

**EXPERTS IN ENERGY,**  
POWERED WITH PASSION

**ELAT**  
SOLAR

**lumis** series

**ELAT-FB-GG-435**

The next generation **double glass** solar panel with outstanding performance.

**435 W**

223 W/m<sup>2</sup>

Optimal performance and extended service life  
with **TOPCon technology**.

**Full black monocrystalline** solar panels:  
stylish, efficient and less reflection.

Up to 25% higher yield due to  
**bifacial power generation**.

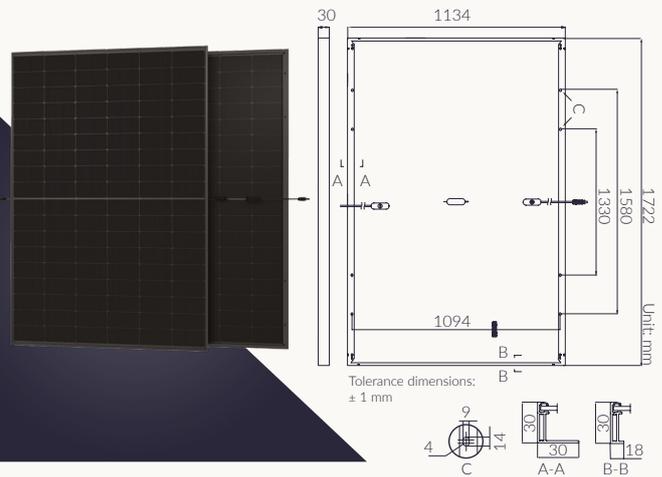
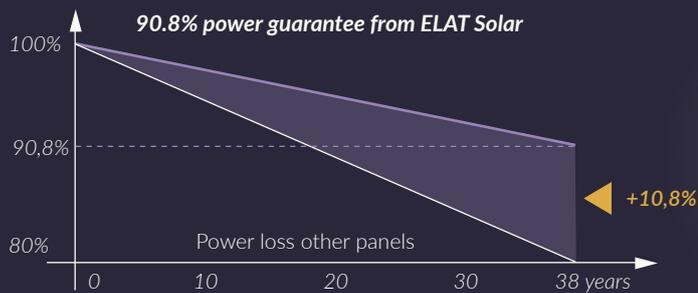
**38**  
year

manufacturer's  
warranty

**38**  
year

linear power  
guarantee

## 38 year linear power guarantee



## Mechanical Parameters

Cell type	182 x 91 mm N Type Mono
Cell technology	TOPCon
No. of cells	108 (6x18)
Junction Box	IP67/IP68, 3 diodes
Output cable	4 mm <sup>2</sup> , 1200 mm
Connector	MC4-EVO2
Front glass	2.0 mm AR coating tempered glass
Back glass	2.0 mm glazed glass
Frame	Anodized aluminium alloy frame
Weight	24.70 kg
Dimensions	1722 x 1134 x 30 mm
Packaging	37 pcs per pallet / 222 pcs per 20 FT container / 962 pcs per 40 HQ container

## Electrical Characteristics STC: AM 1.5 1000 W / m<sup>2</sup> 25°C

Module type	ELAT-FB-GG-435
Maximum power (P <sub>max</sub> / W)	435
Open circuit voltage (V <sub>oc</sub> / V)	38,47
Short circuit current (I <sub>sc</sub> / A)	14,31
Voltage at maximum power (V <sub>mp</sub> / V)	32,06
Current at maximum power (I <sub>mp</sub> / A)	13,57
Module efficiency (%)	22,28

## Certificates



## Operating Parameters

Operational temperature	-40°C ~ +85°C
Power output tolerance	0 ~ +5 W
V <sub>oc</sub> - and I <sub>sc</sub> -tolerance	± 3%
Maximum system voltage (V)	1500 V
Maximum series fuse rating	30 A
Nominal Operating Cell Temperature (NOCT)	45 ± 2°C
Protection class	Class II
Fire rating	UL 1703, Class A

## Mechanical Loading

Front side maximum static loading	5400 Pa
Rear side maximum static loading	2400 Pa
Hailstone test	25 mm hailstone at speed 23 m/s

## Temperature Ratings (STC)

Temperatuur Coëfficiënt van I <sub>sc</sub> (A / °C)	+ 0,041 % / °C
Temperatuur Coëfficiënt van V <sub>oc</sub> (V / °C)	- 0,250 % / °C
Temperatuur Coëfficiënt van P <sub>max</sub> (W / °C)	- 0,290 % / °C

## Parameter of double-sided power generation (435 W)

P <sub>max</sub> gain	P <sub>max</sub> / W	V <sub>mp</sub> / V	I <sub>mp</sub> / A	V <sub>oc</sub> / V	I <sub>sc</sub> / A
5%	456,00	32,06	14,22	38,47 ± 3%	14,93 ± 3%
15%	500,00	32,06	15,60	38,47 ± 3%	16,38 ± 3%
25%	543,00	32,06	16,94	38,47 ± 3%	17,78 ± 3%

Certificates are available on request. ELAT Solar's solar cells and solar modules are both manufactured by Bloomberg Tier 1-listed suppliers.

Research, design and development in the ELAT region.   