



IQ7 PD Microinverters for full site upgrade

The high-powered, smart grid-ready IQ7 PD Microinverter dramatically simplifies the installation process while achieving the highest system efficiency.



Part of the Enphase Energy System, the IQ7 PD Microinverter integrates with the IQ Cable, IQ Battery, IQ Gateway, and the Enphase Installer App monitoring and analysis software to provide a solution for a full site upgrade.



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 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.



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, & 2020)

Productive and reliable

- Optimized for 60-cell, 72-cell, and 84-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, 3rd Ed.)

IQ7 PD Microinverters

INPUT DATA (DC)	UNITS	IQ7PD-72-2-US	IQ7PD-84-2-US
Commonly used module pairings ¹	W	230	250
Module compatibility	—	60-cell/72-cell PV modules	72-cell/84-cell PV modules
MPPT voltage range	V	22–40	31–50
Operating range	V	20–60	20–60
Minimum/Maximum start voltage	V	22/60	22/60
Maximum input DC voltage	V	54	60
Maximum continuous input DC current	A	10	10
Maximum input DC short-circuit current	A		25
Maximum module I _{sc}	A		20
Overvoltage class DC port	—		II
DC port backfeed current	mA		<0.55
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	IQ7PD-72-2-US	IQ7PD-84-2-US
Peak output power	VA	199	220
Maximum continuous output power	VA	190	210
Nominal (L-L) voltage/range ²	V	240/211–264, 208/183–229	
Maximum continuous output current	A	0.80 (240 V) 0.92 (208 V)	0.88 (240 V) 1.06 (208 V)
Nominal frequency	Hz	60	
Extended frequency range	Hz	47–68	
AC short-circuit fault current over 3 cycles	A _{rms}	5.8	
Max. units per 20 A (L-L) branch circuit ³	—	20 (240 VAC)/17 (208 VAC)	18 (240 VAC)/15 (208 VAC)
Total harmonic distortion	%	<5	
Overvoltage class AC port	—	III	
AC port backfeed current	mA	0.08	
Power factor setting	—	1	
Grid-tied power factor (adjustable)	—	0.95	
Peak efficiency	%	96.5 (240 V), 96.5 (208 V)	
CEC weighted efficiency	%	96.5	
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 lb)
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

COMPLIANCE	
Certifications	CA Rule 21 (UL 1741-SA), UL 62109-1, IEEE 1547:2018 (UL 1741-SB 3 rd Ed.), 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 and NEC 2017 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.

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.

Revision history

REVISION	DATE	DESCRIPTION
DSH-00459-1.0	June 2024	Initial release.
		Previous releases.