Enphase IQ 7, IQ 7+, and IQ 7X Microinverters

The high-powered smart grid-ready **Enphase IQ Series Micros™** achieve the highest system efficiency.

Part of the Enphase IQ System, the IQ 7, IQ 7+, and IQ 7X Micro integrate perfectly with the Enphase Envoy-S™, and the Enphase Enlighten™ monitoring and analysis software.

The IQ Series Micros 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.

Easy to Install

- Lightweight and simple
- Faster installation with improved, lighter two-wire cabling

Productive and Reliable

- Optimized for high powered 60-cell, 72-cell* and 96-cell* modules
- More than a million hours of testing
- Class II double-insulated enclosure

Smart Grid Ready

- Complies with advanced grid support, voltage and frequency ride-through requirements
- Remotely updates to respond to changing grid requirements
- Configurable for varying grid profiles

* The IQ 7+ Micro is required to support 72-cell modules, and the IQ 7X is required to support 96-cell modules.

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INPUT DATA (DC)	IQ7-60-2-INT	IQ7PLUS-72-2-INT	IQ7X-96-2-INT
Commonly used module pairings	235 W - 350 W + [1]	235 W - 440 W + [1, 2]	320 W - 460 W + [1, 2]
Module compatibility	60-cell PV modules only	60-cell & 72-cell PV modules	96-cell PV modules only
Maximum input DC voltage	48 V	60 V	79.5 V
Peak power tracking voltage	27 V - 37 V	27 V - 45 V	53 V - 64 V
Operating range	16 V - 48 V	16 V - 60 V	25 V - 79.5 V
Min/Max start voltage	22 V / 48 V	22 V / 60 V	33 V / 79.5 V
Max DC short circuit current (module Isc)	15 A	15 A	10 A
Overvoltage class DC port	II	II	II
DC port backfeed under single fault	0 A	0 A	0 A
OUTPUT DATA (AC)	**IQ 7 Microinverter**	**IQ 7+ Microinverter**	**IQ 7X Microinverter**
Peak output power	250 VA	295 VA	320 VA
Maximum continuous output power	240 VA	290 VA	315 VA
Nominal (L-N) voltage/range[3]	230 V / 184-276 V	230 V / 184-276 V	230 V / 184-276 V
Maximum continuous output current	1.04 A	1.26 A	1.37 A
Nominal frequency	50 Hz	50 Hz	50 Hz
Extended frequency range	45 - 55 Hz	45 - 55 Hz	45 - 55 Hz
Maximum units per 20 A (L-N) branch circuit[4]	16 (230 VAC)	13 (230 VAC)	12 (230 VAC)
Overvoltage class AC port	III	III	III
AC port backfeed current	18mA	18mA	18mA
Power factor setting	1.0	1.0	1.0
Power factor (adjustable)	0.8 leading ... 0.8 lagging	0.8 leading ... 0.8 lagging	0.8 leading ... 0.8 lagging
EFFICIENCY	**@230 V**	**@230 V**	**@230 V**
EN 50530 (EU) weighted efficiency	96.5 %	96.5 %	96.5 %
MECHANICAL DATA			
Ambient temperature range	-40°C to +65°C	-40°C to +65°C	-40°C to +60°C
Relative humidity range	4% to 100% (condensing)		
Connector type	MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)		
Dimensions (HxWxD)	212 mm x 175 mm x 30.2 mm (without bracket)		
Weight	1.08 kg		
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 (pending)	AS 4777.2, RCM, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2		

1. No enforced DC/AC ratio in NZ. In Australia, CEC design guidelines state inverter continuous AC power output cannot be less than 75% of the array peak power.
2. Maximum DC input limited to 350 W at 25°C as per AU/NZS 5033:2014 4.3.12(d).
3. Nominal voltage range can be extended beyond nominal if required by the utility.
4. 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**

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