Enphase Microinverters

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

The high-powered smart grid-ready Enphase IQ 7™, **Enphase IQ 7+**™ and **Enphase IQ 7X**™ microinverters achieve the highest system efficiency.

Part of the Enphase IQ system, the IQ 7, IQ 7+ and IQ7X integrate perfectly with the Envoy-S™ and the Enphase Enlighten™ monitoring and analysis software.

The IQ 7, IQ 7+ and IQ7X 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
- Optimised for all high-powered modules
- More than one 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

25 YEAR GUARANTEE

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

INPUT DATA (DC)	IQ7-60-2-INT	IQ7PLUS-72-2-INT	IQ7X-96-2-INT
Commonly used module pairings [1]	235 W – 350 W + [1]	235 W – 440 W + [1]	320 W – 460 W + [1]
Module compatibility (see online calculator) [2]	60 cells only	60 & 72 cells	96 cells
Maximum input DC voltage	48 V	60 V	79.5 V
Peak power tracking range	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/Mas 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
PV array configuration	AC side protection requires max. 20 A per branch circuit.		

OUTPUT DATA (AC)	IQ 7	IQ 7+	IQ 7X
Peak output power	250 VA	295 VA	320 VA
Maximum continuous output power	240 VA	290 VA	315 VA
Nominal (L-N) voltage range [2]	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
Frequency range	45 – 55 Hz	45 – 55 Hz	45 – 55 Hz
Maximum units per 20 A branch circuit [3]	15 (Ph + N) 45 (3Ph + N)	12 (Ph + N) 36 (3Ph+N)	11 (Ph + N) 33 (3Ph + N)
Maximum units per cable	15 (Ph+N), 24 (3Ph+N)	12 (Ph+N), 21 (3Ph+N)	11 (Ph + N), 21 (3Ph + N)
Overvoltage class AC port	III	III	III
AC port backfeed current	0 A	0 A	0 A
Power factor setting	1.0	1.0	1.0
Power factor (adjustable)	0.7 lagging ... 0.7 leading	0.7 lagging ... 0.7 leading	0.7 lagging ... 0.7 leading

EFFICIENCY	@230 V	@230 V	@230 V
EN 50530 (EU) weighted efficiency	96.5%	96.5%	96.5%

MECHANICAL DATA			
Ambient operating temperature range	−40 °C to +65 °C	−40 °C to +65 °C	−40 °C to +60 °C
Relative humidity range	4% to 100% (condensing)		
DC connector type	MC4 (or Amphenol H4 UTX with additional Q-DCC-5 adapter)		
Dimensions (W×H×D)	212 mm × 175 mm × 30.2 mm (without bracket)		
Weight	1.08 kg		
Cooling	Natural convection – No fans		
Approved for wet locations	Yes		
Pollution degree	3		
Enclosure	Class II double-insulated, corrosion-resistant polymeric enclosure		
IP rating	Outdoor – IP67		

FEATURES			
Communication with Envoy-S	PLC (power-line communication)		
Monitoring	Enlighten Manager and MyEnlighten compatible with Enphase Envoy-S monitoring options		
Compliance	AS 4777.2, RCM, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2		
Warranty	25 years		

1. No enforced DC/AC ratio. See the compatibility calculator at enphase.com/en-us/support-client/module-compatibility.
2. Nominal 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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