

The IQ8 Microinverter

Its IQ is off the charts



IQ8 enables backup power when the sun is up, even without a battery, and eliminates battery sizing restrictions to make Enphase battery ownership possible for millions more homeowners.



Seamless switching on or off grid.

IQ8, our most powerful software-defined microinverter ever, is powered by a proprietary, intelligent chip, that makes switching between on or off grid virtually seamless.



Sunlight Backup— an industry first.

With IQ8, power essential appliances—lights, fans, and phones— during daytime outages, even without a home battery.



More power to your home.

In an outage, other energy systems limit the amount of energy you can produce based on battery capacity. With IQ8, produce as much solar energy as you can make, regardless of battery size, maximizing your investment in solar.



Future proof your investment.

With IQ8 at the core, Enphase Energy Systems are flexible and scalable. Start with an IQ8 solar-only system and add Enphase batteries and an IQ Load Controller as energy needs grow for resiliency.



More power per square foot.

Our highest-output microinverters ever, IQ8 packs more power into less space than other rooftop solar systems.



Industry-leading warranty.

IQ8 microinverters are backed by an industry-leading 25-year limited warranty.

Enphase microinverters are placed under each solar panel and work independently, so even if one stops, the power keeps flowing.





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

IQ8 Series Microinverters

INPUT DATA (DC)		108-60-2-US	108PLUS-72-2-US	108M-72-2-US	108A-72-2-US	108H-240-72-2-US	108H-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 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)		108-60-2-US	108PLUS-72-2-US	108M-72-2-US	108A-72-2-US	108H-240-72-2-US	108H-208-72-2-US	
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						
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						
Acoustic noise at 1 m		<60 dBA						
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.

The Enphase App

The power of the sun at your fingertips



A powerful and intelligent companion to the Enphase Energy System.



Get data from each solar panel by day, month, year, or enter a custom range.



Know your energy system vitals in real-time.



View your energy production and consumption over time.



Seamlessly disconnect your home from the utility grid at the tap of a button.



Choose which appliances to back up and prioritize in the event of an outage.



Contact customer support and troubleshoot your system directly in the Enphase App.



Get alerts about extreme weather events so you can prepare the home to stay powered during an outage.



Sell surplus electricity back to your utility provider for cash or credit on your bill.*



Smart settings automatically optimize backup power, energy savings, or both.

* Available in select locations.