# **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 ridethrough requirements
- · Envoy and Internet connection required
- · Configurable for varying grid profiles



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INPUT (DC)	IQ7A-72-2-INT
Commonly used module pairings <sup>1</sup>	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 <sup>2</sup>	18 V-58 V
Min/Max start voltage	33 V / 58 V
Max DC short circuit current (module Isc) <sup>3</sup>	15 A
Overvoltage class DC port	H.
DC port backfeed current	0 A
OUTPUT (AC)	
Peak output power	366 VA
Maximum continuous output power	349 VA
Nominal (L-N) voltage/range <sup>4</sup>	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 <sup>5</sup>	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	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 <a href="https://enphase.com/en-au/support/module-compatibility">https://enphase.com/en-au/support/module-compatibility</a>.

- EU peak power tracking voltage range is 38 V to 43 V.
   Maximum continuous input DC current is 10.2A.
   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/au



