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 IQ Envoy™, 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 of up to 25 years.

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**High Power**
- Peak output power 366 VA @ 240 VAC and 295 VA @ 208 VAC

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

**Efficient and Reliable**
- Optimized for high powered 60-cell and 72-cell modules
- Highest CEC efficiency of 97%
- 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
- Envoy and Internet connection required
- Configurable for varying grid profiles
- Meets CA Rule 21 (UL 1741-SA)

To learn more about Enphase offerings, visit [enphase.com](http://enphase.com)
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**INPUT (DC)**  
IQ7A-72-2-US

- Commonly used module pairings¹: 295 W–460 W +
- Module compatibility: 60-cell and 72-cell PV modules
- Maximum input DC voltage: 58 V
- Maximum input DC current: 10.2 A
- Peak power tracking voltage: 38 V–43 V
- Operating range: 18 V–58 V
- Min/Max start voltage: 30 V / 58 V
- Max DC short circuit current (module Isc): 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 (AC)**  
@ 240 VAC  
@ 208 VAC

- Peak output power: 366 VA  
  295 VA
- Maximum continuous output power: 349 VA  
  290 VA
- Nominal (L-L) voltage/range²: 240 V / 211–264 V  
  208 V / 183–229 V
- Maximum continuous output current: 1.45 A (240 VAC)  
  1.39 A (208 VAC)
- 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 (L-L) branch circuit³: 11 (240 VAC)  
  11 (208 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 VAC  
@ 208 VAC

- CEC weighted efficiency: 97.0 %  
  96.5 %

**MECHANICAL**

- Ambient temperature range: -40ºC to +60ºC
- Relative humidity range: 4% to 100% (condensing)
- Connector type: DC (IQ7A-72-2-US): MC4
- Dimensions (WxHxD): 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
- Compatible with Enphase IQ Envoy
- 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)  
  This product is UL Listed as PV Rapid Shut Down 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 manufacturer’s instructions.

2. 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.

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