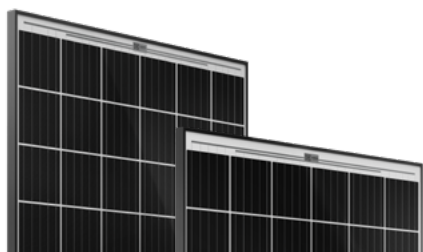


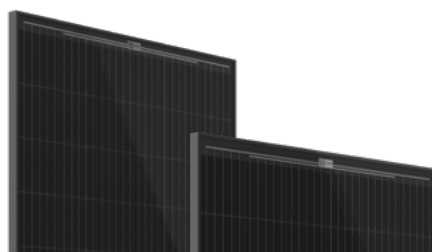
# MODULE OVERVIEW

Solar Competence. Made in Germany. Seit 2001.

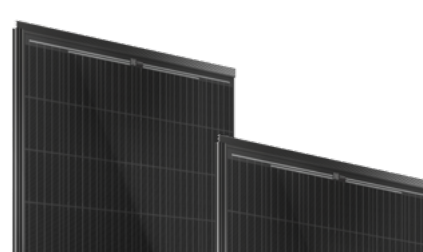


## PREMIUM HE-TEC

Glass-foil (white backsheet)  
Interconnectable



Glass-foil (black backsheet)  
Interconnectable



## PREMIUM INROOF

Solrif System  
Glass-foil (black backsheet)  
Interconnectable



## BIPV / GLAS-GLAS

Laminated safety  
glass with  
DIBt approval



## PROJECT

Glass-foil  
(white backsheet)

### X63

### X61

### X83

### X81

### S83Sol

### S81Sol

### Elegante

### P23

POWERCLASS	330 - 340 W	260-270W	320 - 330 W	255-265W	320-330 W	255-265 W	200 W	320-330 W
NUMBER OF CELLS	60	48	60	48	60	48	40	60
CELL MATERIAL	Monokristalline Si, PERC	Monokristalline Si, PERC	Monokristalline Si, PERC	Monokristalline Si, PERC	Monokristalline Si, PERC	Monokristalline Si, PERC	Monokristalline Si, PERC	Monokristalline Si, PERC
LENGTH X WIDTH X HEIGHT [MM]	1716 x 1023 x 42	1387 x 1023 x 42	1716 x 1023 x 42	1387 x 1023 x 42	1048 x 1759 x 36 grid dimension 1016 x 1741	1430 x 1048 x 36 grid dimension 1016 x 1412	950 x 1600 x 9 <sup>3</sup>	1716 x 1023 x 35
WEIGHT [KG]	19,5	16	19,5	16	19,5	16	31,5	19,3
CONNECTORS	MC4	MC4	MC4	MC4	MC4	MC4	2 Tyco wing edge	MC4
MAX. SYSTEM VOLT-AGE [Vdc]	1000	1000	1000	1000	1000	1000	1000	1000
MAX. MODULE PRESSURE LOAD <sup>1</sup> [Pa]	8000	8000	8000	8000	5400	5400	7500	5400
MAX. MODULE SUCTION LOAD <sup>1</sup> [Pa]	5400	5400	5400	5400	2400	2400	5400	2400
CLASSIFICATION RANGE [W]	0/ up to +6,99	0/+4,99	0/ up to +4,99	0/+4,99	0/ up to +4,99	0/+4,99	0/+9,99	0/+4,99
POWER GUARANTEE <sup>2</sup>	25 years, linear	25 years, linear	25 years, linear	25 years, linear	25 years, linear	25 years, linear	30 years, linear	25 years, linear
+ PRODUCT GUARANTEE <sup>2</sup>	25 years	25 years	25 years	25 years	25 years	25 years	23 years	12 years, optional 25 years

QUALITY UNDER HAND AND SEAL

<sup>1</sup>: Mechanical load according to IEC/EN 61215 | Please observe the mounting conditions in the installation manual. | Testload = Designload x 1,5 Factor of safety  
<sup>2</sup>: Detailed information on our product and performance guarantees. Accessible online [www.aleo-solar.com](http://www.aleo-solar.com) | Subject to errors and updates.



Prenzlau

## GERMAN TECHNOLOGY AND MANUFACTURING. FOR HIGH-QUALITY SOLAR MODULES.

When you purchase solar modules from aleo you can rely on expert knowledge and genuine

Made in Germany since **2001** Our products are designed under the aspects of **quality and durability** and manufactured in our certified production facility in Prenzlau, Germany.

# 25 YEARS POWER GUARANTEE\*

# YEARS PRODUCT GUARANTEE\*

# 100 % COST RECOVERY FOR DEFECTS\*\*

\*For all modules of the aleo Premium line.

\*\*If our modules show material and processing defects caused by the manufacturer, or should the power output be below the guaranteed values, we will bear the following costs within the framework of the conditions stated in the guarantee certificate: Reasonable transport costs for the delivery of replacement modules + Return of repaired or replaced modules + Costs related to the installation, extension or reinstallation of the modules

### WE TEST WAY BEYOND STANDARD

In order to simulate the expected lifetime of modules, international standards are not stringent enough. We test every new material at least twice as much IEC standards and even far beyond when we consider it necessary.



**100% diodes tested**



**2 x 100% Electroluminescence-Tests**  
to detect even the finest cracks in modules



**3xtriple Climate chamber test**  
intensified reality under extreme conditions

**Extreme Temperatures**

600 cycles

200 cycles

(Thermal Cycling Test; cycling between -40 to +85 °C)

**High Humidity**

3000 hours

1000 hours

(Damp Heat Test; 85°C/85%RH)

**Frost & Humidity**

30 cycles

10 cycles

(Humidity-Freeze Test; cycling between 85°C / 85%RH and -40°C)

### OUR QUALITY IS CERTIFIED

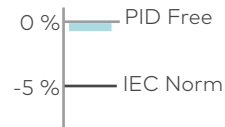
All aleo modules are certified according to IEC 61215:2016 and IEC 61730:2016. In addition, our modules have received the following certificates.



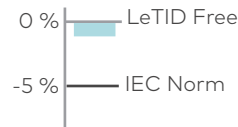
#### Consistent

aleo modules show an extremely high Resistance to degradation phenomena (PID & LeTID). The associated Power losses are far below those required by IEC standard.

**PID**



**LeTID**



#### Robust

Modules must be able to withstand heavy snow, wind and hail. aleo's Premium HE-TEc modules are much more robust than the standard requires.

8000  
Pascal

2400

**Pressure**  
(Snow & Wind)

5400  
Pascal

2400

**Suction**  
(Wind)

4

3

**Hail Class**  
(Tested with 40 mm Hailgrains)

### Versatile application



**Salt mist corrosion resistance**  
(IEC 61701:2011)

Class 6  
Certified for use in coastal areas



**Ammonia corrosion resistance**  
(IEC 62716:2013)

Certified for use in agricultural areas



**Sand & Dust resistance**  
(IEC 60068-2-68:1994)

Certified for use in regions with high sand / dust levels



### Good-looking

**Snail Trail Free**  
(AgNP test)

Certified to be free of snail trails