DATA SHEET



X-IQ-AM1-240-5-HDK
X-IQ-AM1-240-5C-HDK
X-IQ-AM1-240-5
X-IQ-AM1-240-5C

IQ Combiner 5/5C

The IQ Combiner 5/5C consolidates interconnection equipment into a single enclosure and streamlines IQ Series Microinverters and IQ Gateway installation by providing a consistent, pre-wired solution for residential applications. IQ Combiner 5/5C uses wired control communication and is compatible with IQ System Controller 3/3G and IQ Battery 5P.

The IQ Combiner 5/5C, IQ Series Microinverters, IQ System Controller 3/3G, and IQ Battery 5P provide a complete grid-agnostic Enphase Energy System.



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



IQ System Controller 3/3G
Provides microgrid interconnection device (MID) functionality by automatically detecting grid failures and seamlessly transitioning the home energy system from grid power to backup power.



IQ Battery 5P
Fully integrated AC battery system. Includes six field-replaceable IQ8D-BAT Microinverters.



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

Enphase 5 year limited warranty

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5-year limited warranty

Smart

- Includes IQ Gateway for communication and control
- Includes Enphase Mobile Connect (CELLMODEM-07-NA-05), only with IQ Combiner 5C
- Supports flexible networking: Wi-Fi, Ethernet, or cellular
- Provides production metering (revenue grade) and consumption monitoring

Easy to install

- Mounts to one stud with centered brackets
- Supports bottom, back, and side conduit entries
- Supports up to four 2-pole branch circuits for 240 VAC plug-in breakers (not included)
- 80 A total PV branch circuits
- Factory installed hold-down kit
- Bluetooth-based Wi-Fi provisioning for easy Wi-Fi setup

Reliable

- Durable NRTL-certified NEMA type 3R enclosure
- 5-year limited warranty
- 2-year labor reimbursement program coverage included for IQ Combiner SKUs*
- UL 1741 Listed

*For country-specific warranty information, see the https://enphase.com/installers/resources/warranty page.

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IQ Combiner 5/5C

MODEL NUMBER	
IQ Combiner 5 (X-IQ-AM1-240-5/X-IQ-AM1-240-5-HDK)	IQ Combiner 5 with IQ Gateway printed circuit board for integrated revenue-grade PV production metering (ANSI C12.20 ±0.5%), consumption monitoring (±2.5%), and IQ Battery monitoring (±2.5%). Includes a silver solar shield to deflect heat. IQ-AM1-240-5-HDK includes a factory-installed hold-down kit compatible with all the circuit breakers mentioned in the **Accessories and Replacement Parts** section.
IQ Combiner 5C (X-IQ-AM1-240-5C/X-IQ-AM1-240-5C-HDK)	IQ Combiner 5C with IQ Gateway printed circuit board for integrated revenue-grade PV production metering (ANSI C12.20 ±0.5%), consumption monitoring (±2.5%), and IQ Battery monitoring (±2.5%). Includes Enphase Mobile Connect cellular modem (CELLMODEM-07-NA-05)[1]. Includes a silver solar shield to deflect heat. IQ-AM1-240-5C-HDK includes a factory-installed hold-down kit compatible with all the circuit breakers mentioned in the **Accessories and Replacement Parts** section.

WHAT'S IN THE BOX	
IQ Gateway printed circuit board	IQ Gateway is the platform for total energy management for comprehensive, remote maintenance, and management of the Enphase Energy System
Busbar	80 A busbar with support for one IQ Gateway breaker and four 20 A breakers for installing IQ Series Microinverters and IQ Battery 5P
IQ Gateway breaker	Circuit breaker, 2-pole, 10 A/15 A
Production CT	Pre-wired revenue-grade solid-core CT, accurate up to ±0.5%
Consumption CT	Two consumption metering clamp CTs, shipped with the box, accurate up to ±2.5%
IQ Battery CT	One battery metering clamp CT, shipped with the box, accurate up to ±2.5%
CTRL board	Control board for wired communication with IQ System Controller 3/3G and the IQ Battery 5P
Enphase Mobile Connect (only with IQ Combiner 5C)	LTE CAT 4-based cellular modem with a 5-year data plan (CELLMODEM-07-NA-05 for AT&T, T-Mobile).
Accessories kit	Spare control headers for the COMMS-KIT-2 board

ACCESSORIES AND REPLACEMENT PARTS (NOT INCLUDED, ORDER SEPARATELY)	
CELLMODEM-07-NA-05	LTE CAT 4-based cellular modem with a 5-year data plan (for AT&T, T-Mobile)
CELLMODEM-M1-06-SP-05	4G-based LTE-M1 cellular modem with a 5-year T-Mobile data plan
CELLMODEM-M1-06-AT-05	4G-based LTE-M1 cellular modem with a 5-year AT&T data plan
Circuit breakers (off-the-shelf)	Supports Eaton BR2XX, Siemens Q2XX, and GE/ABB THQL21XX Series circuit breakers (XX represents 10, 15, 20, 30, 40, 50, or 60). Also supports Eaton BR220B, BR230B, and BR240B circuit breakers compatible with the hold-down kit.
Circuit breakers (provided by Enphase)	BRK-10A-2-240V, BRK-15A-2-240V, BRK-20A-2P-240V, BRK-15A-2P-240V-B, and BRK-20A-2P-240V-B (more details in the "Accessories" section)
XA-SOLARSHIELD-ES	Replacement solar shield for IQ Combiner 5/5C
XA-ENV2-PCBA-5	IQ Gateway replacement printed circuit board (PCB) for IQ Combiner 5/5C
X-IQ-NA-HD-125A	Hold-down kit compatible with Eaton BR-B Series circuit breakers (with screws). Not required for X-IQ-AM1-240-5-HDK/X-IQ-AM1-240-5C-HDK.
XA-COMMS2-PCBA-5	Replacement COMMS-KIT-2 printed circuit board (PCB) for IQ Combiner 5/5C

ELECTRICAL SPECIFICATIONS	
Rating	80 A
System voltage and frequency	120/240 VAC or 120/208 VAC, 60 Hz
Busbar rating	125 A
Fault current rating	10 kAIC
Maximum continuous current rating (input from PV/ storage)	64 A
Branch circuits (solar and/or storage)	Up to four 2-pole Eaton BR, Siemens Q, or GE/ABB THQL Series distributed generation (DG) breakers only (not included)
Maximum total branch circuit breaker rating (input)	80 A of distributed generation/95 A with IQ Gateway breaker included
IQ Gateway breaker	10 A or 15 A rating GE/Siemens/Eaton included

[1] A plug-and-play industrial-grade cell modem for systems of up to 60 microinverters. Available in the United States, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.

ACCESSORIES AND REPLACEMENT PARTS (NOT INCLUDED, ORDER SEPARATELY)	
Production metering CT	200 A solid-core pre-installed and wired to IQ Gateway
Consumption monitoring CT (CT-200-CLAMP)	A pair of 200 A clamp-style current transformers is included with the box
IQ Battery metering CT	200 A clamp-style current transformer for IQ Battery metering, included with the box
MECHANICAL DATA	
Dimensions (W × H × D)	37.5 cm × 49.5 cm × 16.8 cm (14.75" × 19.5" × 6.63"). Height is 53.5 cm (21.06") with mounting brackets.
Weight	7.5 kg (16.5 lb)
Ambient temperature range	-40°C to 46°C (-40°F to 115°F)
Cooling	Natural convection, plus heat shield
Enclosure environmental rating	Outdoor, NRTL-certified, NEMA type 3R, polycarbonate construction
Wire sizes	• 20 A to 50 A breaker inputs: 14 to 4 AWG copper conductors • 60 A breaker branch input: 4 to 1/0 AWG copper conductors • Main lug combined output: 10 to 2/0 AWG copper conductors • Neutral and ground: 14 to 1/0 copper conductors • Always follow local code requirements for conductor sizing
Communication (in-premise connectivity)	Built-in CTRL board for wired communication with the IQ Battery 5P and the IQ System Controller 3/3G. Integrated power line communication for IQ Series Microinverters.
Altitude	Up to 2600 meters (8530 feet)
COMMUNICATION INTERFACES	
Integrated Wi-Fi	802.11b/g/n (dual band 2.4 GHz/5 GHz) for connecting to the Enphase Cloud through the internet
Wi-Fi range (recommended)	10 m (32.8 feet)
Bluetooth	BLE4.2, 10 m range to configure Wi-Fi SSID
Ethernet	Optional, 802.3, Cat5E (or Cat 6) UTP Ethernet cable (not included) for connecting to the Enphase Cloud through the internet.
Cellular/Mobile Connect	CELLMODEM-07-NA-05; CELLMODEM-M1-06-SP-05 or CELLMODEM-M1-06-AT-05[2] (included with the IQ Combiner 5C)
Digital I/O	Digital input/output for grid operator control
USB 2.0	Mobile Connect, COMMS-KIT-01 for IQ Battery 3/3T/10/10T, COMMS-KIT-02 for IQ Battery 5P
Access point (AP) mode	For connection between the IQ Gateway and a mobile device running the Enphase Installer App
Metering ports	Up to two Consumption CTs, one IQ Battery CT, and one Production CT
Power line communication	90–110 kHz
Web API	See https://developer-v4.enphase.com
Local API	See Guide for local API
COMPLIANCE	
IQ Combiner with IQ Gateway	UL 1741, CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003, NOM-208-SCFI-2016, UL 61010-1, CAN/CSA 22.2 No. 61010-1, IEEE 1547: 2018 (UL 1741-SB, 3rd Ed.), IEEE 2030.5/CSIP Compliant, Production metering: ANSI C12.20 accuracy class 0.5 (PV production)

COMPATIBILITY		
PV	Microinverters	IQ6, IQ7, and IQ8 Series Microinverters
COMMS-KIT-01[3]	IQ System Controller	EP200G101-M240US00
	IQ System Controller 2	EP200G101-M240US01
	IQ Battery	ENCHARGE-3-1P-NA, ENCHARGE-10-1P-NA, ENCHARGE-3T-1P-NA, ENCHARGE-10T-1P-NA
COMMS-KIT-02[4]	IQ System Controller 3	SC200D111C240US01, SC200G111C240US01
	IQ Battery	IQBATTERY-5P-1P-NA

[2] Older IQ Combiner 5C units may have Cell Modem 06 as Enphase Mobile Connect.

[3] For information about IQ Combiner 5/5C compatibility with the 2nd-generation batteries, refer to the compatibility matrix.

[4] IQ Combiner 5/5C comes pre-equipped with COMMS-KIT-02.

Accessories



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 <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-00007-8.0	December 2025	Added CELLMODEM-07-NA-05 SKU.
DSH-00007-7.0	May 2025	• Replaced the Eaton breaker image. • Updated altitude information.
DSH-00007-6.0	September 2024	Included the X-IQ-AM1-240-5-HDK and X-IQ-AM1-240-5C-HDK SKU.
DSH-00007-5.0	July 2024	• Updated the system voltage value and compliance. • Updated Sprint plan to T-Mobile data plan.
DSH-00007-4.0	April 2024	Updated the UL smart mark.
DSH-00007-3.0	March 2024	Updated accessories and replacement parts, communication interfaces, and compatibility specifications.
DSH-00007-2.0	September 2023	Included Bluetooth specifications.
DSH-00007-1.0	May 2023	Initial release.

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