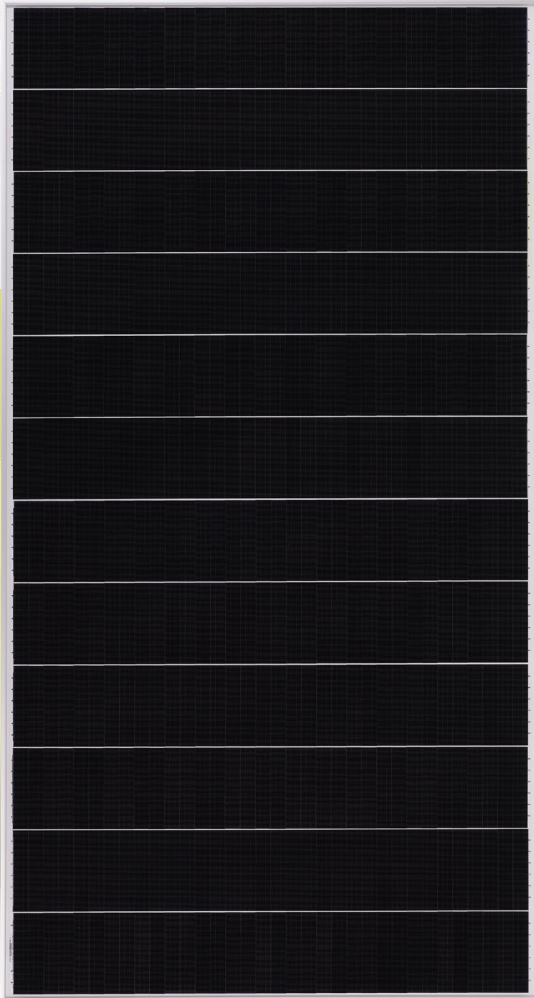


KS470M-SH

Monocrystalline Shingled

SILVER FRAME, WHITE BACKSHEET

Output: **470 W**



SHINGLED CELLS TECHNOLOGY

Innovative technology allows more cells fit on standard-sized module and avoids 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

15-year product performance warranty
25-year linear warranty

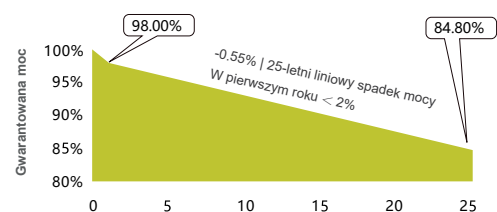


HIGHEST QUALITY FAVOURABLE PRICE

Quality Control at each stage of production

HIGH PERFORMANCE FOR MANY YEARS

Gwarancja mocy



Electrical Characteristics at Standard Test Conditions (STC)

Module Type	KS470M-SH
Maximum Power Pm [Wp]	470
Open-Circuit Voltage Voc [V]	49.4
Short-Circuit Current Isc [A]	12.07
Maximum Power Voltage Vm [V]	40.9
Maximum Power Current Im [A]	11.49
Module Efficiency η [%]	20.94

Parametry elektryczne w nominalnych warunkach pracy (NMOT)

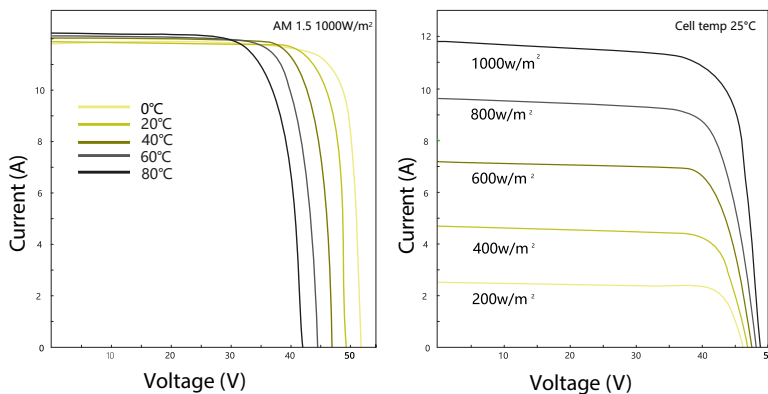
Maximum Power Pm [Wp]	354
Open-Circuit Voltage Voc [V]	47.1
Short-Circuit Current Isc [A]	9.72
Maximum Power Voltage Vm [V]	39.0
Maximum Power Current Im [A]	9.08

Note:

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

Mechanical Parameters

Dimensions	1969×1140×35 (L×W×H)
Weight	24 kg
Encapsulation	White toughened safety glass 3.2mm
Lamination	EVA (Ethylene-Vinyl-Acetate)
Cells	Monocrystalline shingled PERC
Backsheet	White composite film
Frame	Anodized aluminum profile
Junction Box	IP68, two diodes
Cable	1m
Connector	MC4 equivalent

I-V Curves

Temperature Characteristics

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

Maximum Ratings Parameter

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

Other Characteristics

Packaging	22 szt./pallet 31 palet/container container 40' = 682 pcs
Warranty	15-year product performance warranty 25-year linear warranty

Dimensions

Unit: mm

