

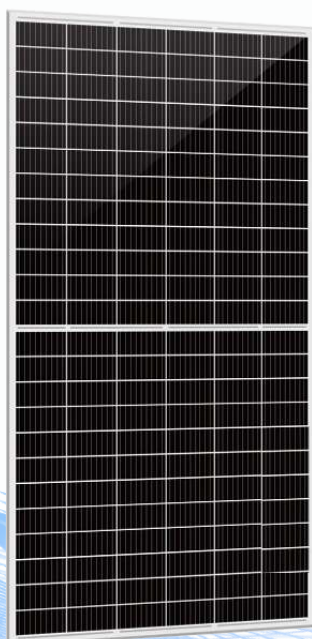


Kingdom Solar is the world's leading green energy manufacturer, committed to making clean energy illuminate every corner of the world. We strive to provide high-efficiency, high-quality and low-cost clean energy solutions. Kingdom solar insists on continuous innovation around customer needs. We invest heavily in technology research, and promotes green energy in the world. Contribute to the early realization of carbon peak and carbon neutrality.

Top Power Panel, 166MM Series!

Maximum Output Wattage **450W**, Positive Tolerance **0~+3W**, Highest efficiency **20.7%**

KEY FEATURES



Module efficiency up to 20.7%

Highest power brings lowest kilowatt-hour cost, highest lifetime generating capacity, simultaneously lowest annual power attenuation.



Anti PID

PID Resistant

Excellent PID resistance test, and also can be improved to meet highest standards for the particularly harsh environment



Low-Light Performance

Excellent power generation performance under low-light conditions with MBB technology



Anti-Crack

Excellent anti-microcracking performance with more balanced interior stress



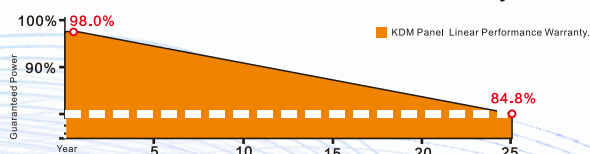
Strength and Durability

Certified for 5400Pa snow and 2400Pa loads test.

12+ Material & Workmanship warranty

25+ Linear power output warranty

KDM Panel Linear Performance Warranty



ELECTRICAL PARAMETERS AT STC & NOCT

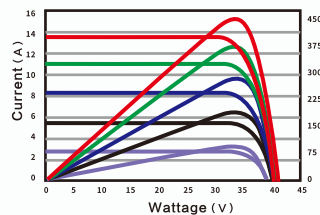
| Module Type | KDM430-144HF | KDM435-144HF | KDM440-144HF | KDM445-144HF | KDM450-144HF |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|
| Rated Maximum Power (Pmax) [W] | 430 321.1 | 435 324.9 | 440 328.6 | 445 332.3 | 450 336.1 |
| Maximum Power Voltage (Vmp) [V] | 40.7 37.9 | 40.9 38.1 | 41.1 38.3 | 41.3 38.5 | 41.5 38.6 |
| Maximum Power Current (Imp) [A] | 10.57 8.47 | 10.64 8.53 | 10.71 8.59 | 10.78 8.64 | 10.85 8.7 |
| Open Circuit Voltage (Voc) [V] | 48.5 45.5 | 48.7 45.7 | 48.9 45.8 | 49.1 46 | 49.3 46.2 |
| Short Circuit Current (Isc) [A] | 11.31 9.15 | 11.39 9.21 | 11.46 9.27 | 11.53 9.33 | 11.6 9.38 |
| Module Efficiency [%] | 19.8 | 20 | 20.2 | 20.5 | 20.7 |

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5

NOCT: Irradiance 800 W/m² ambient temperature 20°C wind speed: 1m/s

| Cell Type | Monocrystalline | OPERATING CONDITIONS | |
|-------------------|--|------------------------------------|---------------------------------------|
| Cell Dimensions | 166mm | Power Tolerance (W) | (0,+3) |
| Cell Quantity | 144pcs | Maximum System Voltage (V) | 1000/1500VDC(IEC) |
| Weight | 23.5kg | Temperature Coefficient Pmax | -0.35 %/°C |
| Module Dimensions | 2094*1038*40mm | Temperature Coefficient Voc | -0.28%/°C |
| Cable | 4.0 mm ² positive pole:240mm negative pole: 120mm,wire length can be customized | Temperature Coefficient Isc | +0.048 %/°C |
| Front Glass | 3.2 mm Anti-Reflection Coating High Transmission Low Iron Tempered Glass | Nominal Operating Cell Temperature | 45±2 °C |
| Frame | Anodized aluminium alloy | Operating Temperature | -40°C~+85°C |
| Junction Box | Ip68 Rated | Maximum Series Fuse | 20A |
| Connector | MC4-EVO2 | PACKING CONFIGURATION | |
| Mechanical Load | Front side 5400Pa/ Rear side 2400Pa | Quantity/Cartoon | 27pcs/big cartoon, 4pcs/small cartoon |
| | | Pallets/Container | 11big pallet/40HQ, |
| | | Quantity/Container | 638pcs/40HQ |

I-V-P CURVE(450W)



Isc, Voc, Pmax CURVE

