

IQ8 Series Microinverters

Our newest IQ8 Microinverters are the industry’s first microgrid-forming, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently. The brain of the semiconductor-based microinverter is our proprietary application-specific integrated circuit (ASIC) which enables the microinverter to operate in grid-tied or off-grid modes. This chip is built in advanced 55nm technology with high speed digital logic and has super-fast response times to changing loads and grid events, alleviating constraints on battery sizing for home energy systems.



Part of the Enphase Energy System, IQ8 Series Microinverters integrate with the Enphase IQ Battery, Enphase IQ Gateway, and the Enphase App monitoring and analysis software.



IQ8 Series Microinverters redefine reliability standards with more than one million cumulative hours of power-on testing, enabling an industry-leading limited warranty of up to 25 years.



Connect PV modules quickly and easily to IQ8 Series Microinverters using the included Q-DCC-2 adapter cable with plug-n-play MC4 connectors.



IQ8 Series Microinverters are UL Listed as PV Rapid Shut Down Equipment and conform with various regulations, when installed according to manufacturer’s instructions.

Easy to install

- Lightweight and compact with plug-n-play connectors
- Power Line Communication (PLC) between components
- Faster installation with simple two-wire cabling

High productivity and reliability

- Produce power even when the grid is down*
- More than one million cumulative hours of testing
- Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules

Microgrid-forming

- Complies with the latest advanced grid support**
- Remote automatic updates for the latest grid requirements
- Configurable to support a wide range of grid profiles
- Meets CA Rule 21 (UL 1741-SA) requirements

* Only when installed with IQ System Controller 2, meets UL 1741. IQ8H-208V operates only in grid-tied mode.

** IQ8 Series Microinverters supports split phase, 240V. IQ8H-208 supports split phase, 208V only.

IQ8 Series Microinverters

INPUT DATA (DC)		IQ8-60-2-US	IQ8PLUS-72-2-US	IQ8M-72-2-US	IQ8A-72-2-US	IQ8H-240-72-2-US	IQ8H-208-72-2-US ¹
Commonly used module pairings ²	W	235 – 350	235 – 440	260 – 460	295 – 500	320 – 540+	295 – 500+
Module compatibility		60-cell/120 half-cell	60-cell/120 half-cell, 66-cell/132 half-cell and 72-cell/144 half-cell				
MPPT voltage range	V	27 – 37	29 – 45	33 – 45	36 – 45	38 – 45	38 – 45
Operating range	V	25 – 48	25 – 58				
Min/max start voltage	V	30 / 48	30 / 58				
Max input DC voltage	V	50	60				
Max DC current ³ [module Isc]	A	15					
Overtoltage class DC port		II					
DC port backfeed current	mA	0					
PV array configuration		1x1 Ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit					
OUTPUT DATA (AC)		IQ8-60-2-US	IQ8PLUS-72-2-US	IQ8M-72-2-US	IQ8A-72-2-US	IQ8H-240-72-2-US	IQ8H-208-72-2-US ¹
Peak output power	VA	245	300	330	366	384	366
Max continuous output power	VA	240	290	325	349	380	360
Nominal (L-L) voltage/range ⁴	V	240 / 211 – 264					208 / 183 – 250
Max continuous output current	A	1.0	1.21	1.35	1.45	1.58	1.73
Nominal frequency	Hz	60					
Extended frequency range	Hz	50 – 68					
AC short circuit fault current over 3 cycles	Arms	2					4.4
Max units per 20 A (L-L) branch circuit ⁵		16	13	11	11	10	9
Total harmonic distortion		<5%					
Overtoltage class AC port		III					
AC port backfeed current	mA	30					
Power factor setting		1.0					
Grid-tied power factor (adjustable)		0.85 leading – 0.85 lagging					
Peak efficiency	%	97.5	97.6	97.6	97.6	97.6	97.4
CEC weighted efficiency	%	97	97	97	97.5	97	97
Night-time power consumption	mW	60					
MECHANICAL DATA							
Ambient temperature range		-40°C to +60°C (-40°F to +140°F)					
Relative humidity range		4% to 100% (condensing)					
DC Connector type		MC4					
Dimensions (HxWxD)		212 mm (8.3") x 175 mm (6.9") x 30.2 mm (1.2")					
Weight		1.08 kg (2.38 lbs)					
Cooling		Natural convection – no fans					
Approved for wet locations		Yes					
Pollution degree		PD3					
Enclosure		Class II double-insulated, corrosion resistant polymeric enclosure					
Environ. category / UV exposure rating		NEMA Type 6 / outdoor					
COMPLIANCE							
Certifications		CA Rule 21 (UL 1741-SA), UL 62109-1, UL1741/IEEE1547, FCC Part 15 Class B, ICES-0003 Class B, CAN/CSA-C22.2 NO. 107.1-01					
		This product is UL Listed as PV Rapid Shut Down Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 section 690.12 and C22.1-2018 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions.					

(1) The IQ8H-208 variant will be operating in grid-tied mode only at 208V AC. (2) No enforced DC/AC ratio. See the compatibility calculator at <https://link.enphase.com/module-compatibility> (3) Maximum continuous input DC current is 10.6A (4) Nominal voltage range can be extended beyond nominal if required by the utility. (5) Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

IQ Combiner 4/4C

The **IQ Combiner 4/4C** with IQ Gateway and integrated LTE-M1 cell modem (included only with IQ Combiner 4C) consolidates interconnection equipment into a single enclosure. It streamlines IQ Microinverters and storage installations by providing a consistent, pre-wired solution for residential applications. It offers up to four 2-pole input circuits and Eaton BR series busbar assembly.

Smart

- Includes IQ Gateway for communication and control
- Includes Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), included only with IQ Combiner 4C
- Includes solar shield to match Enphase IQ Battery aesthetics and deflect heat
- Supports Wi-Fi, Ethernet, or cellular connectivity
- Optional AC receptacle available for PLC bridge
- Provides production metering and consumption monitoring

Simple

- Mounts on single stud with centered brackets
- Supports bottom, back and side conduit entry
- Allows up to four 2-pole branch circuits for 240VAC plug-in breakers (not included)
- 80A total PV or storage branch circuits

Reliable

- Durable NRTL-certified NEMA type 3R enclosure
- Five-year limited warranty
- Two years labor reimbursement program coverage included for both the IQ Combiner SKU's
- UL listed
- X2-IQ-AM1-240-4 and X2-IQ-AM1-240-4C comply with IEEE 1547:2018 (UL 1741-SB, 3rd Ed.)



IQ Combiner 4/4C

MODEL NUMBER

IQ Combiner 4 X-IQ-AM1-240-4 X2-IQ-AM1-240-4 (IEEE 1547:2018)	IQ Combiner 4 with IQ Gateway printed circuit board for integrated revenue grade PV production metering (ANSI C12.20 ± 0.5%) and consumption monitoring (± 2.5%). Includes a silver solar shield to match the IQ Battery and IQ System Controller 2 and to deflect heat.
IQ Combiner 4C X-IQ-AM1-240-4C X2-IQ-AM1-240-4C (IEEE 1547:2018)	IQ Combiner 4C with IQ Gateway printed circuit board for integrated revenue grade PV production metering (ANSI C12.20 ± 0.5%) and consumption monitoring (± 2.5%). Includes Mobile Connect cellular modem (CELLMODEM-M1-06-SP-05), a plug-and-play industrial-grade cell modem for systems up to 60 microinverters. (Available in the US, Canada, Mexico, Puerto Rico, and the US Virgin Islands, where there is adequate cellular service in the installation area.) Includes a silver solar shield to match the IQ Battery and IQ System Controller and to deflect heat.

ACCESSORIES AND REPLACEMENT PARTS (not included, order separately)

Supported microinverters	IQ6, IQ7, and IQ8. (Do not mix IQ6/7 Microinverters with IQ8)
Communications Kit 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
Circuit Breakers BRK-10A-2-240V BRK-15A-2-240V BRK-20A-2P-240V BRK-15A-2P-240V-B BRK-20A-2P-240V-B	Supports Eaton BR210, BR215, BR220, BR230, BR240, BR250, and BR260 circuit breakers. Circuit breaker, 2 pole, 10A, Eaton BR210 Circuit breaker, 2 pole, 15A, Eaton BR215 Circuit breaker, 2 pole, 20A, Eaton BR220 Circuit breaker, 2 pole, 15A, Eaton BR215B with hold down kit support Circuit breaker, 2 pole, 20A, Eaton BR220B with hold down kit support
XA-SOLARSHIELD-ES	Replacement solar shield for IQ Combiner 4/4C
XA-PLUG-120-3	Accessory receptacle for Power Line Carrier in IQ Combiner 4/4C (required for EPLC-01)
X-IQ-NA-HD-125A	Hold-down kit for Eaton circuit breaker with screws
Consumption monitoring CT (CT-200-SPLIT/CT-200-CLAMP)	A pair of 200A split core current transformers

ELECTRICAL SPECIFICATIONS

Rating	Continuous duty
System voltage	120/240VAC, 60 Hz
Eaton BR series busbar rating	125A
Max. continuous current rating	65A
Max. continuous current rating (input from PV/storage)	64A
Max. fuse/circuit rating (output)	90A
Branch circuits (solar and/or storage)	Up to four 2-pole Eaton BR series Distributed Generation (DG) breakers only (not included)
Max. total branch circuit breaker rating (input)	80A of distributed generation/95A with IQ Gateway breaker included
IQ Gateway breaker	10A or 15A rating GE/Siemens/Eaton included
Production metering CT	200A solid core pre-installed and wired to IQ Gateway

MECHANICAL DATA

Dimensions (WxHxD)	37.5 cm x 49.5 cm x 16.8 cm (14.75 in x 19.5 in x 6.63 in). Height is 53.5 cm (21.06 in) with mounting brackets.
Weight	7.5 kg (16.5 lbs)
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	<ul style="list-style-type: none">• 20A to 50A breaker inputs: 14 to 4 AWG copper conductors• 60A 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.
Altitude	Up to 3,000 meters (9,842 feet)

INTERNET CONNECTION OPTIONS

Integrated Wi-Fi	IEEE 802.11b/g/n
Cellular	CELLMODEM-M1-06-SP-05, CELLMODEM-M1-06-AT-05 (4G based LTE-M1 cellular modem). Note that an Mobile Connect cellular modem is required for all Enphase Energy System installations.
Ethernet	Optional, IEEE 802.3, Cat5E (or Cat6) UTP Ethernet cable (not included)

COMPLIANCE

Compliance, IQ Combiner	CA Rule 21 (UL 1741-SA) IEEE 1547:2018 - UL 1741-SB, 3 rd Ed. (X2-IQ-AM1-240-4 and X2-IQ-AM1-240-4C) CAN/CSA C22.2 No. 107.1, Title 47 CFR, Part 15, Class B, ICES 003 Production metering: ANSI C12.20 accuracy class 0.5 (PV production) Consumption metering: accuracy class 2.5
Compliance, IQ Gateway	UL 60601-1/CANCSA 22.2 No. 61010-1

IQ System Controller 2

The **IQ System Controller 2** connects the home to grid power, the IQ Battery system, and solar PV. It provides microgrid interconnection device (MID) functionality by automatically detecting and seamlessly transitioning the home energy system from grid power to backup power in the event of a grid failure. It consolidates interconnection equipment into a single enclosure and streamlines grid independent capabilities of PV and storage installations by providing a consistent, pre-wired solution for residential applications.



Easy to Install

- Connects to service entrance¹ or main load center
- Supports main breaker
- Includes neutral-forming transformer
- Mounts on single stud with centered brackets
- Provides conduit entry from bottom, left, or right
- Includes color coded wires for ease of wiring Enphase Energy System Shutdown Switch

Flexible

- Can be used for Sunlight Backup, Home Essentials Backup, or Full Energy Independence
- Integrates with select AC standby generators. See [Generator Integration Tech Brief](#) for list of generators

Safe and Reliable

- Enphase Energy System Shutdown Switch can be used to disconnect PV, battery, and generator systems
- It acts as a rapid shutdown initiator of grid forming IQ8 PV Microinverters for safety of maintenance technicians/first responders
- IQ System Controller 2 has a 10-year limited warranty

1. IQ System Controller 2 is not suitable for use as service equipment in Canada.

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IQ System Controller 2

MODEL NUMBERS

EP200G101-M240US01 NOTE: No longer sold separately.	IQ System Controller 2 with neutral-forming transformer (NFT), and microgrid interconnect device (MID). Streamlines grid-independent capabilities of PV and storage installations.
EP200G-SC2-RSD-KIT	Includes above plus Enphase Energy System Shutdown Switch (EP200G-NA-02-RSD) with red, black, orange and purple 12 AWG wires, and breaker for powering IQ Gateway (refer to figure 1).
EP200G-SC2-RSD-BRK-KIT	Includes above plus three Eaton BR220B breakers for either IQ System Controller 2 or IQ Combiner, two BR240B breakers and one BR260 breaker for IQ System Controller 2, two X-IQ-NA-HD-125A hold-down kits for IQ Combiner, and two EP200G-NA-HD-200A hold-down kits for IQ System Controller 2 (refer to figures 2A and 2B).

ACCESSORIES and REPLACEMENT PARTS (ORDER SEPARATELY AS NEEDED)

EP200G-NA-XA-E3	Replacement IQ System Controller 2 printed circuit board
EP200G-NA-HD-200A	Eaton type BR circuit breaker hold-down kit, BRHDK125
CT-200-SPLIT	200A split core current transformer for generator metering ($\pm 2.5\%$ accuracy)
Circuit breakers (as needed) ^{2,3}	
• BRK-100A-2P-240V: Main breaker, 2 pole, 100A, 25kAIC, Eaton CSR2100N	• BRK-20A-2P-240V-B: Circuit breaker, 2 pole, 20A, 10kAIC, Eaton BR220B
• BRK-125A-2P-240V: Main breaker, 2 pole, 125A, 25kAIC, Eaton CSR2125N	• BRK-30A-2P-240V-B: Circuit breaker, 2 pole, 30A, 10kAIC, Eaton BR230B
• BRK-150A-2P-240V: Main breaker, 2 pole, 150A, 25kAIC, Eaton CSR2150N	• BRK-40A-2P-240V-B: Circuit breaker, 2 pole, 40A, 10kAIC, Eaton BR240B
• BRK-175A-2P-240V: Main breaker, 2 pole, 175A, 25kAIC, Eaton CSR2175N	• BRK-60A-2P-240V: Circuit breaker, 2 pole, 60A, 10kAIC, Eaton BR260
• BRK-200A-2P-240V: Main breaker, 2 pole, 200A, 25kAIC, Eaton CSR2200N	• BRK-80A-2P-240V: Circuit breaker, 2 pole, 80A, 10kAIC, Eaton BR280
BRK-20A40A-2P-240V	Quad breaker, 20A/40A, 10kAIC, Eaton BQC220240
EP200G-HNDL-R1	IQ System Controller 2 installation handle kit
EP200G-LITKIT	IQ System Controller 2 literature kit, including labels, feed-through headers, screws, filler plates, and QIG
EP200G-NA-02-RSD	2 pole Enphase Energy System Shutdown Switch

ELECTRICAL SPECIFICATIONS

Nominal voltage/range (L-L)	240 VAC/ $\pm 20\%$
Voltage measurement accuracy	$\pm 1\%$ ($\pm 1.2V$ L-N and $\pm 2.4V$ L-L)
Auxiliary/Dry contact for load control, excess PV control, and generator two-wire control	24V, 1A
Nominal frequency/range	60 Hz/56 - 63 Hz
Frequency measurement accuracy	± 0.1 Hz
Maximum continuous current rating	160A
Maximum input overcurrent protection device ⁴	200A
Maximum output overcurrent protection device ⁴	200A
Maximum overcurrent protection device rating for generator circuit	80A
Maximum overcurrent protection device rating for storage circuit	80A
Maximum overcurrent protection device rating for PV combiner circuit	80A
Internal busbar rating	200A
Neutral Forming Transformer (NFT)	
• Breaker rating (pre-installed): 40A between L1 and neutral; 40A between L2 and neutral	• Maximum continuous unbalanced current: 30A @ 120V
• Continuous rated power: 3600VA	• Peak rated power: 8800VA for 30 seconds
	• Peak unbalanced current: 80A @ 120V for 30 seconds

MECHANICAL DATA

Dimensions (WxHxD)	50cm x 91.6cm x 24.6cm (19.7 in x 36 in x 9.7 in)
Weight	39.4 kg (87 lbs)
Ambient temperature range	-40° C to +50° C (-40° F to 122° F)
Cooling	Natural convection, solar shield
Enclosure environmental rating	Outdoor, NEMA type 3R, polycarbonate construction
Maximum altitude	2500 meters (8200 feet)

WIRE SIZES

Connections (All lugs are rated to 90C)	• Main lugs and backup load lugs • CSR breaker bottom wiring lugs • AC combiner lugs, IQ Battery lugs, and generator lugs • Neutral lugs	Cu/Al: 1 AWG – 300 KCMIL Cu/Al: 2 AWG – 300 KCMIL 14 AWG – 2 AWG Cu/Al: 6 AWG – 300 KCMIL
Neutral and ground bars	Large holes (5/16-24 UNF) Small holes (10-32 UNF)	14 AWG – 1/0 AWG 14 AWG – 6 AWG

COMPLIANCE

Compliance	UL1741, UL1741 SA, UL1741 SB, UL1741 PCS CRD, UL1998, UL869A ⁵ , UL67 ⁵ , UL508 ⁵ , UL50E ⁵ CSA 22.2 No. 107.1, 47 CFR Part 15 Class B, ICES 003, ICC ES AC156. IQ System Controller 2 is approved for use as service equipment in the United States IFETEL homologation number: RCPENEP22-2078
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2. Compatible with BRHDK125 hold-down kit to comply with 2017 NEC 710.15E for back-fed circuit breakers.

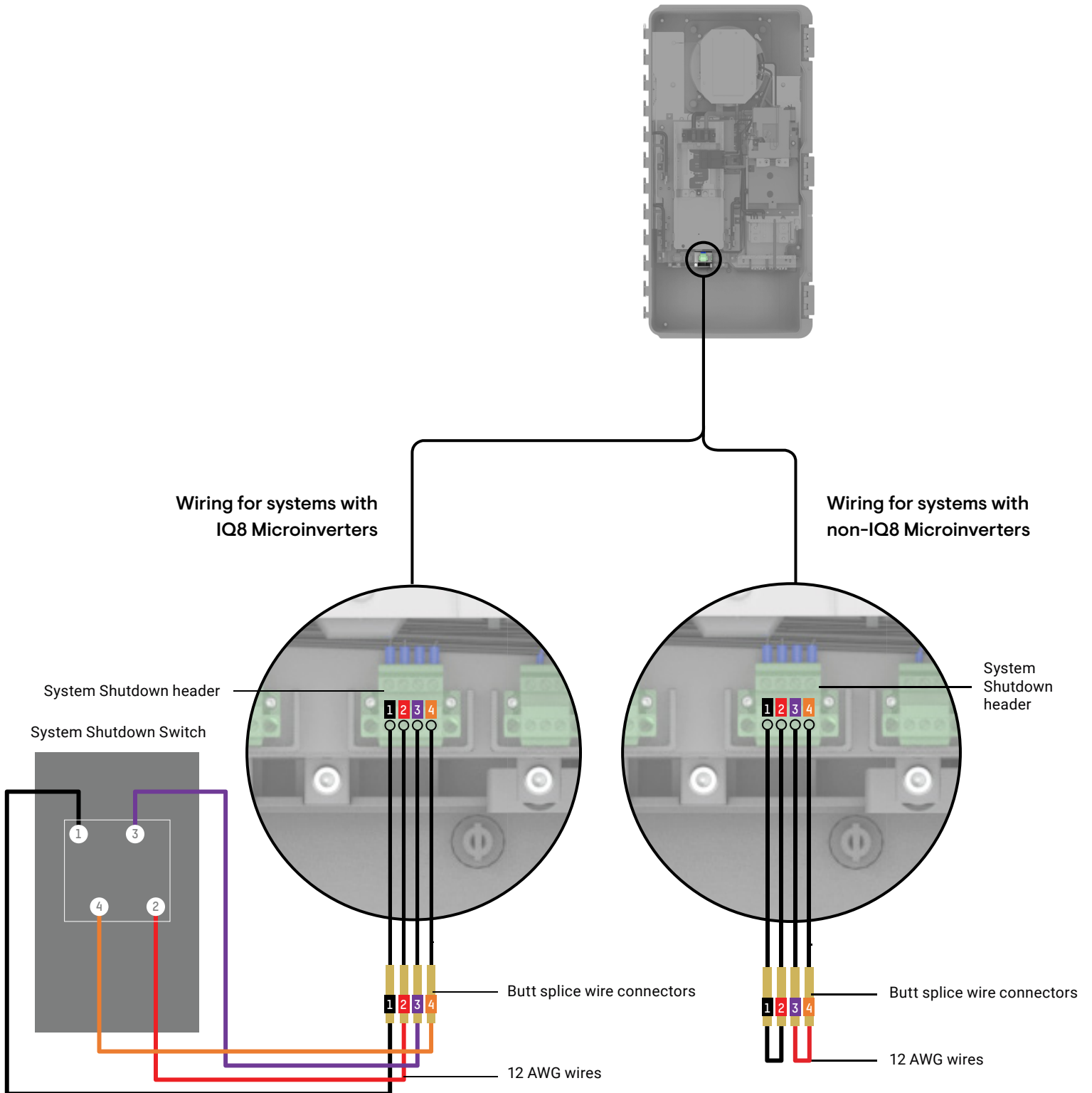
3. The IQ System Controller 2 is rated at 22 kAIC.

4. CSR breakers are not included in EP200G-SC2-RSD-BRK-KIT. Installer must provide correctly rated breakers.

5. Sections from these standards were used during the safety evaluation and included in the UL1741 listing.

IQ System Controller 2

Figure 1: Wiring Enphase Energy System Shutdown Switch



IQ System Controller 2

Figure 2A: Installing DER breakers for IQ8 System without generator

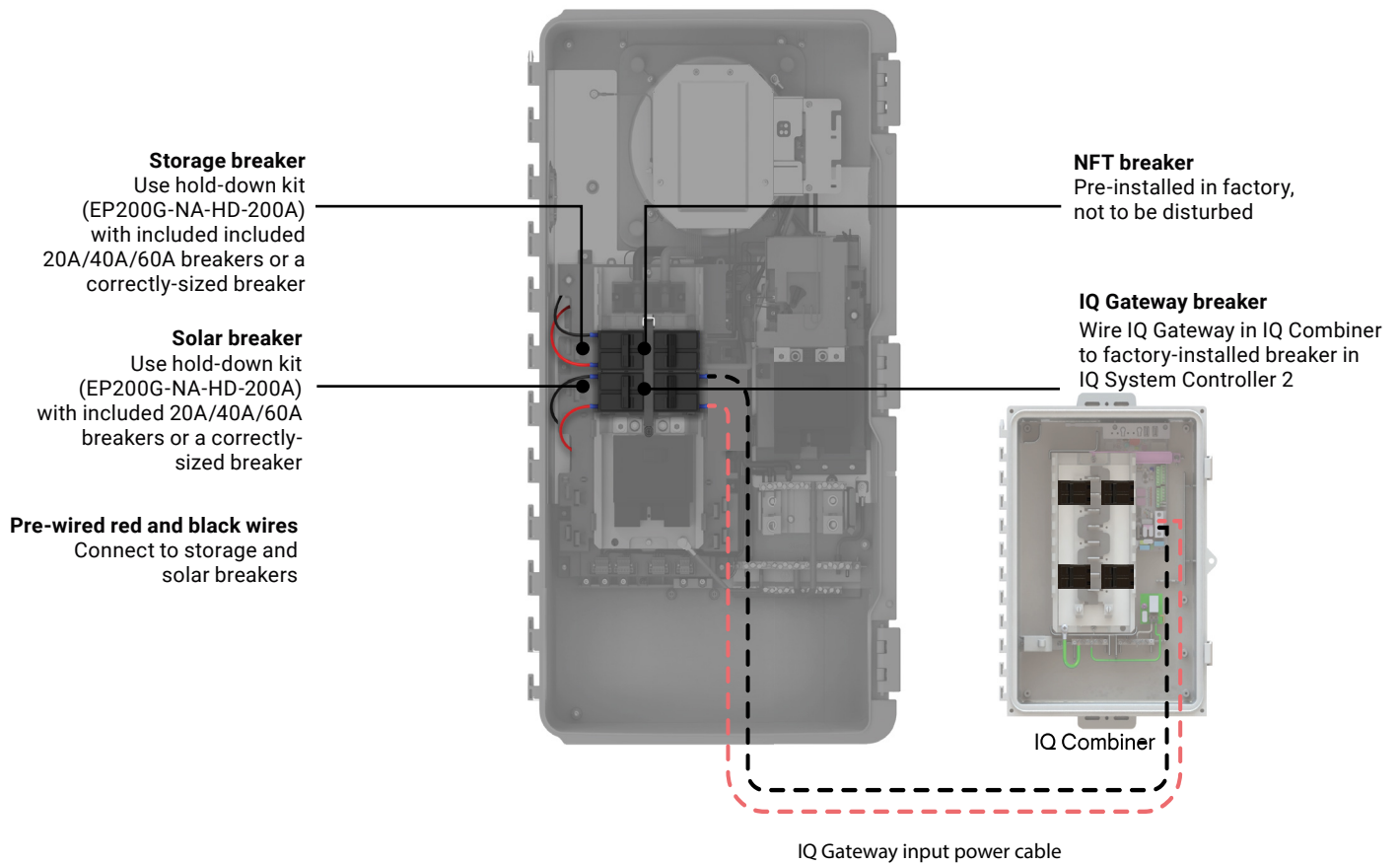
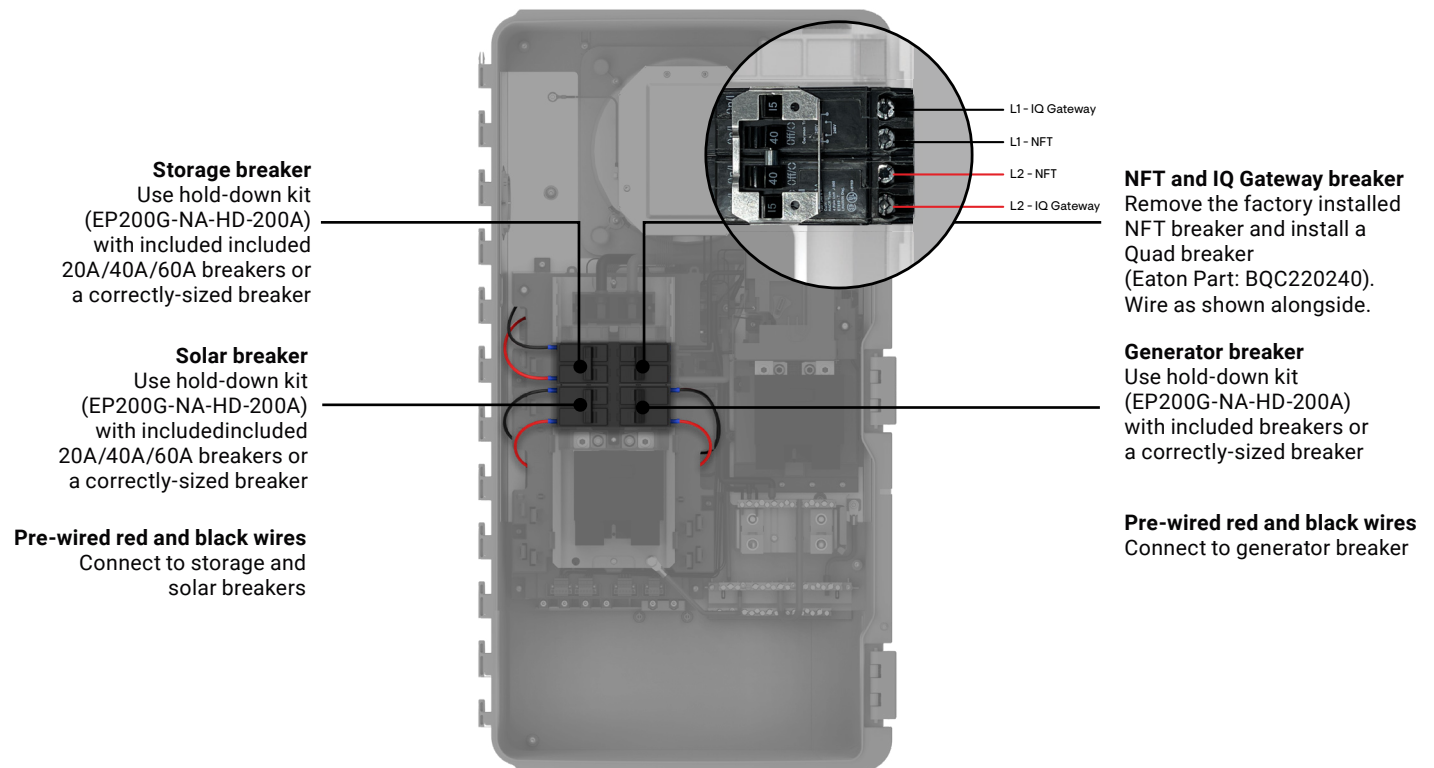


Figure 2B: Installing DER breakers for IQ8 System with generator



IQ Battery 3T

The **IQ Battery 3T** all-in-one AC-coupled storage system is reliable, smart, simple, and safe. It has a total usable energy capacity of 3.36 kWh and includes four embedded grid-forming microinverters with 1.28 kW power rating. It provides backup capability and installers can quickly design the right system size to meet the needs of both new and retrofit solar customers.



Reliable

- Proven high-reliability IQ Series Microinverters
- 10-years limited warranty, extendable to 15-years¹
- Four embedded IQ8X-BAT microinverters
- Passive cooling (no moving parts/fans)
- UL listed
- Meets CA Rule 21 (UL 1741-SA) and IEEE 1547:2018 (UL 1741-SB, 3rd Ed.)

Smart

- Grid-forming capability for backup operation
- Remote software and firmware upgrade
- Mobile app-based monitoring and control
- Support for self consumption
- Utility time of use (TOU) optimization

Simple

- Fully integrated AC battery system
- Quick and easy plug-and-play installation
- Interconnects with standard household AC wiring

Safe

- Safety tested battery cells and module
- Lithium iron phosphate (LFP) chemistry for maximum safety and longevity

1. Terms and conditions apply.

IQ Battery 3T

MODEL NUMBER	
ENCHARGE-3T-1P-NA	IQ Battery 3T with integrated Enphase IQ Series Microinverters and battery management unit (BMU). Includes: - One IQ Battery 3T base unit (B03-T01-US00-1-3) - One IQ Battery 3T cover kit with cover and wall mounting bracket (B03T-C-0430-O)
OUTPUT (AC)	
	@240 VAC²
Rated (continuous) output power	1.28 kVA
Peak output power	1.92 kVA (10 seconds)
Nominal voltage / range	240/211–264VAC
Nominal frequency / range	60/57–63 Hz
Rated output current	5.3A
Peak output current	8.2A (10 seconds)
Power factor (adjustable)	0.85 leading ... 0.85 lagging
Maximum units per 20A branch circuit	Three units (single-phase)
Interconnection	Single-phase
Maximum AC short circuit fault current over 3 cycles	23.2 Arms
Round trip efficiency ³	89%
BATTERY	
Total capacity	3.5 kWh
Usable capacity	3.36 kWh
Round trip efficiency	96%
Nominal DC voltage	67.2V
Maximum DC voltage	75.6V
Ambient operating temperature range	-15°C to 55°C (5°F to 131°F) non-condensing
Optimum operating temperature range	0°C to 30°C (32°F to 86°F)
Chemistry	Lithium iron phosphate (LFP)
MECHANICAL DATA	
Dimensions (WxHxD)	430 mm x 775 mm x 188 mm (16.9 in x 30.5 in x 7.4 in)
Weight	One individual 40.5 kg (89.3 lbs) base unit plus 8.3 kg (18.3 lbs) cover and mounting bracket; total 48.8 kg (107.6 lbs)
Enclosure	Outdoor – NEMA 3R
IQ8X-BAT Microinverter enclosure	NEMA type 6
Cooling	Natural convection – No fans
Altitude	Up to 2,500 meters (8,200 feet)
Mounting	Wall mount
FEATURES AND COMPLIANCE	
Compatibility	Compatible with grid-tied PV systems. Compatible with M215/M250 and IQ Series Microinverters, IQ System Controller, and IQ Gateway for backup operation.
Communication	Wireless 2.4 GHz
Services	Backup, self-consumption, TOU, Demand Charge, NEM Integrity
Monitoring	Enphase Installer App monitoring options; API integration
Compliance	CA Rule 21 (UL 1741-SA), IEEE 1547:2018 (UL 1741-SB, 3 rd Ed.) CAN/CSA C22.2 No. 107.1-16 UL 9540, UL 9540A, UN 38.3, UL 1998, UL 991, NEMA Type 3R, AC156 EMI: 47 CFR, Part 15, Class B, ICES 003 Cell Module: UL 1973, UN 38.3 Inverters: UL 62109-1, IEC 62109-2
LIMITED WARRANTY	
Limited Warranty	>70% capacity, up to 10-years or 4,000 cycles ⁴ , extendable to 15-years ¹

1. Terms and conditions apply.
2. Supported in both grid-connected and backup operation.
3. AC to battery to AC at 50% power rating.
4. Whichever occurs first. Restrictions apply.

To learn more about Enphase offerings, visit enphase.com

Enphase IQ Battery 10T

The **Enphase IQ Battery 10T** all-in-one AC-coupled storage system is **reliable, smart, simple, and safe**. It is comprised of three base IQ Battery 3T storage units, has a total usable energy capacity of 10.08 kWh and twelve embedded grid-forming microinverters with 3.84 kW power rating. It provides backup capability and installers can quickly design the right system size to meet the needs of both new and retrofit solar customers.



Reliable

- Proven high reliability IQ series microinverters
- Ten-years limited warranty, extendable to 15 years⁴
- Three independent IQ Battery base units
- Twelve embedded IQ8X-BAT microinverters
- Passive cooling (no moving parts/fans)

Smart

- Grid-forming capability for backup operation
- Remote software and firmware upgrade
- Mobile app-based monitoring and control
- Support for self consumption
- Utility time of use (TOU) optimization

Simple

- Fully integrated AC battery system
- Quick and easy plug-and-play installation
- Interconnects with standard household AC wiring

Safe

- Safety tested battery cells and module
- Lithium iron phosphate (LFP) chemistry for maximum safety and longevity

Enphase IQ Battery 10T

MODEL NUMBER	
ENCHARGE-10T-1P-NA	IQ Battery 10T battery storage system with integrated Enphase IQ series microinverters and battery management unit (BMU). Includes: - Three IQ Battery 3T base units (B03-T01-US00-1-3) - One IQ Battery 10T cover kit with cover, wall mounting bracket, and interconnect cable for wiring between batteries (B10T-C-1290-0)
OUTPUT (AC)	
	@ 240 VAC¹
Rated (continuous) output power	3.84 kVA
Peak output power	5.76 kVA (10 seconds)
Nominal voltage / range	240 / 211 – 264 VAC
Nominal frequency / range	60 / 57 – 63 Hz
Rated output current	16 A
Peak output current	24.6A (10 seconds)
Power factor (adjustable)	0.85 leading ... 0.85 lagging
Maximum units per 20 A branch circuit	1 unit (single phase)
Interconnection	Single-phase
Maximum AC short circuit fault current over 3 cycles	69.6 Arms
Round trip efficiency ²	89%
BATTERY	
Total capacity	10.5 kWh
Usable capacity	10.08 kWh
Round trip efficiency	96%
Nominal DC voltage	67.2 V
Maximum DC voltage	75.6 V
Ambient operating temperature range	-15° C to 55° C (5° F to 131° F) non-condensing
Optimum operating temperature range	0° C to 30° C (32° F to 86° F)
Chemistry	Lithium iron phosphate (LFP)
MECHANICAL DATA	
Dimensions (WxHxD)	1283 x 775 x 188 mm (50.5 x 30.5 x 7.4 in)
Weight	Three individual 40.5 kg (89.3 lbs) base units plus 22.1 kg (48.7 lbs) cover and mounting bracket; total 143.6 kg (316.5 lbs)
Enclosure	Outdoor – NEMA type 3R
IQ8X-BAT microinverter enclosure	NEMA type 6
Cooling	Natural convection – No fans
Altitude	Up to 2500 meters (8200 feet)
Mounting	Wall mount
FEATURES AND COMPLIANCE	
Compatibility	Compatible with grid-tied PV systems. Compatible with Enphase M215/M250 and IQ Series Micros, Enphase IQ System Controller, and Enphase IQ Gateway for backup operation.
Communication	Wireless 2.4 GHz
Services	Backup, self-consumption, TOU, Demand Charge, NEM Integrity
Monitoring	Enphase Installer Platform monitoring options; API integration
Compliance	UL 9540, UN 38.3, UL 1998, UL 991, NEMA Type 3R, AC156 EMI: 47 CFR, Part 15, Class B, ICES 003 Cell Module: UL 1973, UN 38.3 Inverters: UL 62109-1, IEC 62109-2, UL 1741SA, CAN/CSA C22.2 No. 107.1-16, and IEEE 1547
LIMITED WARRANTY	
Limited Warranty	>70% capacity, up to 10 years or 4000 cycles ³ , extendable to 15 years ⁴

1. Supported in both grid-connected and backup operation.
2. AC to Battery to AC at 50% power rating.
3. Whichever occurs first. Restrictions apply.
4. Terms and conditions apply.

To learn more about Enphase offerings, visit enphase.com