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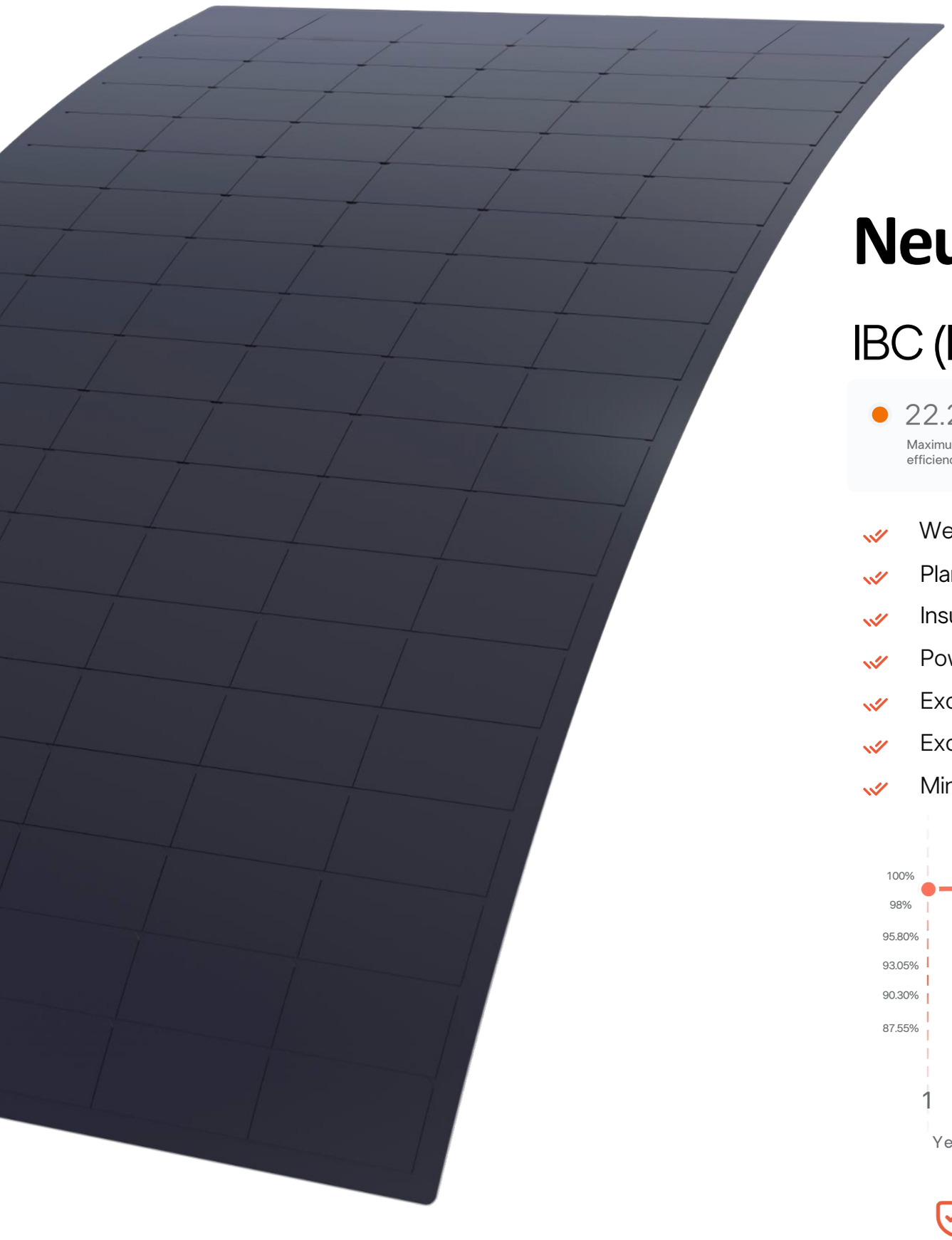
DATA SHEET

NeuroFlex®
IBC Cell Technology
Electro-conductive

More Generation, Less Space, 4x Less Weight per Square Meter. Social, Sustainable, and Economic Impact in All Sectors.

Contact us

Direct European and International Allies

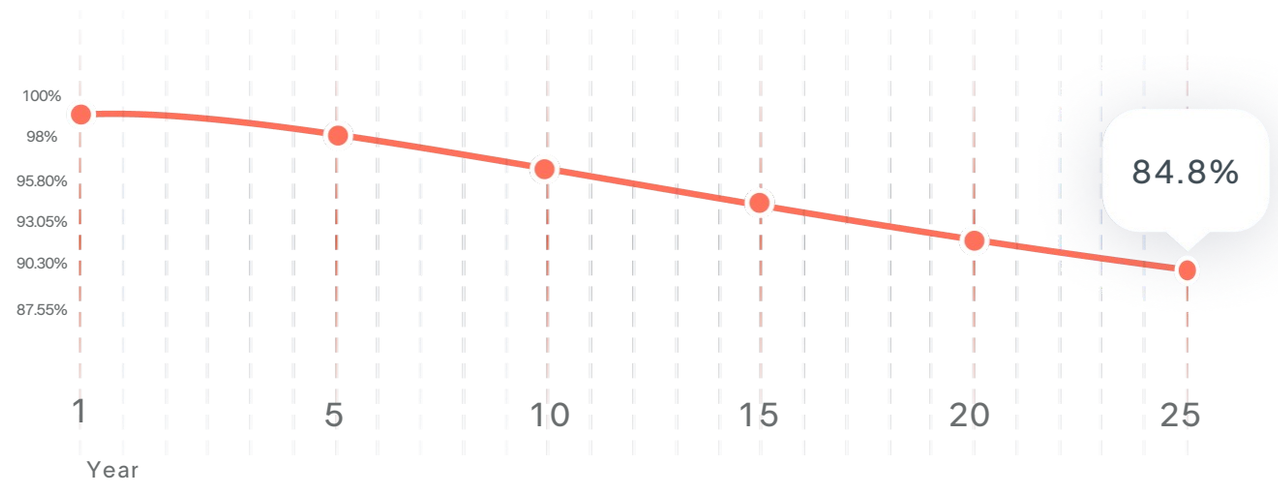


NeuroFlex®

IBC (Interdigitated Back Contact) Technology

- 22.2% Maximum module efficiency
- 0~3% Power Tolerance
- <2% First-year degradation
- 0.5% 2-25 years power degradation

- Weight of 2.5 kg/m² - Ideal for weak roofs and curved surfaces
- Planar Electrical Connection (PEC) technology
- Insulating Encapsulation Composite (IEC)
- Power tolerance 0~+5W
- Excellent performance in low-light conditions
- Excellent behavior in extreme temperature conditions
- Minimum bending radius of 0.3 m



- 25-year linear performance warranty
- 15-year Product warranty

Absolute Maximum Value

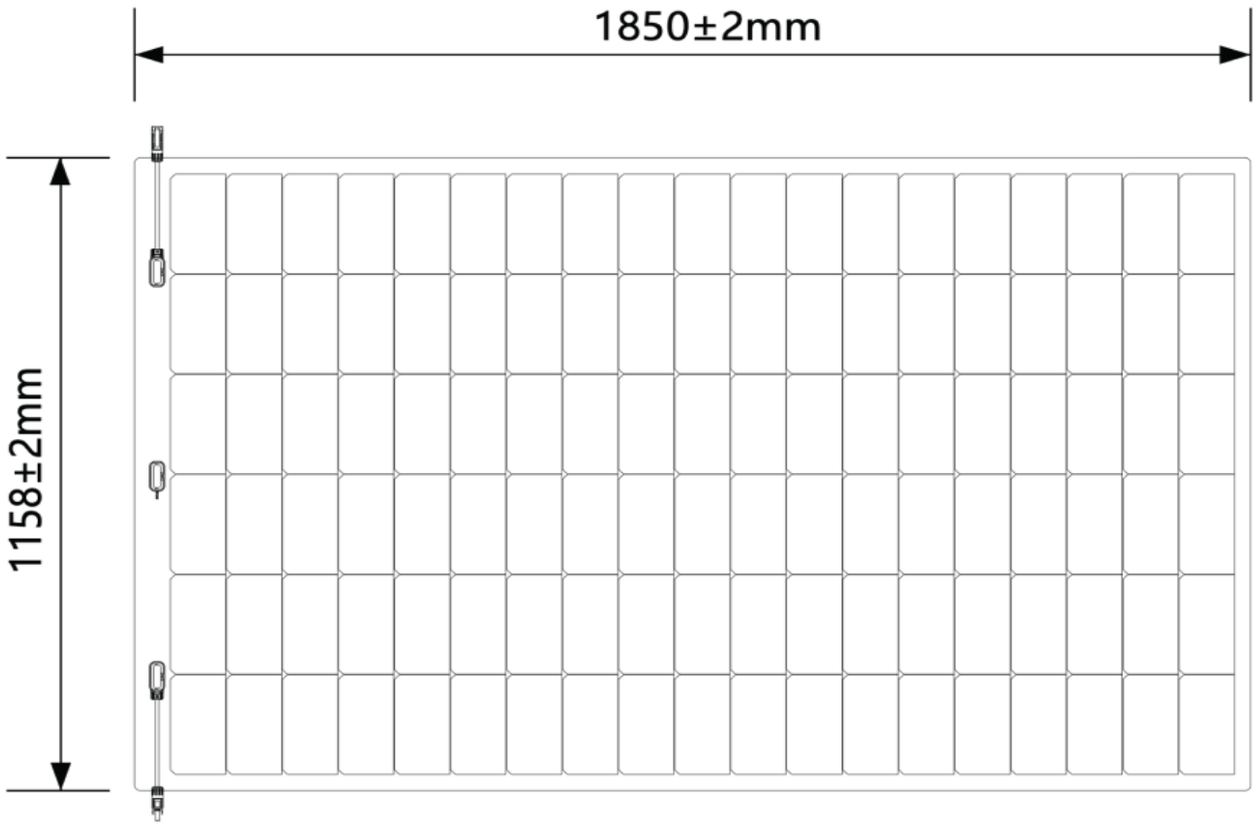
Operating temperature	From -40 to +85°C
Maximum Series Fuse Value	25A
Safety class	II
Fire classification (IEC 61730)	C
Maximum system voltage	DC 1500V

Mechanical Characteristics

Cell type	114 Monocrystalline IBC (182mm×91.9mm)
Effective module dimension (L×W)	1763.6mm×1098.2mm
Weight	5.2±0.5kg
Cable	4mm2 (IEC), 450mm or customized length
Junction box	IP 68 with three bypass diodes
Connector	MC4 Original

IEC 61215
IEC 61730

For details on tests and certificates, please refer to the following page.



15 years of warranty
25 years service life

Cross-linking degree test

Guaranteed power

5Wp

Output tolerance from 0 to 5 Wp

Ultra Resistant

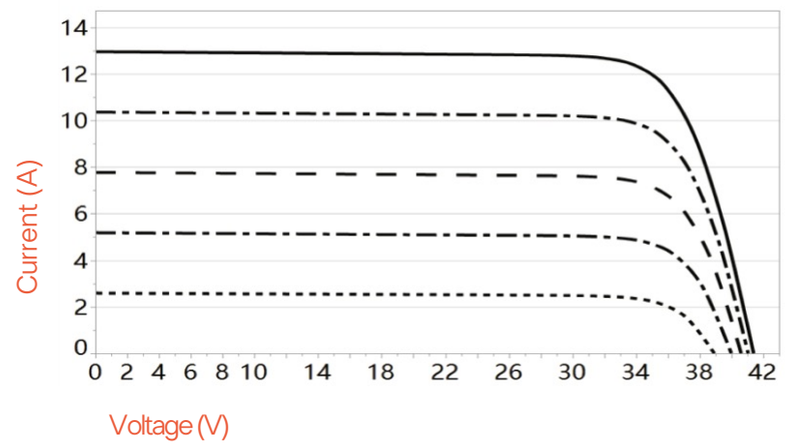
154 NeuroFlex® Per Pallet

Electrical Parameters

Under Test Conditions	STC	NOCT
Nominal Power (Pmpp) /W	430	325
Nominal Current (Impp) /A	12.23	9.80
Nominal Voltage (Vmpp) /V	35.18	33.21
Short-Circuit Current (Isc) /A	13.11	10.74
Open-Circuit Voltage (Voc) /V	41.83	39.86
Effective Module Efficiency (η) /%	22.21%	

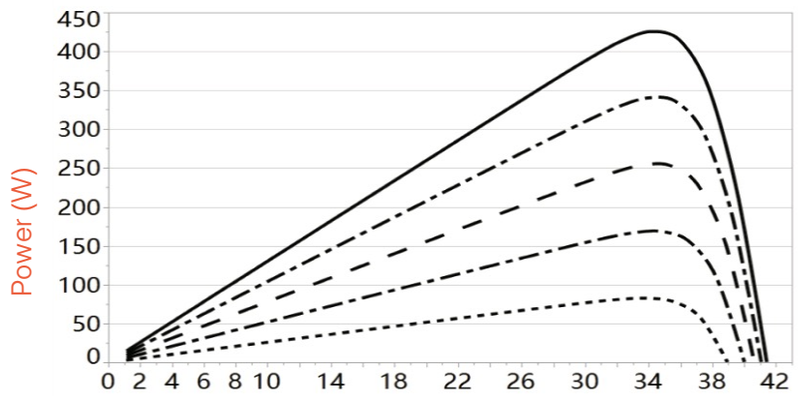
STC (Standard Test Conditions): Irradiance 1000 W/m², Air mass 1.5, Cell temperature 25 ℃, Measurement tolerance ±3%

NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², Ambient temperature 20 ℃, Air mass 1.5, Wind speed 1 m/s



Temperature Ratings

Temperature coefficient per voltage	%/℃	-0.220
Temperature coefficient per current	%/℃	+0.050
Temperature coefficient per power	%/℃	-0.240
Tolerance		0~+5W
NOCT		43 ± 2 °C



Packaging Information

Dimension (L × W × T)	1850mm×1158mm x 2mm (72.8 x45.6 x0.07 inches)	
40’ HQ Container	Pallet/container	Pieces/container
Pieces (154 pieces per pallet)	18	2772

Technical Tests and Classifications

Safety and Environmental Certifications:

- Complies with CE (according to the Low Voltage Directive (LVD) 2014/35/EU)
- Sand/dust: IEC 60068-2-68: 1994 modified
- Salt fog: IEC 61701:2020 / EN IEC 61701:2020
- Potential Induced Degradation (PID): IEC TS 62804-1:2015 (modified)
- Ammonia (NH_3): IEC 62716:2013 / EN 62716:2013

Design Certification

- IEC 61215-1:2021 / EN IEC 61215-1:2021
- IEC 61215-1-1:2021 / EN IEC 61215-1-1:2021
- IEC 61215-2:2021 / EN IEC 61215-2:2021

Construction and Electrical Safety Requirements:

- IEC 61730-1:2023
- IEC 61730-2:2023

Fire Resistance Classification (External Exposure):

- Class E: According to DIN EN 13501-1:2019
- Broof (t1): According to DIN EN 13501-5:2016 (for roofs with a slope < 20°, using test data from external fire exposure on roofs)

Anti-glare: ISO 2813:2014