



IQ7 and IQ7+ Microinverters

The high-powered, smart grid-ready IQ7 and IQ7+ Microinverters dramatically simplify installation while achieving the highest system efficiency.



Part of the Enphase Energy System, the IQ7 Series Microinverters integrate with the IQ Gateway, IQ Battery, and the Enphase Installer App monitoring and analysis software.



IQ7 Series Microinverters extend the reliability standards set forth by previous generations and undergo over a million hours of power-on testing, enabling Enphase to provide an industry-leading warranty of up to 25 years.



Connect PV modules quickly and easily to IQ7 Series Microinverters using the included Q-DCC-2 adapter cable with plug-and-play MC4 connectors.



IQ7 Series Microinverters are UL listed as PV Rapid Shutdown Equipment and conform with various regulations when installed according to the manufacturer's instructions.

Easy to install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant (NEC 2014, 2017, and 2020)

Productive and reliable

- Optimized for high-powered 60-cell/120-half-cell and 72-cell/144-half-cell PV modules
- More than a million hours of testing
- Class II double-insulated enclosure
- UL listed

Smart grid-ready

- Complies with advanced grid support, voltage, and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA) IEEE 1547:2018 (UL 1741-SB, 3rd Ed.)

IQ7 and IQ7+ Microinverters

INPUT DATA (DC)		UNITS	IQ7-60-2-US	IQ7PLUS-72-2-US
Commonly used module pairings ¹		W	235–350	235–440
Module compatibility			60-cell/120 half-cell PV modules only	60-cell/120-half-cell and 72-cell/144-half-cell PV modules
MPPT voltage range		V	27–37	27–45
Operating range		V	16–48	16–60
Min./max. start voltage		V	22/48	22/60
Max. input DC voltage		V	50	60
Max. continuous input DC current		A	10	12
Max. input DC short-circuit current		A		25
Max. module Isc		A		20
Overtoltage class DC port				II
DC port back-feed current		mA		0
PV array configuration			1 × 1 ungrounded array; No additional DC side protection required; AC side protection requires max 20 A per branch circuit	
OUTPUT DATA (AC)		UNITS	IQ7-60-2-US	IQ7PLUS-72-2-US
Peak output power		VA	250	295
Max. continuous output power		VA	240	290
Nominal (L-L) voltage/range ²		V	240/211–264, 208/183–229	
Max. continuous output current		A	1.0 (240 V)/1.15 (208 V)	1.21 (240 V)/1.39 (208 V)
Nominal frequency		Hz		60
Extended frequency range		Hz		49–68
AC short circuit fault current over three cycles		Arms		5.8
Max. units per 20 A (L-L) branch circuit ³			16/13	13/11
Total harmonic distortion		%		<5
Overtoltage class AC port				III
AC port back-feed current		mA		18
Power factor setting				1.0
Grid-tied power factor (adjustable)			0.85 leading ... 0.85 lagging	
Peak efficiency		%	97.6 (240 V)	97.5 (240 V)/97.3 (208 V)
CEC weighted efficiency		%		97
Nighttime power consumption		mW		60
MECHANICAL DATA				
Ambient temperature range			–40°C to 65°C (–40°F to 149°F)	
Relative humidity range			4% to 100% (condensing)	
DC connector type			MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)	
Dimensions (H × W × D)			212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2") without bracket	
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, IEEE 1547:2018 (UL 1741-SB 3 rd Ed.), HEI Rule 14H SRD 2.0, 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 Shutdown Equipment and conforms with NEC 2014, NEC 2017, and NEC 2020 section 690.12 and C22.1-2015 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to the manufacturer's instructions.			

(1) Pairing PV modules with wattage above the limit may result in additional clipping losses. See the compatibility calculator at <https://link.enphase.com/module-compatibility>.

(2) Nominal voltage range can be extended beyond nominal if required by the utility. (3) Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.