



# Datasheet

## Crystalline PV Module

### CHSM 6610P



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	199.9 Wp	204.6 Wp	209.2 Wp	213.9 Wp	218.5 Wp	223.2 Wp	227.9 Wp
Standard sorted output	$(P_{mpp} + 2.5 \text{ Wp}) > P_{flash} \geq (P_{mpp} - 2.5 \text{ Wp})$						
Measurement Tolerance	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%	+/- 3%
Warranted power output STC ( $P_{mpp \text{ min}}$ )	217.5 Wp	222.5 Wp	227.5 Wp	232.5 Wp	237.5 Wp	242.5 Wp	247.5 Wp
Rated voltage ( $V_{mpp}$ ) at STC	28.02 V	28.40 V	28.78 V	29.16 V	29.54 V	29.92 V	30.30 V
Rated current ( $I_{mpp}$ ) at STC	7.86 A	7.92 A	7.99 A	8.06 A	8.13 A	8.20 A	8.27 A
Open circuit voltage ( $V_{oc}$ ) at STC	36.92 V	37.14 V	37.35 V	37.56 V	37.77 V	37.98 V	38.19 V
Short circuit current ( $I_{sc}$ ) at STC	8.46 A	8.49 A	8.53 A	8.56 A	8.59 A	8.62 A	8.65 A
Module Efficiency	13.4%	13.7%	14.0%	14.3%	14.6%	14.9%	15.2%
Rated output ( $P_{mpp}$ ) at NOCT	165.0 Wp	168.8 Wp	172.5 Wp	176.3 Wp	180.0 Wp	183.8 Wp	187.5 Wp
Rated voltage ( $V_{mpp}$ ) at NOCT	25.36 V	25.74 V	26.08 V	26.42 V	26.75 V	27.06 V	27.37 V
Rated current ( $I_{mpp}$ ) at NOCT	6.51 A	6.56 A	6.61 A	6.67 A	6.73 A	6.79 A	6.85 A
Open circuit voltage ( $V_{oc}$ ) at NOCT	33.73 V	33.93 V	34.12 V	34.31 V	34.50 V	34.70 V	34.89 V
Short circuit current ( $I_{sc}$ ) at NOCT	7.12 A	7.15 A	7.18 A	7.21 A	7.23 A	7.26 A	7.28 A

Temperature coefficient $\alpha$ ( $P_{mpp}$ )	- 0.469%/K
Temperature coefficient $\beta$ ( $I_{sc}$ )	+ 0.052%/K
Temperature coefficient $\delta$ ( $I_{mpp}$ )	- 0.008%/K
Temperature coefficient $\epsilon$ ( $V_{mpp}$ )	- 0.463 %/K
Temperature coefficient $\times$ ( $V_{oc}$ )	- 0.344%/K
Normal Operating Cell Temperature (NOCT)	43 °C

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



## QUALIFICATION AND WARRANTIES

Product standard	IEC 61215, 61730 / UL 1703
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	polycrystalline
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 inch
Frame technology	Aluminum, silver anodized
Module compound	Glass / EVA / Backsheet (white)
Weight (module only)	20 kg / 44.0 lbs
Front glass thickness	3.2 mm / 0.13 inch
Junction Box IP rating	IP 65
Cable length / diameter (UL)	1000 mm / 39.37 inch / 12 AWG
Cable length / diameter (IEC)	1000 mm / 39.37 inch / 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	200016	200023
225 Wp	200017	200024
230 Wp	200018	200025
235 Wp	200019	200026
240 Wp	200020	200027
245 Wp	200021	200028
250 Wp	200022	200029

## MODULE DIMENSION DETAILS

Front View	Side View	Back View	Frame Cross Section
			