



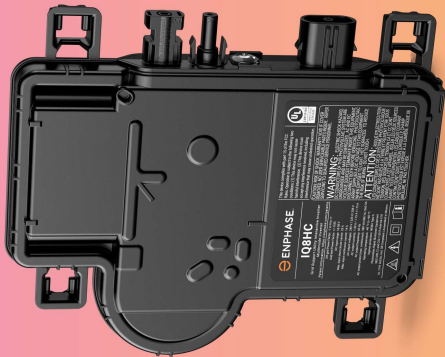
IQ8HC Microinverter

Our newest IQ8 Series Microinverters^{1,2,3} are the industry’s first microgrid-forming⁴, software-defined microinverters with split-phase power conversion capability to convert DC power to AC power efficiently.

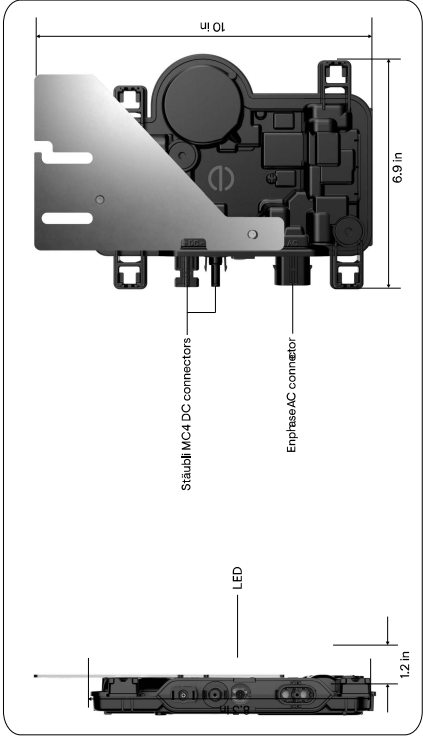


NORTH AMERICA

DATA SHEET



Key specifications	IQ8HC-72-M-US@240 VAC IQ8HC-72-M-DOM-US @240 VAC		IQ8HC-72-M-US@208 VAC IQ8HC-72-M-DOM-US @208 VAC	
Peak output power	384 VA		366 VA	
Nominal grid voltage (L-L)	240 V, split-phase (L-L), 180°		208 V, single-phase (L-L), 120°	
Nominal frequency	60 Hz		60 Hz	
CEC weighted efficiency	97.0%		96.5%	
Maximum input DC voltage	60 V		60 V	
MPPT voltage range	29.5–45 V		29.5–45 V	
Maximum module I _{sc}	20 A		20 A	
Ambient temperature range	–40°C to 65°C (–40°F to 149°F)			



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



- Produces power even when the grid is down⁴
- More than one million cumulative hours of testing
- Industry-leading limited warranty of up to 25 years
- Class II double-insulated enclosure
- Optimized for the latest high-powered PV modules



- 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) and IEEE 1547:2018 (UL 1741-SB 3rd Ed.)

Input data (DC)	Units
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Commonly used module pairings ⁶	W	IQ8HC-72-M-US @240 VAC IQ8HC-72-M-DOM-US @240 VAC	IQ8HC-72-M-US @208 VAC IQ8HC-72-M-DOM-US ⁵ @208 VAC
Module compatibility	–	To meet compatibility, PV modules must be within the maximum input DC voltage and maximum module I _{sc} listed below. Module compatibility can be checked at https://enphase.com/installers/microinverters/calculator .	
MPPT voltage range	V	29.5–45	
Operating range	V	18–58	
Minimum/Maximum start voltage	V	22/58	
Maximum input DC voltage	V	60	
Maximum continuous operating DC current	A	14	
Maximum input DC short-circuit current	A	25	
Maximum module I _{sc}	A	20	
Overvoltage class DC port	–	II	
DC port backfeed current	mA	0	
PV array configuration	–	Ungrounded array; no additional DC side protection required; AC side protection requires a maximum of 20 A per branch circuit	
Output data (AC)	Units	IQ8HC-72-M-US @240 VAC IQ8HC-72-M-DOM-US @240 VAC	IQ8HC-72-M-US @208 VAC IQ8HC-72-M-DOM-US ⁵ @208 VAC
Peak output power	VA	384	366
Maximum continuous output power	VA	380	360
Nominal grid voltage (L-L)	V	240, split-phase (L-L), 180°	208, single-phase (L-L), 120°
Minimum and maximum grid voltage ⁷	V	211-264	183–229
Maximum continuous output current	A	1.58	1.73
Nominal frequency	Hz	60	
Extended frequency range	Hz	47–68	
AC short-circuit fault current over three cycles	A _{rms}	2.7	
Maximum units per 20 A (L-L) branch circuit ⁸	–	10	9
Total harmonic distortion	%	<5	
Overvoltage class AC port	–	III	
AC port backfeed current	mA	18	
Power factor setting	–	1	
Grid-tied power factor (adjustable)	–	0.85 leading ... 0.85 lagging	
Peak efficiency	%	97.3	97.2
CEC weighted efficiency	%	97.0	96.5
Nighttime power consumption	mW	22	26

⁵ IQ8HC-72-M-DOM-US (240 VAC and 208 VAC) is made in the USA, and the PCBs, electrical parts, and enclosure are domestically manufactured to meet the requirements of eligibility to be considered for the ITC domestic content bonus adder.

⁶ No enforced DC/AC ratio.

⁷ Nominal voltage range can be extended beyond nominal if required by the utility.

⁸ Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

¹ IQ8 Series Microinverters can be added to existing IQ7 systems on the same IQ Gateway only in the following grid-tied configurations: Solar Only or Solar + Battery (IQ Battery 3T/10T and IQ Battery 5P) without backup.

² IQ7 Series Microinverters cannot be added to a site with existing IQ8 Series Microinverters on the same gateway.

³ IQ Microinverters ship with default settings that meet North America’s IEEE 1547 interconnection standard requirements. Region-specific adjustments may be requested by an Authority Having Jurisdiction (AHJ) or utility representative, according to the IEEE 1547 interconnection standard. Use an IQ Gateway to make these changes during installation.

⁴ Meets UL 1741 only, when installed with IQ System Controller 2 or 3.