



## 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.



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 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.



IQ7 Series Microinverters are UL Listed as PV rapid shutdown equipment and conform to 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) and IEEE 1547:2018 (UL 1741-SB, 3<sup>rd</sup> Ed. - for single-phase systems)

# IQ7 and IQ7+ Microinverters

INPUT DATA (DC)	UNITS	IQ7-60-2-US	IQ7PLUS-72-2-US
Commonly used module pairings <sup>1</sup>	W	235–350	235–440
Module compatibility	–	60-cell/120-half-cut-cell and 54-cell/108-half-cut-cell PV modules	60-cell/120-half-cut-cell, 66-cell/132-half-cut-cell, 54-cell/108-half-cut-cell, and 72-cell/144-half-cut-cell PV modules
MPPT voltage range	V	27–37	27–45
Operating range	V	16–48	16–60
Minimum/Maximum start voltage	V	22/48	22/60
Maximum input DC voltage	V	50	60
Maximum continuous input DC current	A	10	12
Maximum input DC short-circuit current	A		25
Maximum module $I_{sc}$	A		20
Overvoltage 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
Maximum continuous output power	VA	240	290
Nominal (L-L) voltage/Range <sup>2</sup>	V	240/211–264, 208/183–229	
Maximum 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	
Maximum units per 20 A (L-L) branch circuit <sup>3</sup>	–	16 (240 V)/13 (208 V)   13 (240 V)/11 (208 V)	
Total harmonic distortion	%	<5	
Overvoltage 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)/97.3 (208 V)   97.5 (240 V)/97.3 (208 V)	
CEC weighted efficiency	%	97	
Nighttime power consumption	mW	60	
MECHANICAL DATA			
Ambient temperature range	°C (°F)	–40 to 65 (–40 to 149)	
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)	mm (in)	212 (8.3) × 175 (6.9) × 30.2 (1.2) without bracket	
Weight	kg (lb)	1.1 (2.4)	
Cooling	–	Natural convection–no fans	
Approved for wet locations	–	Yes	
Pollution degree	–	PD3	
Enclosure	–	Class II double-insulated, corrosion-resistant polymeric enclosure	
Environmental category/UV exposure rating	–	NEMA type 6/Outdoor	

<sup>1</sup> 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>.

<sup>2</sup> Nominal voltage range can be extended beyond nominal if required by the utility.

<sup>3</sup> Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.

## COMPLIANCE

### Certifications

CA Rule 21 (UL 1741-SA), UL 62109-1, IEEE 1547:2018 (UL 1741-SB 3<sup>rd</sup> 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 manufacturer's instructions.

# Revision history

REVISION	DATE	DESCRIPTION
DSH-00174-2.0	May 2024	Updated the UL description.
DSH-00174-1.0	July 2023	Updated Module compatibility with 60-cell/120-half-cut-cell and 54-cell/108-half-cut-cell PV modules and 60-cell/120-half-cut-cell, 66-cell/132-half-cut-cell, 54-cell/108-half-cut-cell, and 72-cell/144-half-cut-cell PV modules.
Previous releases.		