



# Datasheet

## Crystalline PV Module

### CHSM6610M



220 225 230 235 240 245 250 255 260

#### ELECTRICAL SPECIFICATIONS

	220 Wp	225 Wp	230 Wp	235 Wp	240 Wp	245 Wp	250 Wp	255 Wp	260 Wp
STC rated output ( $P_{mpp}$ )	220 Wp	225 Wp	230 Wp	235 Wp	240 Wp	245 Wp	250 Wp	255 Wp	260 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	227.6 Wp	232.2 Wp
Standard sorted output	$(P_{mpp} + 5 \text{ Wp}) > P_{flash} \geq P_{mpp}$								
Measurement tolerance	+/- 3%	+/- 3%	+/- 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	255 Wp	260 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	30.84 V	31.21 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	8.31 A	8.38 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	38.24 V	38.39 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	8.67 A	8.70 A
Module efficiency	13.4%	13.7%	14.0%	14.3%	14.6%	14.9%	15.2%	15.5%	15.8%
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	184.8 Wp	188.4 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	27.43 V	27.73 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	6.74 A	6.79 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	34.80 V	34.94 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	7.15 A	7.18 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 V <sub>DC</sub>
Maximum system voltage NEC	600 V <sub>DC</sub>
Number of diodes	6
Maximum series fuse rating	15 A



## QUALIFICATION AND WARRANTIES

Product standard	IEC 61215, 61730 / UL 1703
Extended product warranty	10 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, silver anodized
Module composition	Glass / EVA / Backsheet (white)
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
Cable length / diameter (IEC)	1000 mm / 39.37 in / 4 mm <sup>2</sup>
Maximum load capacity	5400 Pa
Fire class	C
Connector type (UL)	Multi contact type 4
Connector type (TUV)	MC type 4 compatible

## MISCELLANEOUS

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

## ARTICLE NUMBER (per panel)

Power class	Article No. (IEC)	Article No. (UL)
220 Wp	100052	100059
225 Wp	100053	100060
230 Wp	100054	100061
235 Wp	100055	100062
240 Wp	100056	100063
245 Wp	100057	100064
250 Wp	100058	100065
245 Wp	100093	100097
250 Wp	100094	100098

## MODULE DIMENSION DETAILS

Front view	Side view	Back view	Frame cross section
			