

Enphase IQ 7+ Microinverters

The high-powered smart grid-ready **Enphase IQ 7+ Micro™** dramatically simplify the installation process while achieving the highest system efficiency.

Part of the Enphase IQ System, and IQ 7+ Microinverters integrate with the Enphase Envoy S™ (ENV-S-AM1-230-60), and the Enphase Enlighten™ monitoring and analysis software.

IQ 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 10 years.



Easy to Install

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

Productive and Reliable

- Optimized for high powered 60-cell/120 half-cell and 72-cell/144 half-cell* 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)

* The IQ 7+ Micro is required to support 72-cell/144 half-cell modules.



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INPUT DATA (DC)	
IQ7PLUS-72-2-US	
Commonly used module pairings ¹	235 W - 440 W +
Module compatibility	60-cell/120 half-cell and 72-cell/144 half-cell PV modules
Maximum input DC voltage	60 V
Peak power tracking voltage	27 V - 45 V
Operating range	16 V - 60 V
Min/Max start voltage	22 V / 60 V
Max DC short circuit current (module I _{sc})	15 A
Overvoltage class DC port	II
DC port backfeed current	0 A
PV array configuration	1 x 1 ungrounded array; No additional DC side protection required; AC side protection requires max 20A per branch circuit
OUTPUT DATA (AC)	
Peak output power	295 VA
Maximum continuous output power	290 VA
Nominal voltage/range ²	240 V / 211-264 V
Maximum continuous output current	1.21 A (240 V)
Nominal frequency	60 Hz
Extended frequency range	47 - 68 Hz
AC short circuit fault current over 3 cycles	5.8 Arms
Maximum units per 20 A branch circuit ³	12 (240 VAC)
Overvoltage class AC port	III
AC port backfeed current	18 mA
Power factor setting	1.0
Power factor (adjustable)	0.85 leading ... 0.85 lagging
EFFICIENCY @240 V	
Peak efficiency	97.5 %
CEC weighted efficiency	97.0 %
MECHANICAL DATA	
Ambient temperature range	-40°C to +65°C
Relative humidity range	4% to 100% (condensing)
Connector type	MC4 with Q-DCC-2 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)
Dimensions (HxWxD)	212 mm x 175 mm x 30.2 mm (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
Environmental category / UV exposure rating	NEMA Type 6 / outdoor
FEATURES	
Communication	Power Line Communication (PLC)
Monitoring	Enlighten Manager and MyEnlighten monitoring options. Both options require installation of an Enphase Envoy S (ENV-S-AM1-230-60).
Disconnecting means	The AC and DC connectors have been evaluated and approved by UL for use as the load-break disconnect required by NEC 690.
Compliance	CA Rule 21 (UL 1741-SA) UL 62109-1, UL1741/IEEE1547, 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 Shut Down 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 manufacturer's instructions.

1. No enforced DC/AC ratio. See the compatibility calculator at <https://enphase.com/en-us/support/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.

To learn more about Enphase offerings, visit www.enphase.com/philippines