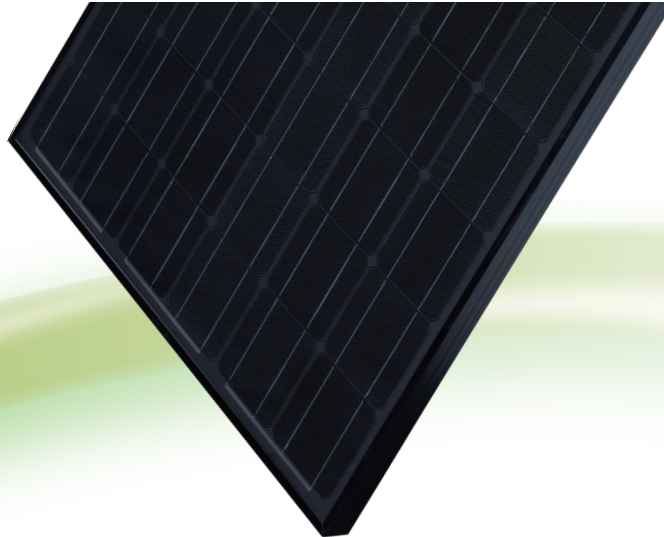
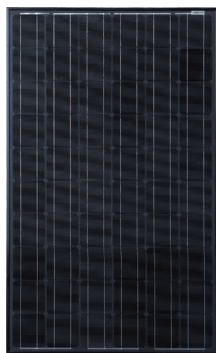


# Datasheet

## Crystalline PV Module

### KDM220WP-250WP



220 225 230 235 240 245 250

#### ELECTRICAL SPECIFICATIONS

STC rated output ( $P_{mpp}$ )	220 Wp	225 Wp	230 Wp	235 Wp	240 Wp	245 Wp	250 Wp
PTC rated output	195.5 Wp	200.1 Wp	204.7 Wp	209.2 Wp	213.8 Wp	218.4 Wp	223.0 Wp
Standard sorted output	$(P_{mpp} + 5 \text{ Wp}) > P_{flash} \geq P_{mpp}$						
Measurement tolerance	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%
Warranted power output STC ( $P_{mpp \text{ min}}$ )	220 Wp	225 Wp	230 Wp	235 Wp	240 Wp	245 Wp	250 Wp
Rated voltage ( $V_{mpp}$ ) at STC	28.30 V	28.66 V	29.03 V	29.39 V	29.75 V	30.12 V	30.48 V
Rated current ( $I_{mpp}$ ) at STC	7.78 A	7.86 A	7.93 A	8.01 A	8.08 A	8.16 A	8.23 A
Open circuit voltage ( $V_{oc}$ ) at STC	37.18 V	37.33 V	37.48 V	37.63 V	37.78 V	37.94 V	38.09 V
Short circuit current ( $I_{sc}$ ) at STC	8.45 A	8.48 A	8.52 A	8.55 A	8.58 A	8.61 A	8.64 A
Module efficiency	13.4%	13.7%	14.0%	14.3%	14.6%	14.9%	15.2%
Rated output ( $P_{mpp}$ ) at NOCT	159.4 Wp	163.1 Wp	166.7 Wp	170.3 Wp	173.9 Wp	177.6 Wp	181.2 Wp
Rated voltage ( $V_{mpp}$ ) at NOCT	25.27 V	25.59 V	25.92 V	26.22 V	26.55 V	26.84 V	27.15 V
Rated current ( $I_{mpp}$ ) at NOCT	6.31 A	6.37 A	6.43 A	6.49 A	6.55 A	6.62 A	6.67 A
Open circuit voltage ( $V_{oc}$ ) at NOCT	33.84 V	33.97 V	34.11 V	34.25 V	34.38 V	34.53 V	34.66 V
Short circuit current ( $I_{sc}$ ) at NOCT	6.97 A	7.00 A	7.03 A	7.06 A	7.08 A	7.11 A	7.13 A

Temperature coefficient $\alpha$ ( $P_{mpp}$ )	- 0.469%/K
Temperature coefficient $\beta$ ( $I_{sc}$ )	+ 0.035%/K
Temperature coefficient $\delta$ ( $I_{mpp}$ )	- 0.042%/K
Temperature coefficient $\epsilon$ ( $V_{mpp}$ )	- 0.433%/K
Temperature coefficient $\times$ ( $V_{oc}$ )	- 0.328%/K
Normal operating cell temperature (NOCT)	47°C

Maximum system voltage SCII	1000 Vdc
Maximum system voltage NEC	600 Vdc
Number of diodes	6
Maximum series fuse rating	15 A



## QUALIFICATION AND WARRANTIES

Product standard	
Extended product warranty	5 years
Output warranty of 90% performance $P_{mpp}$ (STC)	10 years
Output warranty of 80% performance $P_{mpp}$ (STC)	25 years

## CELL TECHNOLOGY

Cell type	monocrystalline
Number of cells / cell arrangement	60 / 6 x 10
Cells dimension	6"

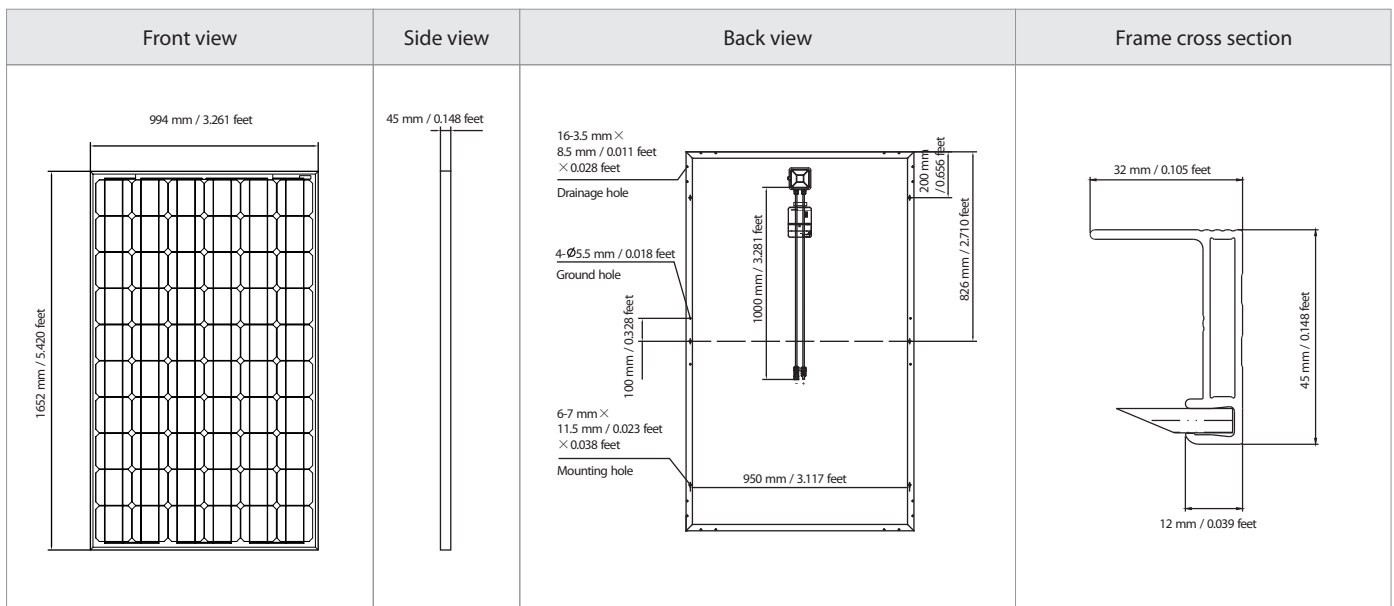
## MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1652 x 994 x 45 mm 65.04 x 39.13 x 1.77 in
Frame technology	Aluminum, black anodized
Module composition	Glass / EVA / Backsheet (black)
Weight (module only)	20 kg / 44.0 lbs
Front glass thickness	3.2 mm / 0.13 in
Junction box IP rating	IP 65
Cable length / diameter (UL)	1000 mm / 39.37 in / 12 AWG
Maximum load capacity	5400 Pa
Fire class	C
Connector type	Multi contact type 4

## MISCELLANEOUS

Packing unit	22 modules
Weight of packing unit	480 kg / 1056 lbs

## MODULE DIMENSION DETAILS



Specifications and designs included in this datasheet are subject to change without notice.