# i-G3N PRODUCT WARRANTY



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# WARRANTY

IG3N (Pty) Ltd (hereafter referred to as "IG3N"), with registration number 2018/617788/07, is a facility that assembles Lithium-Ion batteries and operates from the Republic of South Africa. This limited warranty (herein referred to as ("Warranty") applies to Products supplied by IG3N to end customers (hereafter referred to as "Customer") that may be a natural person or a legal entity, for on-site use.

#### **Product Warranty**

IG3N warrants to the purchaser that the Product is new and free in all material aspects from defects in materials and workmanship under normal use.

The duration of the Warranty is 10 years from commissioning date by IG3N or by an authorised third party.

If you acquire the Product from an authorised reseller in South Africa where the South African National Consumer Protection Act applies, the batteries come with guarantees that cannot be excluded under that law.

#### **Performance Warranty**

IG3N guarantees that the capacity of the battery modules of the IG3N storage system will be at least 80% of the nominal capacity until the minimum number of full charge cycles of 4000 is reached, but no later than the end of the guarantee period of 10 years.

The Warranty covers the following battery ranges or Product building blocks:

- i-Node Master
- i-Node storage (5.6 to 28 kWh)
- X-Range Master
- X-Range storage (16.1 to 537.6 kWh)
- e-Wall storage (3.0 to 54 kWh)
- e-Wall control box (250A to 1000A)
- e-Stack Master
- e-Stack storage (5.4 to 26.9 kWh)
- Giga Rack (54 kWh to 1 MW)
- Z-Range

For custom configuration, Warranty can only be confirmed post configuration and may incorporate support and maintenance in a form of a Service Level Agreement.

Product and rated capacity for standard Products:

## i-Node

Product Name	i-Node (5.6)	i-Node (11.2)	i-Node (16.8)	i-Node (22.4)
Nominal capacity [Ah]	110	220	330	440
Nominal voltage [V <sub>DC</sub> normal]	52			
Max energy [kWh]	5.7	11.4	17.2	22.9
Cycle life @ 80% DoD, 25°C	4000			
Energy available @ 80% DoD [kWh]	4.6	9.2	13.7	18.3

# X-Range

Product Name	X-Range (21)	X-Range (43)	X-Range (64.5)	X-Range (86)
Nominal capacity [Ah]	420	840	1260	1680
Nominal voltage [V <sub>DC</sub> normal]	52			
Max energy [kWh]	21.5	43	64.5	86
Cycle life @ 80% DoD, 25°C	4000			
Energy available @ 80% DoD [kWh]	17.2	34.4	51.6	68.8

#### e-Wall

Product Name	e-Wall (5.4)	e-Wall (10.8)	e-Wall (16.1)	e-Wall (21.5)
Nominal capacity [Ah]	105	210	315	420
Nominal voltage [V <sub>DC</sub> normal]	52			
Max energy [kWh]	5.4	10.8	16.1	21.5
Cycle life @ 80% DoD, 25°C	4000			
Energy available @ 80% DoD [kWh]	4.3	8.6	12.9	17.2

### e-Stack

Product Name	e-Stack (5.4)	e-Stack (10.8)	e-Stack (16.1)	e-Stack (21.5)
Nominal capacity [Ah]	105	210	315	420
Nominal voltage [V <sub>DC</sub> normal]	52			
Max energy [kWh]	5.4	10.8	16.1	21.5
Cycle life @ 80% DoD, 25°C	4000			
Energy available @ 80% DoD [kWh]	4.3	8.6	12.9	17.2

#### Giga Rack

Product Name	54	108	144	288
Nominal capacity [Ah]	105	210	280	560
Nominal voltage [V <sub>DC</sub> normal]	512			
Max energy [kWh]	53.76	107.52	143.36	286.72
Cycle life @ 80% DoD, 25°C	> 10 years (4000 cycles) @ 25°C		> 10 years (6000 cycles) @ 25°C	
Energy available @ 80% DoD [kWh]	43	86.016	114.69	229.38

#### **Z-Range**

Nominal capacity [Ah]	100
Nominal voltage [V <sub>DC</sub> normal]	51,2
Max energy [kWh]	5,120
Cycle life @ 90% DoD, 25°C	> 10 years (4500 cycles) @ 25°C
Energy available @ 90% DoD [kWh]	4 608

Cycles Calculation example (ambient temperature of no more than 40 degrees Celsius @ 1C charge):

#### i-Node range:

80% DoD = 4000 cycles, 10-year Warranty 50% DoD = 6000 cycles, 10-year Warranty

e.g. 10-year kWh Delivery for 1 Cycle/day i-Node 5.6 kWh = 16352 kWh 10-year kWh Delivery for 1 Cycle/day X-Range 16.1 kWh = 47012 kWh 10-year kWh Delivery for 1 Cycle/day e-Wall 5.4 kWh = 15768 kWh

Capacity measurement condition:

IG3N warrants that the Product retains at least 80% of usable energy for 10 years from the commissioning date by IG3N or an authorised third party.

#### **Preconditions for Warranty**

- 1 The Product should fall within the Warranty period.
- 2 Any system failure, fault or warning information must be reported to IG3N or authorised service partner within 2 weeks of indication.
- The Product should be installed by an authorised service partner.
- 4 Customer should correctly operate and use the system according to the installation manual.
- 5 Customer should provide proof of the original purchase of the Product.
- The installation of the Product for the Customer should be completed within 1 month from the date the title of the Product is transferred from IG3N.
- 7 User should register the i-Node Product on IG3N's after-service page on the website (http://www.i-g3n.co.za/service-centre/) within one week after the first installation or send an email to info@i-g3n.com
- The ambient temperature during the operation of the Product must be within the -10 °C and 40 °C temperature range and should not be exposed to direct sunlight. The battery room must be ventilated in accordance with the requirements stipulated in the product installation manual.
- The Product is for installation and operation in residential, small business and light industrial applications, with an average of one full cycle per day. The Product is not suitable for supplying life-sustaining medical devices and automotive applications. The Warranty will be voided if usage exceeds household, small business and light industrial energy storage applications.
- The presented margin between 80% to 90% DoD is only to be used in emergency conditions such as load shedding. To ensure the Warranty is maintained the system should not be used at 90% DOD for periods longer than 10% of its total life cycles (400 Cycles).
- The Product must be operated within the specified voltage and current parameters provided at allowed temperature. This holds true for both CANbus and non-CANbus linked installations.

#### Replace or Repair of defective Product

- If any Product covered by the Warranty is confirmed by IG3N to be factory defective or non-conforming, IG3N will replace or repair the defective or non-conforming Product at its own discretion. Any maintenance or replacement should not be deemed as extension or recalculation of the Warranty period.
- 2 IG3N or Service Provider should respond within 3 working days after receipt of service.
- IG3N will be responsible for the approved repair or replacement costs in connection with such non-conforming or defective Product. IG3N reserves the ownership of replaced battery or Products. Unless otherwise agreed by IG3N, the replaced battery or Products should be returned by the Customer to the place designated by IG3N in the same or similar package within 4 weeks from installation.
- Provided that IG3N has discontinued the manufacturing of the Product at the time the related Warranty claim is confirmed, IG3N should, at its sole discretion replace it with a different type of Product (of mutually agreed size, colour, shape and/or power) or refund the purchase price prorated by the days of the relevant Warranty Period remaining.
- Replacement of battery, components or Products may not be brand new but with quality and specification compliant with the Product specifications.

#### **Exception of Warranty**

The following will result in a Warranty not honoured:

- 1 The battery was not registered on IG3N's after-sales website on time.
- 2 The quality or capacity Warranty period was exceeded.
- Product damage and defects caused by Customer's improper use, misuse and abuse that is not in line with installation manual or specifications.
- 4 Damage caused during transport.
- 5 Unauthorised wiring and use of faulty or incompatible devices or devices with safety issues.
- 6 Product arbitrarily modified or its function changed without authorization from IG3N.
- Any changes to the installation not in accordance with the i-Node installation manual or specifications.
- Product damage caused by maintenance and other services conducted not by personnel authorised by IG3N.

- 9 Product damage caused by an external force, force majeure (unforeseeable, unavoidable, and insurmountable objective events, including but not limited to war, civil war, strike, riot or other activities intervened by the government) or by a third party.
- Defects arising from a technology update as a result of unforeseeable changes to laws and regulations.
- 11 Product damage caused by Customer deliberately or by wilful act.
- 12 Failure report not provided within 2 weeks of appearance.
- 13 Unauthorised opening of the special sealed battery enclosure

#### Non-Applicability of the warranty claim

In case a Warranty claim is found to be invalid, the costs incurred by IG3N or an authorised installer due to the invalid claim should be covered by the Customer unless the information or circumstances around the invalidity of the claim would not have been apparent to the Customer.

#### **Warranty restriction**

- 1 Unless otherwise specified herein, to the extent permitted by applicable law, the Warranty and above remedies should be exclusive and replace all other guarantees and remedies, oral or in writing, expressed or implied.
- To the extent permitted by applicable law, IG3N expressly reject any and all legal or implied Warranty, including but not limited to warranties of merchantability, fitness for a particular purpose and hidden or potential defects. No distributor, agent or staff of IG3N is authorised to make any revision, extension or addition to the quality Warranty.
- The legality and enforceability of remaining clauses herein should not be affected or damaged if any of clauses herein is adjudged to be illegal or unenforceable.
- Unless otherwise specified herein, to the maximum range permitted by applicable law, IG3N will not be liable for any direct, indirect, special, accidental or derivative losses caused by the purchase or use of Products and its system, including but not limited to the loss of use, loss of income, the actual or expected loss in revenue (including contract revenue losses), loss of the use of money, loss of anticipated savings, loss of business, loss of opportunity, loss of goodwill, loss of reputation, personal injury or damage loss, or the indirect or derivative loss or damage (including any expense arising from the replacement of equipment and property, resumption of production, etc.) caused by any reasons.
- 7.6 IG3N's liability to any cause whatsoever should in no event exceed the amount of the purchase price paid by the Customer to IG3N for the Product giving rise to the liability.

#### **Update of warranty**

To the extent permitted by the applicable law, IG3N reserves the right to update this Warranty from time to time, and such update may be published on the official website of IG3N or sent by email to the address of the Customer (if provided by the Customer when purchasing the Products).

#### **Out of Warranty**

As for the service for the Products out of Warranty, IG3N agrees to provide certain after-sales service to the Customer upon written request, and all the expenses which include but not limited to the materials, parts or labour, will be incurred by the Customer.

#### **End-of-Life Processy**

Batteries that reach their end-of-life and are no longer viable for refurbishment should be returned to IG3N for processing and recycling at the Customer's cost. Material weight will be considered, and a recycling or disposal value may be credited in the Customers' favour.

#### **Reporting of Warranty**

Complete the table below with Product information to IG3N or authorised installers to report Warranty requirement:

	Complete this column
Product Type	
Serial Number of product	
Installation Date	

