvoltage category (EN 61010-1)	—	3
CAT III	—	GRID terminal is rated for measurement category III
Voltage and frequency acquisition time on valid input	ms	100 (5 line cycles @50 Hz)
Output rating (typical)	—	230 Vrms, 25 A
LEDs	—	Four red/green LEDs: three for under/overvoltage trip, one for under/over frequency and DC current
Residual current device	Units	X-IQ-EURO-230-3P-4-2
RCD type	—	Type A
Number of poles	—	4
Current rating	A	63
Sensitivity	mA	30
Metering specifications	Units	X-IQ-EURO-230-3P-4-2
Production metering	—	±1% accuracy, three Production CTs pre-installed
Consumption metering	—	±1% accuracy, three Consumption CTs provided with the product
Consumption CT lead cable length	m	4
Field wiring specifications	Units	X-IQ-EURO-230-3P-4-2
Mains input terminals	mm ²	4–6
IQ Relay input terminals	mm ²	2.5–6
CTRL header	mm ²	0.5–1.5
Communications Kit 2	mm ²	0.5–2.5
What's in the box	Quantity	
IQ Gateway Metered (ENV-S-EM-230)	1	IQ Gateway is the platform for total energy management for comprehensive remote maintenance and management of the IQ Microinverters and IQ Batteries
IQ Relays (Q-RELAY-3P-INT)	2	Network and system protection device with PLC-phase coupler (multi-phase) and DC current injection monitoring
Communications Kit 2 (COMMS-KIT-INT-02)	1	Enables wired control communication between IQ Gateway Metered and the IQ Batteries
Productions CTs (CT-100-SPLIT-ROW)	3	Pre-wired Production CTs for metering PV production with ±1% accuracy

What's in the box	Quantity	
Consumption CTs (CT-100-SPLIT-ROW)	3	Enables home-load metering with $\pm 1\%$ accuracy, provided with the product
IQ Gateway breaker	1	16 A, 4-pole, B-curve breakers pre-wired to power up the IQ Gateway
PV/storage breaker	2	20 A, 4-pole, B-curve breakers pre-wired for IQ Microinverter and/or IQ Battery
Residual current device	1	30 mA, 63 A, Type A, 4-pole RCD for ground fault protection

Compliance	
IQ Combiner	IEC 61439-1, IEC 61439-3
Breaker and RCD	IEC 60947-2
Enclosure	DIN EN 60670-24
IQ Gateway	IEC/EN 61010-1:2010, EN 50065-1, EN 61000-4-5, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3
IQ Relay	IEC 61010-1, EN 61010-1, AS/NZS 61010.1
Product labeling	CE

Accessories (to be ordered separately)	
CELLMODEM-M1-06-AT-05/CELLMODEM-07-INT-05	Plug-and-play industrial-grade cellular modem with a 5-year data plan

Compatibility	
Microinverters	IQ7 and IQ8 Series Microinverters
IQ Battery	IQ Battery 5P with FlexPhase (configured in three-phase)

Assembled in China.

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 Gateway and current transformers

Provides complete control and insights into the Enphase Energy System. IQ Gateway is shipped with two CTs to enable production and consumption monitoring with an accuracy of $\pm 1\%$.



IQ Battery with FlexPhase

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. It has a total usable energy capacity of 5 kWh.



Communications Kit 2 INT

The Enphase Communications Kit 2 INT enables wired communication between IQ Gateway Metered and IQ Battery 5P using control cables.

Revision history

Revision	Date	Description
DSH-00476-3.0	March 2025	Updated the "Communication interfaces" and "Accessories" specifications.
DSH-00476-2.0	January 2025	Initial release.
DSH-00476-1.0	June 2024	Preliminary release.