

Enphase IQ 7A Microinverter

The high-powered smart grid-ready **Enphase IQ 7A Micro™** dramatically simplifies the installation process while achieving the highest system efficiency for systems with 60-cell and 72-cell modules.

Part of the Enphase IQ System, the IQ 7A Micro integrates with the Enphase Envoy-S™, Enphase IQ Battery™, and the Enphase Enlighten™ monitoring and analysis software.

The 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.



High Power

- Peak output power 366 VA

Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling
- Built-in rapid shutdown compliant

Efficient and Reliable

- Optimized for high powered 60-cell and 72-cell modules
- Highest EU efficiency of 96.5%
- More than a million hours of testing
- Class II double-insulated IP67 enclosure

Smart Grid Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Envoy and Internet connection required
- Configurable for varying grid profiles

Enphase IQ 7A Microinverter

INPUT (DC)		IQ7A-72-2-INT / IQ7A-72-E-INT	
Commonly used module pairings ¹	295 W–460 W +		
Module compatibility	60-cell and 72-cell PV modules		
Maximum input DC voltage	58 V		
Power point tracking voltage range ²	18 V–58 V		
Min/Max start voltage	33 V / 58 V		
Max DC short circuit current (module I _{sc}) ³	15 A		
Oversvoltage class DC port	II		
DC port backfeed current	0 A		
OUTPUT (AC)			
Peak output power	366 VA		
Maximum continuous output power	349 VA		
Nominal (L-N) voltage/range ⁴	230 V / 219–264 V		
Maximum continuous output current	1.52 A		
Nominal frequency	50 Hz		
Extended frequency range	45–55 Hz		
AC short circuit fault current over 3 cycles	5.8 Arms		
Maximum units per 20 A (L-N) branch circuit ⁵	11 (single-phase)		
Oversvoltage class AC port	III		
AC port backfeed current	18 mA		
Power factor setting	1.0		
Power factor (adjustable)	0.8 leading ...		0.8 lagging
EFFICIENCY			
EN 50530 (EU) weighted efficiency	96.5 %		
MECHANICAL			
Ambient temperature range	-40°C to +60°C		
Relative humidity range	4% to 100% (condensing)		
DC connector type	Model IQ7A-72-2-INT: Bulkhead with MC4 locking type connector Model IQ7A-72-E-INT: Enphase EN4 bulkhead with TE Connectivity PV4-S connector		
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	Outdoor - IP67		
FEATURES			
Communication	Power Line Communication (PLC)		
Monitoring	Enlighten Manager and MyEnlighten monitoring options Compatible with Enphase Envoy-S		
Compliance	AS/NZS 4777.2, RCM, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2, EN 50549, G98/G99, VDE-AR-N-4105		

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

2. EU peak power tracking voltage range is 38 V to 43 V.

3. Maximum continuous input DC current is 10.2A.

4. Voltage range can be extended beyond nominal if required by the utility.

5. 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 enphase.com