

Enphase IQ 7A Microinverter

with Integrated MC4 connectors

The high-powered smart grid-ready **Enphase IQ 7A Micro™** with Integrated MC4 connectors 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 PV 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

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INPUT (DC)		IQ7A-72-M-INT
Commonly used module pairings	295 W–460 W +	
Module compatibility	60-cell / 120-half-cell and 72-cell / 144-half-cell PV modules	
Maximum input DC voltage	58 V	
PV input operating voltage range	18 V–58 V	
Min/Max start voltage	33 V / 58 V	
Max DC short circuit current (module I _{sc})	15 A	
Overvoltage 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 ¹	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 ²	11 (single-phase)	
Overvoltage 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	Staubli made MC4	
Dimensions (HxWxD)	212 mm x 175 mm x 30.2 mm (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	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. Voltage range can be extended beyond nominal if required by the utility.
2. Limits may vary. Refer to local requirements to define the number of microinverters per branch in your area.