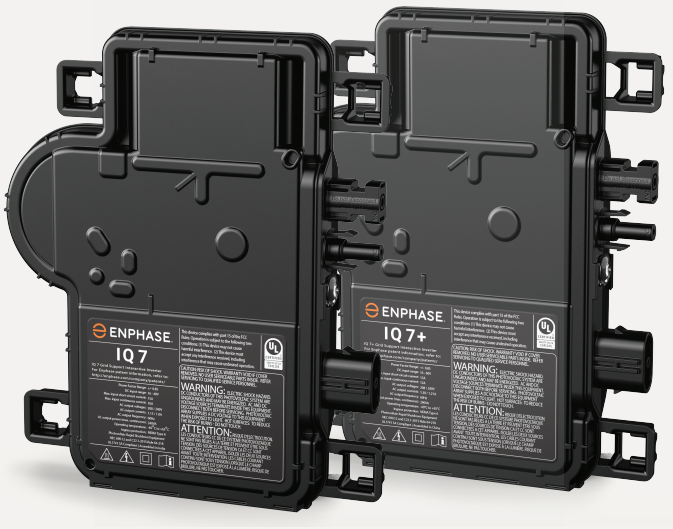

IQ7 and IQ7+ Microinverters with integrated MC4 connectors

The high-powered, smart grid-ready IQ7 and IQ7+ Microinverters with integrated MC4 connectors 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.

Enphase 25 year limited warranty

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.

UL CERTIFIED SAFETY

IQ7 Series Microinverters are UL listed as PV rapid shutdown equipment and conform with various regulations, when installed according to 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, 66-cell/ 132-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, 3rd Ed.)

IQ7 and IQ7+ Microinverters with integrated MC4 connectors

INPUT DATA (DC)	UNITS	IQ7-60-M-US	IQ7PLUS-72-M-US
Commonly used module pairings[1]	W	235–350	235–440
Module compatibility		60-cell/120-half-cell and 54-cell/108-half-cut-cell PV modules	60-cell/120-half-cell, 66-cell/132-half-cell, 54-cell/108-half-cut-cell, and 72-cell/144-half-cell PV module
Maximum input DC voltage	V	48	60
Peak power tracking voltage	V	27–37	27–45
Operating range	V	16–48	16–60
Minimum/Maximum start voltage	V	22/48	22/60
Maximum input DC short-circuit current	A	25	
Maximum module I_{sc}	A	20	
Overvoltage class DC port		II	
DC port back-feed current	A	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 MICROINVERTER		IQ7+ MICROINVERTER	
Peak output power	VA	250		295	
Maximum continuous output power	VA	240		290	
Nominal (L-L) voltage/Range[2]	V	240/211–264, 208/183-229			
Maximum continuous output current		1.0 A (240 V)	1.15 A (208 V)	1.21 A (240 V)	1.39 A (208 V)
Nominal frequency	Hz	60			
Extended frequency range	Hz	47–68			
AC short circuit fault current over three cycles	Arms	5.8			
Maximum units per 20 A (L-L) branch circuit[3]		16 (240 VAC)	13 (208 VAC)	13 (240 VAC)	11 (208 VAC)
Overvoltage class AC port		III			
AC port back-feed current	mA	18			
Power factor setting		1.0			
Power factor (adjustable)		0.85 leading … 0.85 lagging			

EFFICIENCY	UNITS	@240 V	@208 V	@240 V	@208 V
Peak efficiency	%	97.6	97.6	97.5	97.3
CEC weighted efficiency	%	97.0	96.5	97.0	96.5

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	Stäubli MC4
Dimensions (H × W × D)	212 mm (8.3") × 175 mm (6.9") × 30.2 mm (1.2") without bracket
Weight	1.1 kg (2.4 lbs)
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
Maximum operating altitude	2,600 m

(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.

NOTE: Adapters 1 and 2 are qualified per UL subject 9703. Adapter 3 requires installers to field install their choice of connector.

IQ7 and IQ7+ Microinverters with integrated MC4 connectors

FEATURES	
Communication	Power line communication (PLC)
Monitoring	Enphase Installer App and monitoring options Compatible with IQ Gateway
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect means required by NEC 690 and C22.1-2018 Rule 64-220.
Compliance	CA Rule 21 (UL 1741-SA), IEEE 1547:2018 (UL 1741-SB 3rd Ed.) HEI Rule 14H SRD 2.0 UL 62109-1, 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 C22.1-2018 Rule 64-218 Rapid Shutdown of PV Systems, for AC and DC conductors, when installed according to manufacturer's instructions.

To learn more about Enphase offerings, visit enphase.com

Revision history

REVISION	DATE	DESCRIPTION
DSH-00175-1.0	July 2023	Updated Module compatibility with 60-cell/120-half-cell and 54-cell/108-half-cut-cell PV modules and 60-cell/120-half-cell, 66-cell/132-half-cell, 54-cell/108-half-cut-cell, and 72-cell/144-half-cell PV module

Previous releases