ALARKO

Diamond GGF Series

MBB Monocrystalline

Half-Cell Photovoltaic Module

535-555W
Output power

PID Resistance Warranty

Eliminate PID risk with the use of high quality EVA.

Hot-Spot Resistance

High protection against Hot-Spot formation with lower internal current and power usage.

12 Years
Product Warranty

30 Years
Linear Performance Guarantee

IEC 61215
IEC 61730
IEC TS 62941
(PV Quality Management System)

ISO9001:2015
(Quality Management System)

ISO14001
(Environmental Management System)

ISO45001
(Occupational Health and Safety System)

ISO50001
(Energy Management System)

Bifacial Technology WITH DOUBLE-SIDED GLASS

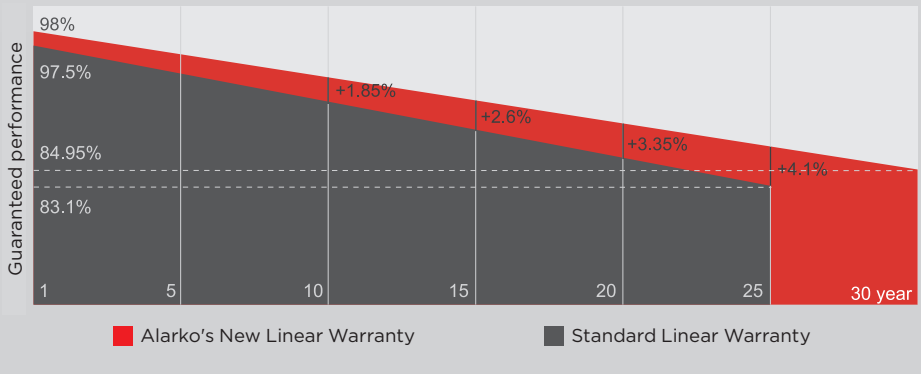
More energy generation from the sunlight with double-sided glass.

21.50%
Maximum efficiency

Multi Busbar Technology

Ability to benefit more from the Sunlight and collect stronger current with 10 Busbar (BB) Cell Technology. Improved effect on output power and reliability.

0~+5W
Power Tolerance

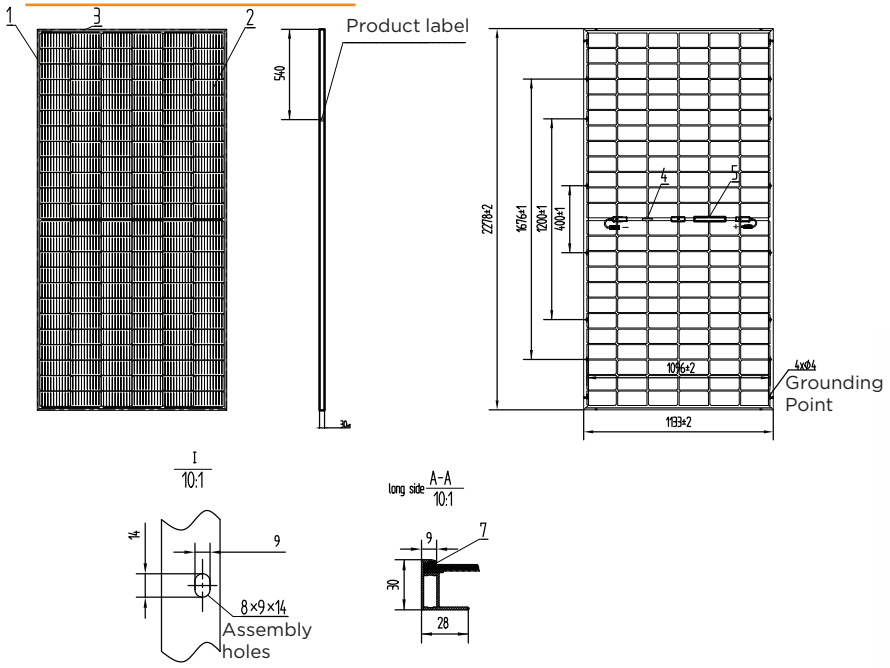


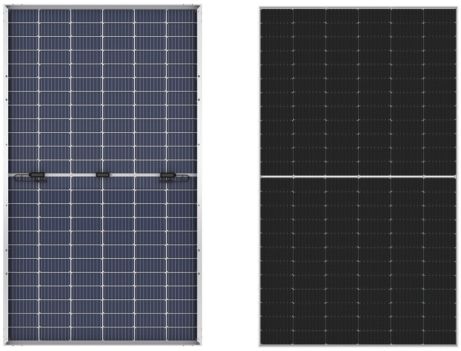
www.alarko-carrier.com.tr

AL-KVNC-xxxB-72H-GGF

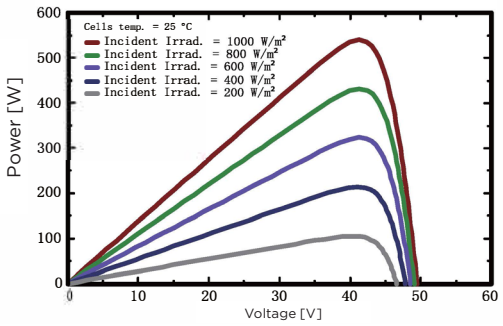
21.50%	0~+5W	<2%	0.45%
MAX. MODULE EFFICIENCY	POWER TOLERANCE	FIRST YEAR'S POWER DROP	POWER LOSS RATE BETWEEN 2- 25 YEARS

PV Module Dimensions (mm)





PV Module P - V Curves



ELECTRICAL SPECIFICATIONS (STC)

Model	535B	540B	545B	550B	555B
Maximum Power (Pmp) STC	535	540	545	550	555
Operating Point Voltage (Vmp)	41.50	41.65	41.80	41.95	42.10
Operating Point Current (Imp)	12.90	12.97	13.04	13.11	13.18
Short Circuit Voltage (Voc)	49.35	49.50	49.65	49.80	49.95
Short Circuit Current (Isc)	13.78	13.85	13.92	14.02	14.09
PV Module Efficiency	20.73%	20.92%	21.12%	21.31%	21.50%
Standard Test Conditions	Atmospheric quality Am 1.5, Irradiance 1000w/m², Cell Temperature 25°C				

MECHANICAL SPECIFICATIONS

Modül Boyutları	2278 x 1133 x 30 mm
Number of Solar Cells and Cell Sizes	144 PCS (2x6x12)
Weight	31 kg + 5%
Junction Box	IP68, MC4
Solar Cables	4mm², + 300mm & -200 mm (Customizable)
Front Window	2,0 mm, anti-reflective glass
Rear Window	2,0 mm, extra toughened glass
Front Side Mechanical Strength	5400 Pa
Reverse Side Mechanical Strength	2400 Pa

ELECTRICAL SPECIFICATIONS FOR THE REVERSE SIDE

(FOR FRONT 540W REFERENCE POWER)

Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax gain
567	49.50	14.54	41.65	13.61	5%
594	49.50	15.23	41.65	14.26	10%
621	49.60	15.92	41.75	14.91	15%
648	49.60	16.62	41.75	15.56	20%
675	49.60	17.31	41.75	16.21	25%

THERMAL SPECIFICATIONS

NMOT	45±2°C
Maximum Power Temperature Coefficient (Pmax)	-0.38%/°C
Short Circuit Voltage Temperature Coefficient (Voc)	-0.36%/°C
Short Circuit Current Temperature Coefficient (Isc)	+0.05%/°C

ELECTRICAL SPECIFICATIONS (NMOT)

Model	535B	540B	545B	550B	555B
Maximum Power (Pmp) STC	398	402	405	409	413
Operating Point Voltage (Vmp)	38.09	38.25	38.39	38.57	38.71
Operating Point Current (Imp)	10.47	10.52	10.57	10.62	10.67
Short Circuit Voltage (Voc)	46.00	46.10	46.20	46.40	46.50
Short Circuit Current (Isc)	11.13	11.19	11.24	11.29	11.34
NMOT	The irradiance is 800W/m, the ambient temperature is 20 degrees, and the wind speed is 1m/s				
The electrical performance parameters given in the tables are only related to one PV panel and are used only as a reference.					

PACKAGING AND TRANSPORT

40'HQ Container	36 Pieces/Pallet x 20 Pallets = 720 Pieces
13.5m Truck	36 Pieces/Pallet x 28 Pallets = 1008 Pieces

MAKSİMUM SINIRLAR

Operation Temperature Range	-40~ +85°C
Maximum System Voltage	1500VDC
Maximum Series Fuse Value	30A

SU_AC_0117 ENG 20032024