



Smart Module

Datasheet

Crystalline PV Module

CHSM6610P Series

Astronergy was founded in 2006 and is the solar subsidiary of the Chint Group. As a leading integrated solar manufacturer, Astronergy specializes in research, development & production of high performance monocrystalline and polycrystalline cells & modules, as well as amorphous/microcrystalline thin film PV modules. With support from its parent company Chint, Astronergy has become a global total solutions provider for photovoltaic systems.

Astronergy has now adopted the Tigo Energy Optimizer™ Solution into solar panels to increase energy production and bring new levels of intelligence, active manageability and enhanced safety for Astronergy modules

Key Features:

- **Maximize energy deliver**
Harvest all energy from each module
- **Maximize system uptime**
Predict and prevent system problems for 25 years
- **Enhance system safety**
De-activate system at PV module level
- **Streamline maintenance**
Module-level intelligence monitoring
- **Fire-arc protection**
Optimize current mismatch for preventing hot spot



240 245 250 255 260

ELECTRICAL SPECIFICATIONS

	240	245	250	255	260
STC rated output (P _{mpp})*	240 Wp	245 Wp	250 Wp	255 Wp	260 Wp
PTC rated output (P _{mpp})**	218.5 Wp	223.2 Wp	227.9 Wp	232.5 Wp	237.2 Wp
Standard sorted output	-0/+5 Wp				
Warranted power output STC (P _{mpp min})	240 Wp	245 Wp	250 Wp	255 Wp	260 Wp
Rated voltage (V _{mpp}) at STC	29.54 V	29.92 V	30.30 V	30.68 V	31.05 V
Rated current (I _{mpp}) at STC	8.13 A	8.20 A	8.27 A	8.33 A	8.39 A
Open circuit voltage (V _{oc}) at STC	37.77 V	37.98 V	38.19 V	38.40 V	38.53 V
Short circuit current (I _{sc}) at STC	8.59 A	8.62 A	8.65 A	8.69 A	8.72 A
Module efficiency	14.6%	14.9%	15.2%	15.5%	15.8%
Rated output (P _{mpp}) at NOCT	180.0 Wp	183.8 Wp	187.5 Wp	191.25 Wp	195 Wp
Rated voltage (V _{mpp}) at NOCT	26.75 V	27.06 V	27.37 V	27.73 V	28.08 V
Rated current (I _{mpp}) at NOCT	6.73 A	6.79 A	6.85 A	6.90 A	6.95 A
Open circuit voltage (V _{co}) at NOCT	34.50 V	34.70 V	34.89 V	35.08 V	35.20 V
Short circuit current (I _{cc}) at NOCT	7.23 A	7.26 A	7.28 A	7.32 A	7.34 A



Temperature coefficient (P_{mpp})	- 0.469%/K
Temperature coefficient (I_{sc})	+0.052%/K
Temperature coefficient (I_{mpp})	- 0.008%/K
Temperature coefficient (V_{mpp})	- 0.463%/K
Temperature coefficient (V_{oc})	- 0.344%/K
Normal operating cell temperature (NOCT)	43±2°C

Maximum system voltage SCII	1000 V _{DC}
Maximum system voltage NEC	600 V _{DC} / 1000 V _{DC}
Number of diodes	6
Maximum series fuse rating	15 A

* Measurement tolerance +/- 3%
 ** Estimated

MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1652 x 994 x 40 mm 65.04 x 39.13 x 1.57 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 67
Cable length / diameter (UL)	1000 mm / 39.37 in / 12 AWG
Cable length / diameter (IEC)	1000 mm / 39.37 in / 4 mm ²
Maximum load capacity	5400 Pa
Fire class	C
Connector type	MC 4

MISCELLANEOUS

Packing unit	25 modules
Weight of packing unit	530 kg / 1166 lbs

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
MunichRe Warranty	25 years

CELL TECHNOLOGY

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

ARTICLE NUMBER (per panel)-Smart CHSM6610P Series

Model	Article No. (IEC)	Article No. (UL)
CHSM6610P-240	200260	200265
CHSM6610P-245	200261	200266
CHSM6610P-250	200262	200267
CHSM6610P-255	200263	200268
CHSM6610P-260	200264	200269

DETAILS DES DIMENSIONS DU MODULE

