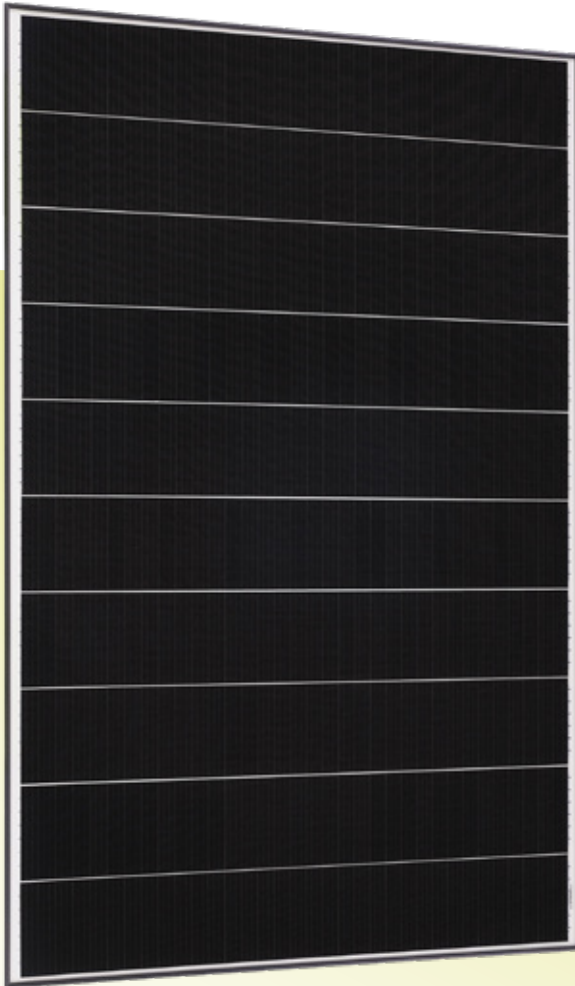


KS405-415MB5-SBS

Monocrystalline Shingled

BLACK FRAME, WHITE BACKSHEET

Output: **405-415 W**



SHINGLED CELLS TECHNOLOGY



Innovative technology allows more cells fit on standard-sized module, avoiding the influence of bus bar shadowing

REDUCED RESISTANCE



Shingled modules reduce resistance and decrease impedance increasing power

MORE POWER WITH STANDARD SIZE



High efficiency of the product allows for more effective use of available area for solar installation

OPTIMIZED INSTALLATION COSTS



Higher energy production combined with standard size decreases costs of transportation and reduces BOS



POLISH BRAND POLISH GUARANTOR

Designed with the expertise of the largest Polish PV distributor



RELIABILITY

25-year product performance warranty
25-year linear warranty

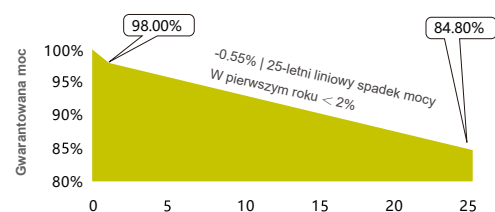


HIGHEST QUALITY FAVOURABLE PRICE

Quality Control at each stage of production

HIGH PERFORMANCE FOR MANY YEARS

Gwarancja mocy



Electrical Characteristics at Standard Test Conditions (STC)

Module Type	KS405MB5-SBS	KS410MB5-SBS	KS415MB5-SBS
Maximum Power Pm [Wp]	405	410	415
Open-Circuit Voltage Voc [V]	46.5	46.6	46.7
Short-Circuit Current Isc [A]	11.02	11.07	11.12
Maximum Power Voltage Vm [V]	38.7	38.8	38.9
Maximum Power Current Im [A]	10.47	10.57	10.67
Module Efficiency η [%]	20.7	20.9	21.2

Electrical Characteristics at Nominal Module Operating Temperature (NMOT)

Module Type	KS405MB5-SBS	KS410MB5-SBS	KS415MB5-SBS
Maximum Power Pm [Wp]	305	309	312
Open-Circuit Voltage Voc [V]	44.3	44.4	44.5
Short-Circuit Current Isc [A]	8.89	8.93	8.97
Maximum Power Voltage Vm [V]	36.9	37.0	37.1
Maximum Power Current Im [A]	8.27	8.35	8.43

Note:

- Standard Test Conditions [STC]: irradiance 1000 W/m²; AM 1.5; ambient temperature 25°C according to EN 60904-3;
- Nominal Module Operating Temperature (NMOT): Irradiance 800W/ m²; wind speed 1m/s, ambient temperature 20°C;
- Tolerance of Pm: 0~+5W, Measuring uncertainty of power: $\pm 3\%$. Performance deviation of Voc [V], Isc [A], Vm [V] and Im [A]: $\pm 3\%$.

Maximum Ratings Parameter

Max. System Voltage	DC 1500(IEC)
Max. Fuse Rated Current [A]	20
Max. Surface Load Capacity [Pa]	5 400
Max. Rear Load Capacity [Pa]	2 400
Operating Temperature [°C]	- 40 to + 85
Withstanding Hail	Max. diameter of 25mm with impact speed of 23m/s

Other Characteristics

Packaging	36 pcs/pallet 26 pallet/container container 40' = 936 pcs
Warranty	25-year product performance warranty 25-year linear warranty

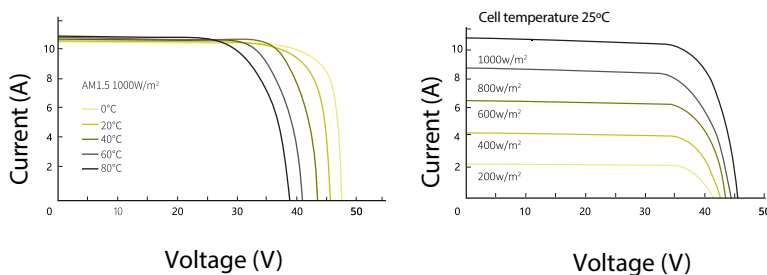
Temperature Characteristics

Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pm	-0.34%/°C

Mechanical Parameters

Dimensions	1719×1140×30 (L×W×H)
Weight	21 kg
Encapsulation	White toughened safety glass 3.2mm
Lamination	EVA (Ethylene-Vinyl-Acetate)
Cells	Monocrystalline shingle, 340 cells (34x10)
Backsheet	White composite film
Frame	Black anodized aluminum profile
Junction Box	IP68, two diodes
Cable	1m
Connector	MC4 equivalent

I-V Curves



Dimensions

Unit: mm

