

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.

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 +	235 W - 440 W +	320 W - 460 W +
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 I _{sc})	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 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
Extended frequency range	45 - 55 Hz	45 - 55 Hz	45 - 55 Hz
Maximum units per 20 A (L-N) branch circuit ³	16 (230 VAC)	13 (230 VAC)	12 (230 VAC)
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)	0.8 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 (WxHxD)	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	AS 4777.2, RCM, IEC/EN 61000-6-3, IEC/EN 62109-1, IEC/EN 62109-2		

1. No enforced DC/AC ratio. See the compatibility calculator at <https://enphase.com/en-us/support/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.

To learn more about Enphase offerings, visit enphase.com/uk

This Limited Warranty is a voluntary manufacturer's warranty provided by Enphase Energy, Inc. ("Enphase") in respect of the products set forth below:

- **IQ™7-series and IQ6-series microinverters, and microinverters with product SKU C250-72-2LN-S2** which, in each case, are connected to the internet through an Envoy™ product, listed below (each a "**Microinverter**");
- **IQ Envoy, IQ Combiner+, IQ Combiner, IQ Commercial Envoy, Envoy-S Standard, Envoy-S Metered, or AC Combiner Box** (each, an "**Envoy**"); and
- **Q Aggregator, Q Commercial Aggregator, Mobile Connect, or Consumption CT;**

each a "**Covered Product**".

This Limited Warranty applies in addition to statutory rights available to consumers under UK consumer laws, including under the Consumer Rights Act 2015.

If you are a consumer and your Covered Product is defective or does not conform with the contract of sale, you can choose to make a claim under UK consumer laws or under this Limited Warranty (whichever is applicable).

We have set out below a summary of UK consumer rights under the Consumer Rights Act 2015. This is not an exhaustive description of the rights available to consumers under UK consumer laws. For more information about UK consumer laws, contact your local consumer organisation (e.g. your local trading standards or citizens advice bureau).

UK Consumer Laws

The Consumer Rights Act 2015 automatically introduces certain terms into contracts for the sale of goods to consumers including, for example, that the goods (i) will match the description given of them, (ii) will be of satisfactory quality and (iii) will be reasonably fit for any particular purpose made known to the seller.

If goods are defective or do not conform with the contract of sale, a consumer may be entitled to (i) a repair or a replacement free of charge, (ii) a discount or (iii) a refund by the seller.

The primary responsibility to provide these remedies will sit with the seller from whom the consumer purchased the goods. So, if you purchased a Covered Product from a third party reseller and not directly from Enphase, you would need to contact that reseller in order to make a claim.

For goods purchased in England and Wales, these rights expire six years from delivery of the goods. For goods purchased in Scotland, these rights expire five years from delivery of the goods.

Limited Warranty

In addition to your rights under UK consumer laws, subject to the terms of this Limited Warranty (including the limitations and exclusions set out below), Enphase warrants to the Covered Owner (as defined below) that the Covered Product will be free from defects in workmanship and materials for the applicable warranty period set forth below (each a "**Warranty Period**"), provided that the Covered Product is (i) purchased from Enphase or an entity expressly authorized by Enphase to resell the Covered Product (the "**Authorised Reseller**"), (ii) the Covered Product remains at the original End User location (the "**Original Location**"), and (iii) the Original Location is within the United Kingdom.

Covered Product(s) and Limited Warranty Period(s)

<u>Covered Product(s)</u>	<u>Limited Warranty Period(s)</u>
IQ™7-series, IQ6-series microinverters connected to the internet through an Envoy product	25 years commencing on the earlier of (i) the date the Covered Product is shipped from Enphase, or (ii) the date the Covered Product is activated* in Enphase's Enlighten™ system (such applicable date is referred to as the " Warranty Start Date ").
SKU C250-72-2LN-S2 microinverters connected to the Internet through an Envoy product	10 years from the Warranty Start Date.
IQ Envoy™, IQ Combiner 3, IQ Combiner+, IQ Combiner, IQ Commercial Envoy, Envoy-S Standard, Envoy-S Metered, or AC Combiner Box	5 years from the Warranty Start Date.
Q Aggregator, Q Commercial Aggregator, Mobile Connect or Consumption CT	5 years from the Warranty Start Date.

*A Covered Product is considered "activated" when the PV solar system has received "permission to operate" by authorities having jurisdiction.

If Enphase repairs or replaces a Covered Product, the Limited Warranty will continue on the repaired or replacement product until the later of (i) the end of the original Limited Warranty Period as set in the table above or (ii) 90 days from the date of receipt of the repaired or replacement product, as long as the repaired or replacement product is installed and (where the repaired or replacement product is a Microinverter) connected to the internet through an Envoy (as described in the Installation and Operation Manual found at www.enphase.com) within 45 consecutive days from the date on which you receive the repaired or replacement product.

This Limited Warranty is given only to the end user who acquired and put the Covered Product into use for the first time (the "**End User**") or to a subsequent end user (the "**Transferee**") (each of the End User or Transferee being a "**Covered Owner**") as long as (i) the Covered Product remains at the Original Location, and (ii) the Transferee submits to Enphase a "**Change of Ownership Form**" and pays the applicable fee (the "**Transfer Fee**") within 30 days from the date of transfer to the Transferee. This submission is a requirement for continued coverage under this Limited Warranty. The Transfer Fee is set out in the Change of Ownership Form and is subject to reasonable adjustment from time to time (as determined at Enphase's discretion). The Change of Ownership Form and payment instructions are available at <http://www.enphase.com/warranty>.

A claim under the Limited Warranty must be submitted by following the procedures set out in Paragraph 3 below (RMA Process).

1. Warranty Exclusions.

- i. This Limited Warranty will not apply in the following circumstances:
 - a) if the Covered Product is not registered with Enphase and (where the Covered Product is a Microinverter) connected to the internet through an Envoy (as described in the Installation and Operation Manual found at www.enphase.com) within 45 consecutive days following the Warranty Start Date;

- b) if the Covered Product is not installed, operated, handled, or used in accordance with the Quick Install Guide (provided with the Covered Product) or Installation and Operation Manual or under conditions for which the Covered Product was not designed;
 - c) if the defect arises after the expiration of the Warranty Period;
 - d) if the Covered Product has been altered, modified, or repaired (unless such alteration, modification or repair is made by Enphase or a third party acting on its behalf);
 - e) if the Covered Product has been misused, neglected, tampered with or otherwise damaged;
 - f) If the Covered Product has been used otherwise than in accordance with applicable laws;
 - g) if the Covered Product has been subjected to fire, water, generalized corrosion, biological infestations, acts of nature, or input voltage that creates operating conditions beyond the maximum or minimum limits listed in the Covered Product specifications set out in the Installation and Operation Manual, including high input voltage from generators or lightning strikes;
 - h) if the defect has been caused by another component of the attached solar system not manufactured by Enphase;
 - i) if the original identification markings (including trademark or serial number) of the Covered Product have been defaced, altered, or removed;
 - j) if the Grid Profile (utility approved operating parameters) of a Microinverter has been altered, and such alteration causes the product to malfunction, fail, or fail to perform; and/or
 - k) if the defect occurs during shipping or transportation after the Covered Product is sold by Enphase to an Authorised Reseller.
- ii. In addition, this Limited Warranty does not cover:
- a) the cost of labour for removal or installation of a Covered Product,
 - b) normal wear and tear or deterioration, or cosmetic, technical or design defects of a Covered Product which do not materially affect energy production or degrade form, fit, or function of the Covered Product;
 - c) theft or vandalism of the Covered Product;
 - d) the removal, installation or troubleshooting of the End User's or the Transferee's electrical systems; and/or
 - e) software programs installed in the Covered Product and/or the recovery and reinstallation of such software programs and data.

2. Remedies. If Enphase confirms the existence of a defect that is covered by this Limited Warranty, Enphase will, at its option, either (a) repair or replace the Covered Product free of charge, or (b) issue a prorated credit or refund for the Covered Product to the End User or Transferee in an amount equal to the current market value of the Covered Product at the time the End User or Transferee notifies Enphase of the defect, as determined in Enphase's sole discretion. If Enphase elects to repair or replace the Covered Product, Enphase will, at its option, use new or reconditioned parts or products of original, comparable, or improved design.

3. RMA Process. To make a claim under this Limited Warranty, the End User or Transferee must comply with the Return Merchandise Authorization (“RMA”) Procedure available at <http://www.enphase.com/warranty>.

4. Assignment. Enphase expressly reserves the right to novate or assign its rights and obligations under this Limited Warranty to a third party with the demonstrated expertise and requisite resources needed to effectively discharge the obligations hereunder.

5. Limitation of Liability.

- i. Enphase will not be responsible for any loss or damage which is not Enphase’s fault or is not foreseeable. Loss or damage is foreseeable if either it is obvious that it will happen or if, at the time the contract of sale was made, both we and you knew it might happen.
- ii. Enphase only provides the Covered Product for domestic and private use. If you use the Covered Product for any commercial or business purpose, Enphase will not be responsible for business losses including, for example, loss of profits, loss of business, business interruption or loss of business opportunity.
- iii. Nothing in this Limited Warranty will limit or exclude Enphase’s liability for (a) death or personal injury caused by its negligence, (b) fraud or fraudulent misrepresentation, (c) any breach of your legal rights in relation to the Covered Product (including as summarised above under “UK Consumer Laws”) or (c) for any other liability which cannot be limited or excluded under applicable law.

6. Governing law. If you purchased the Covered Product in England, Wales or Northern Ireland, this Limited Warranty is governed by and construed under the laws of England and each party submits to the non-exclusive jurisdiction of the English courts. If you purchased the Covered Product in Scotland, this Limited Warranty is governed by and construed under the laws of Scotland and each party submits to the non-exclusive jurisdiction of the Scottish courts.

7. Severability. If any term of this Limited Warranty is held to be illegal or unenforceable, it will be excluded from this Limited Warranty and the legality or enforceability of the remaining terms will not be affected.

This Limited Warranty is offered by Enphase Energy, Inc.

Contact Details:

United Kingdom <https://enphase.com/en-uk/support/>

The grant of this Limited Warranty is expressly conditioned upon the acceptance and agreement by the End User and any permitted Transferee to the terms, conditions, and requirements herein.