

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 / 120-half-cell and 72-cell / 144-half-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 / 120-half-cell and 72-cell / 144-half-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 | |
|---|--|-------------|
| Commonly used module pairings ¹ | 295 W–460 W + | |
| Module compatibility | 60-cell / 120-half-cell and 72-cell / 144-half-cell modules | |
| Maximum input DC voltage | 58 V | |
| PV input operating 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 | |
| Overtoltage 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 (Ph+N) | |
| Overtoltage 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) | |
| Maximum altitude | 2000 m | |
| DC connector type | Bulkhead with MC4 locking type 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-uk/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/uk