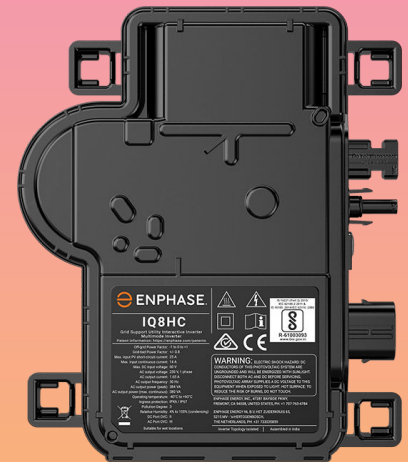
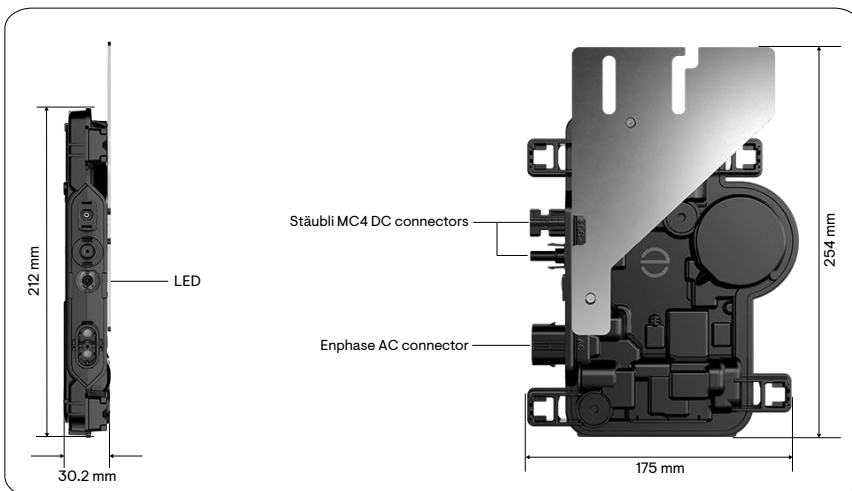


IQ8 Series Microinverters

The high-powered, smart grid-ready IQ8 Series Microinverters are designed to match the latest generation high-output PV modules. The IQ8 Series Microinverter has the highest energy production and reliability standards in the industry, and with rapid shutdown functionality, it meets the highest safety standards.



Key specifications	IQ8HC-72-M-INT
Max. apparent power	384 VA
Nominal grid voltage	230 V
Nominal frequency	50 Hz
IS/IEC 61683 weighted efficiency	96.7%
Min./Max. voltage	18/60 V
Min./Max. MPP voltage	29.5/45 V
Max. short-circuit DC input current	25 A
Ambient air temperature range	-40°C to 65°C (-40°F to 149°F)



Easy

- Lightweight and compact with integrated Stäubli MC4 connectors for easy installation
- Fast installation with simple AC cabling
- Faster firmware upgrades enabled by the new integrated circuit technology

Reliable

- More than 1 million power-on hours of reliability testing
- Patented Burst Mode technology provides increased energy production
- Low-voltage DC and rapid shutdown for the ultimate fire safety
- Industry-leading warranty of up to 15 years, extendable to 20 or 25 years¹

Compatible

- Supports the latest high-current PV modules
- Compatible with existing IQ7 systems, allowing seamless expansion of your solar capacity as energy requirements grow²

¹15-year warranty is valid, provided an internet-connected IQ Gateway and IQ Relay are installed. Get in touch with the Enphase team for warranty extension options.

²For details, see the "Compatibility with IQ7 Series Microinverters" section.

Input data (DC)	Parameters	Units	IQ8HC-72-M-INT
Typical module compatibility	—	—	54-cell/108-half-cell, 60-cell/120-half-cell, 66-cell/132-half-cell, 72-cell/144-half-cell. No enforced DC/AC ratio and maximum input power. Modules can be paired as long as the maximum input voltage is not exceeded and the maximum input current of the inverter is respected at the lowest and highest temperatures. See the compatibility calculator at https://enphase.com/en-in/installers/microinverters/calculator .
Min./Max. voltage	Udcmin/ Udcmax	V	18/60
Startup input voltage	Udcstart	V	22
Min./Max. MPP voltage	Umpmin/ Umpmax	V	29.5/45
Min./Max. operating voltage	Uopmin/ Uopmax	V	18/58
Max. input current	Idcmax	A	14
Max. short-circuit DC input current	Iscmax	A	25 Maximum short-circuit current for modules (Isc) allowed being paired with IQ8HC Microinverters: 20 A
Max. input power ³	Pdcmax	W	560
Output data (AC)	Parameters	Units	IQ8HC-72-M-INT
Max. apparent power	Sac,max	VA	384
Rated power	Pac,r	W	380
Nominal grid voltage	Uacnom	V	230
Min./Max. grid voltage	Uacmin/ Uacmax	V	184/276
Max. output current	Iacmax	A	1.67
Nominal frequency	fnom	Hz	50
Min./Max. frequency	fmin/fmax	Hz	45/55
Max. units per single-phase/three-phase 20 A circuit	16 A/ Iacmax	—	9 (L+N)/27 (3L+N) For IQ Cable with 12 AWG stranded conductors designed with NEC 2023 India standard and using a 1.25 safety factor, 16 A per phase is calculated as the maximum current according to NEC 2023 India requirements. Breaker selection should be determined by “Circuit current < Breaker rated current < Cable current capacity”.
Protective class (all ports)	—	—	II
Total harmonic distortion	—	%	<5
Power factor setting	—	—	1.0
Power factor range	cos phi	—	0.8 leading ... 0.8 lagging
Inverter maximum efficiency	ηmax	%	97.4
IS/IEC 61683 weighted efficiency	η	%	96.7
Inverter topology	—	—	Isolated (HF transformer)
Night-time power loss	—	mW	50

³ At STC within the MPP range. <https://enphase.com/en-in/installers/microinverters/calculator>.

Mechanical data	IQ8HC-72-M-INT
Ambient air temperature range	-40°C to 65°C (-40°F to 149°F)
Relative humidity range	4% to 100% (condensing)
Overvoltage class AC port	III
Number of input DC connectors (pairs) per single MPP tracker	1
AC connector type	IQ Cabling (refer to the IQ Cable and accessories data sheet)
DC connector type	Stäubli MC4
Dimensions (H × W × D)	212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2") (without mounting brackets)
Weight (with mounting plate)	1.1 kg (2.4 lb)
Cooling	Natural convection—no fans
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure
IP rating	Outdoor – IP67
Altitude	<2600 m (8530 ft)

Standards	IQ8HC-72-M-INT
Grid compliance	IEC61727
Safety	EN IEC 62109-1, EN IEC 62109-2
EMC	EN IEC 61000-3-2, 61000-3-3, 61000-6-2, 61000-6-3, EN IEC 50065-1, 50065-2-2, EN 55011 ⁴
Product labelling	CE, RCM and BIS
Advanced grid functions ⁵	Power export limiting (PEL), phase imbalance management (PIM), loss of phase detection (LOP), power factor control Q (U), cos phi (P)
Microinverter communication	Power line communication (PLC) 110–120 kHz (Class B), narrowband 200 Hz

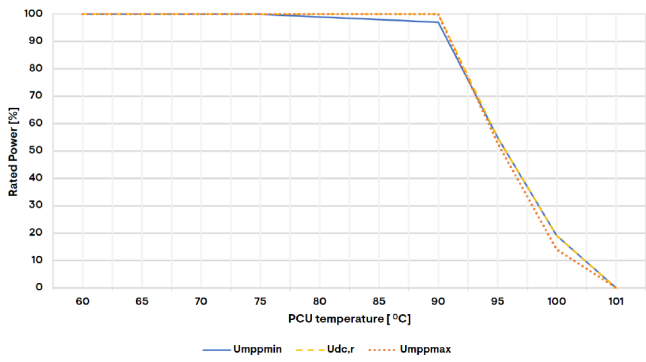
Compatibility with IQ7 Series Microinverters

- IQ8 Series Microinverters can be added to existing IQ7 systems on the same IQ Gateway/IQ Combiner/IQ System Controller only in the following configurations: (i) Solar Only or (ii) Solar Plus Battery (IQ Battery 5P) grid-tied or Solar Plus Battery (IQ Battery 5P) with backup with IQ System Controller 3 INT.
- IQ7 Series Microinverters cannot be added to a site with existing IQ8 Series Microinverters on the same gateway.
- Mixed system of IQ7 and IQ8 will not support the IQ8-specific Sunlight Jump Start feature.
- The peak power output of the IQ7, IQ8 Microinverter arrays must not exceed 150% of the IQ Battery's total rated power output. If the microinverter array exceeds this ratio, PV shedding must be implemented to shed excess PV when the system transitions to off-grid mode.

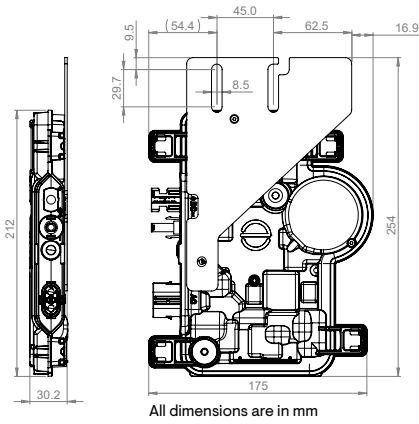
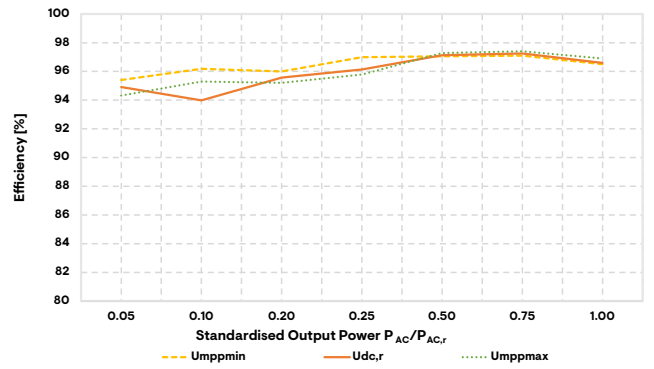
⁴ Some of these functions require IQ Gateway Metered with current transformers and/or IQ Relay installed.

⁵ IQ Relay is mandatory to protect the PV system from grid abnormalities.

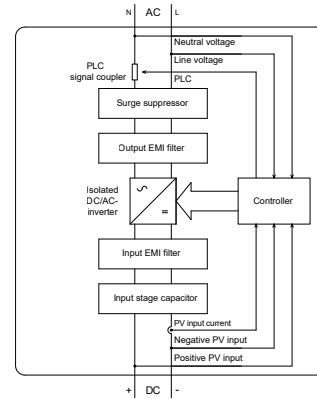
IQ8HC Microinverter rated power vs PCU temperature



IQ8HC Microinverter efficiency curve



IQ8HC Microinverter



Assembled in China, India, or the U.S.

Manufacturer: Enphase Energy Inc. 47281 Bayside Pkwy, Fremont, CA 94538, United States of America, Tel: +1 (707) 763-4784

Importer: Enphase Solar Energy Pvt. Ltd., IndiQube Golf View Homes, Ward No: 73 Airport, NAL Wind Tunnel Main Road, Bangalore-560017. Tel: +91-80-6117-2500

Components of the Enphase Energy System



IQ Battery

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.



IQ Gateway

The IQ Gateway is a device that performs energy management, provides internet connectivity, and integrates with the IQ Series Microinverters to provide complete control and insights into the Enphase Energy System.⁶



IQ Cabling

Install microinverters quickly and safely with IQ Cabling.



IQ Relay

For production circuits in both single-phase and three-phase systems. IQ Relay acts as a grid monitoring and disconnection device and includes a built-in PLC phase coupler (three-phase).⁷

⁶15-year warranty is valid, provided an internet-connected IQ Gateway and IQ Relay are installed. Get in touch with the Enphase team for warranty extension options.

⁷IQ Relay is mandatory to protect the PV system from grid abnormalities.

Revision history

Revision	Date	Description
DSH-00071-5.0	March 2026	Updated information on backward compatibility with IQ7/IQ8 Series Microinverters.
DSH-00071-4.0	June 2025	Updated the introduction.
DSH-00071-3.0	May 2025	Updated information on backward compatibility with IQ7 Series Microinverters.
DSH-00071-2.0	September 2023	Updated the module comparability calculator link.
DSH-00071-1.0	August 2023	Preliminary release.