



Heckert Solar

FUTURE STARTS IN GERMANY



Bifacial Back-Contact-Module

ZEUS 1.2 FullBlack 270-280WP



35MM FRAME HEIGHT



LIGHTWEIGHT WITH 14,3KG



BACK-CONTACT-CELL TECHNOLOGY



IDEAL AREA COVERAGE



OPTIMAL SHADING BEHAVIOR

DE

GERMAN
WARRANTOR



DIRECT
SERVICE

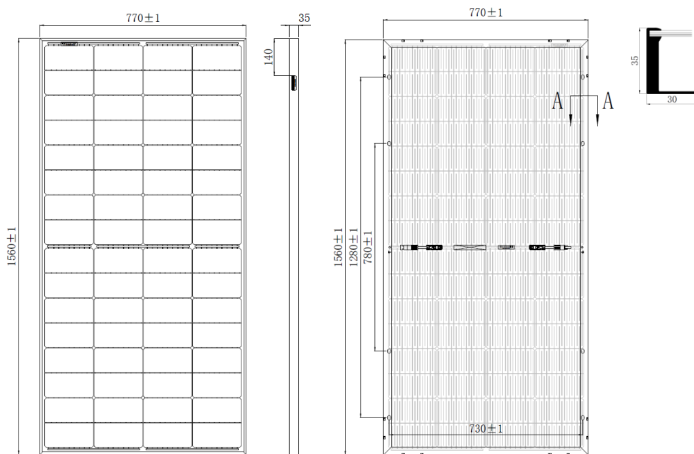
**30
YEARS**

PRODUCT
WARRANTY

**30
YEARS**

PERFORMANCE
WARRANTY

DIMENSIONS IN MM



MODULE SPECIFICATIONS

Cell Technology	N-Type Back-Contact Technology
Cell Type	64 half cut cells (4x16)
Dimensions	1560 x 770 x 35mm
Weight	14,3kg
Front Glass	2,0mm heat strengthened AR-glass
Rear Glass	2,0 mm heat strengthened glass
Frame	35mm black anodized aluminium frame
Junction Box	2 diodes, IP68, according to IEC 62790
Connecting Cable	4mm² Stäubli MC4-EVO 2A connector +/(1500V)
Cable Length	2 x 1100mm
Max. Test-Load, push/pull	9000Pa / 2400Pa*
Max. Design-Load, push/pull	6000Pa / 1600Pa*

ELECTRICAL SPECIFICATIONS¹ (STC²)

Rated Power P_{MPP} (Wp)	270	275	280
Max. Power Current I_{MPP} (A)	13,35	13,51	13,67
Max. Power Voltage V_{MPP} (V)	20,23	20,36	20,49
Short-circuit Voltage I_{SC} (A)	14,58	14,65	14,72
Open-circuit Voltage V_{OC} (V)	23,67	23,89	24,11
Module Efficiency (%)	22,47	22,89	23,31

ELECTRICAL SPECIFICATIONS¹ (NMOT³)

Rated Power P_{MPP} (Wp)	207,3	210,7	214,1
Max. Power Current I_{MPP} (A)	11,19	11,19	11,25
Max. Power Voltage V_{MPP} (V)	18,6	18,8	19,0
Short-circuit Voltage I_{SC} (A)	11,77	11,83	11,89
Open-circuit Voltage V_{OC} (V)	22,5	22,7	22,9

BIFACIAL OUTPUT (STC)

Rated Power P_{MAX} (Wp)	295	301	307
Max. Power Current I_{MPP} (A)	14,61	14,78	14,95
Max. Power Voltage V_{MPP} (V)	20,25	20,38	20,51
Short-circuit Voltage I_{SC} (A)	15,45	16,03	16,11
Open-circuit Voltage V_{OC} (V)	23,69	23,91	24,13

TEMPERATURE CHARACTERISTICS

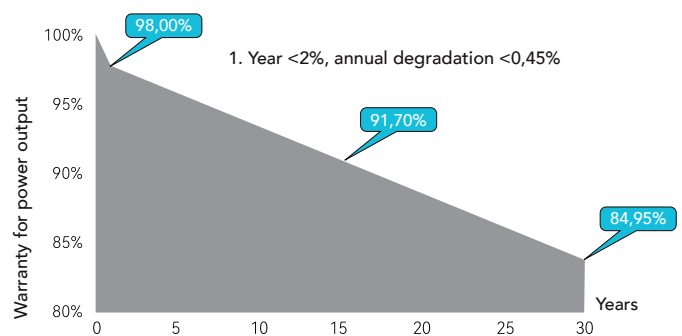
Nominal Module Operating Temperature ³	42 ± 2°C
Temperature Coefficient P_{MAX} (%/°C)	- 0,26
Temperature Coefficient V_{OC} (%/°C)	- 0,22
Temperature Coefficient I_{SC} (%/°C)	+ 0,05

OPERATING CONDITIONS

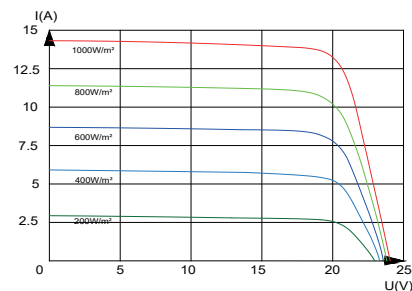
Operating Temperature	-40 ~ +85°C
Maximum System Voltage (VDC)	1500
Reverse Current Feed I_R (A)	25
Max. Power Tolerance (Wp)	0 / +4,99
Max. Bifaciality (%)	80 ± 5

¹Measurements according to IEC 60904-3, measurements tolerance: I_{SC} ±5%, V_{OC} ±5%, P_{MPP} ±4%, bifaciality: 80% ± 5% ²Standard Test Conditions STC: irradiation 1.000 W/m² with a spectrum of AM 1,5 at a cell temperature of 25°C. Maximum reduction in efficiency at 200W/m²: 2%. ³NMOT-Data: Nominal Module Operating Temperature Standard Test Conditions (STC): Irradiation on back side 135 W/m². Permissible operating temperature between -40°C and +85°C. Dimensions +/- 3 mm. Technical specifications subject to change without notice. All information is provided without guarantee. Design Load = rated load, test load = test load. Please refer to our installation instructions.

LINEAR POWER OUTPUT WARRANTY



I-V CURVE



CERTIFICATES & WARRANTIES

IEC 61215, IEC 61730*
 IEC 62716: Ammonia Corrosion*
 IEC 61701: Salt Mist Corrosion*
 IEC TS 62804: PID; IEC TS 63342: LeTID*
 IEC 60068: Dust & Sand*
 Fire protection class: A (according to UL 790)
 Hail resistance class: HW4
 Product warranty: 30 years
 Performance warranty: 30 years
 WEEE-Reg.-No.: DE 42676826

31 Modules/Pallet, 868 Module/40'HC *under certification

