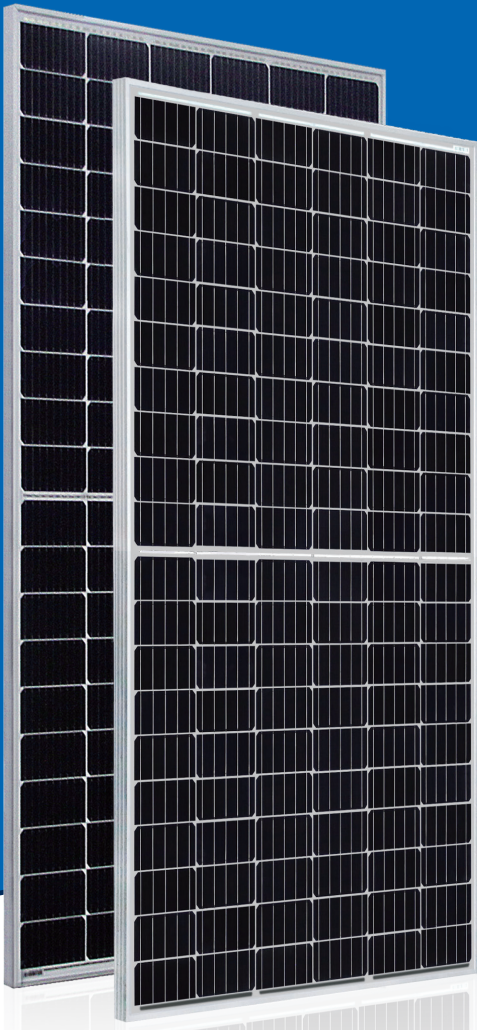


AstroTwins™

Enjoy the Energy of the Universe

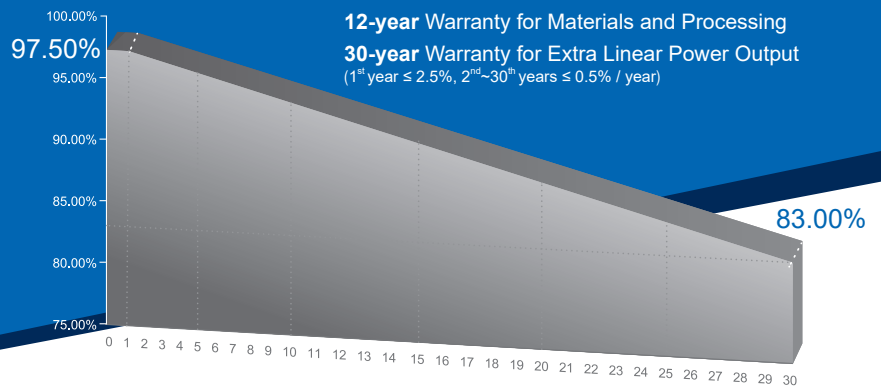


315W~335W

P-type Monocrystalline PV Module

CHSM60M(DG)/F-BH Series (156.75)

CHSM60M(DG)/F-BH is bifacial module with white glazed glass



Multi-Busbar Module could be the option

COMPREHENSIVE CERTIFICATES



First solar company which passed the TUV Nord IEC/TS 62941 certification audit.

KEY FEATURES

- OUTPUT POSITIVE TOLERANCE**
 Guaranteed 0~+5W positive tolerance ensures power output reliability.
- ENHANCED FIRE PERFORMANCE**
 Fire Class A certified according to IEC standard.
- EXCELLENT WEATHER RESISTANCE**
 Reduces the cell micro-crack and extended product warranty.
- BIFACIAL POWER**
 The backside makes use of the reflected and scattered light from the surroundings, the modules can yield up to 5%~30% power more, depending on the albedo.
- REDUCE INTERNAL MISMATCH LOSS**
 Reduces mismatch loss and improves output.
- APPLICABLE FOR MULTI DIFFERENT ENVIRONMENTS**
 The wide range of applications, such as BIPV, vertical installation, snow area, high humidity area and strong sandstorm area, etc.
- SNAIL TRAIL RESISTANCE**
 Reduces the probability of snail trails with zero water vapor transmittance.

For Global Market



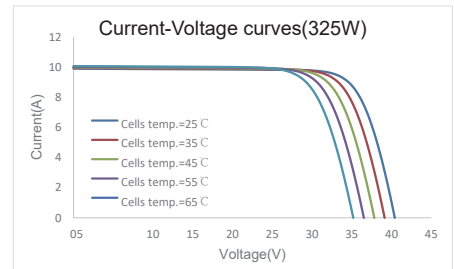
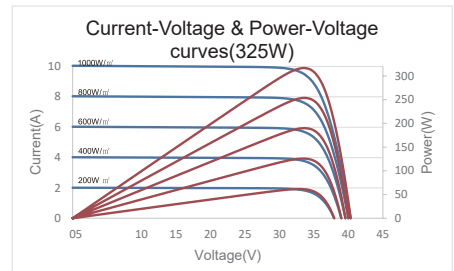
ASTRONERGY
A CHNT COMPANY

ELECTRICAL SPECIFICATIONS

Power rating (front)	315 Wp		320 Wp		325 Wp		330 Wp		335 Wp	
Testing Condition	Front	Back	Front	Back	Front	Back	Front	Back	Front	Back
STC rated output (P_{mpp}/Wp)*	315	222	320	225	325	229	330	232	335	236
Rated voltage (V_{mpp}/V) at STC	33.48	33.65	33.73	33.90	33.97	34.14	34.21	34.38	34.44	34.62
Rated current (I_{mpp}/A) at STC	9.41	6.59	9.49	6.65	9.57	6.70	9.65	6.76	9.73	6.82
Open circuit voltage (V_{oc}/V) at STC	40.04	38.86	40.23	39.04	40.42	39.23	40.61	39.41	40.80	39.60
Short circuit current (I_{sc}/A) at STC	9.86	6.91	9.93	6.96	10.00	7.01	10.07	7.06	10.14	7.11
Module efficiency	18.6%	13.1%	18.9%	13.3%	19.2%	13.5%	19.5%	13.7%	19.8%	13.9%
Temperature coefficient (P_{mpp})					- 0.3438%/°C					
Temperature coefficient (I_{sc})					+0.0353%/°C					
Temperature coefficient (V_{oc})					- 0.2722%/°C					
Nominal module operating temperature (NMOT)					44±2°C					
Maximum system voltage (IEC/UL)					1500V _{DC}					
Number of diodes					3					
Junction box IP rating					IP 68					
Maximum series fuse rating					20 A					

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM=1.5

CURVE



ELECTRICAL SPECIFICATIONS (Integrated power)

P_{mpp} gain	P_{mpp}	V_{mpp}	I_{mpp}	V_{oc}	I_{sc}
5%	341 Wp	33.97 V	10.05 A	40.23 V	10.50 A
10%	358 Wp	33.97 V	10.52 A	40.23 V	11.00 A
15%	374 Wp	33.87 V	11.03 A	40.33 V	11.50 A
20%	390 Wp	33.87 V	11.51 A	40.33 V	12.00 A
25%	406 Wp	33.87 V	11.99 A	40.33 V	12.50 A

Electrical characteristics with different rear power gain (reference to 325W)

MECHANICAL SPECIFICATIONS

Outer dimensions (L x W x H)	1696 x 998 x 30 mm 66.77 x 39.29 x 1.18 in
Module composition	Glass / POE / Glass
Glass thickness	2.5 mm / 0.098 in
Cable length (IEC/UL)	Portrait: 350 mm (13.78 in) Landscape: 1100 mm (43.31 in)
Cable diameter (IEC/UL)	4 mm ² / 12 AWG
① Maximum mechanical test load	5400 Pa (front) / 2400 Pa (back)
Fire performance (IEC/UL)	Class A (IEC) or Type 3 (UL)
Connector type (IEC/UL)	MC4 compatible

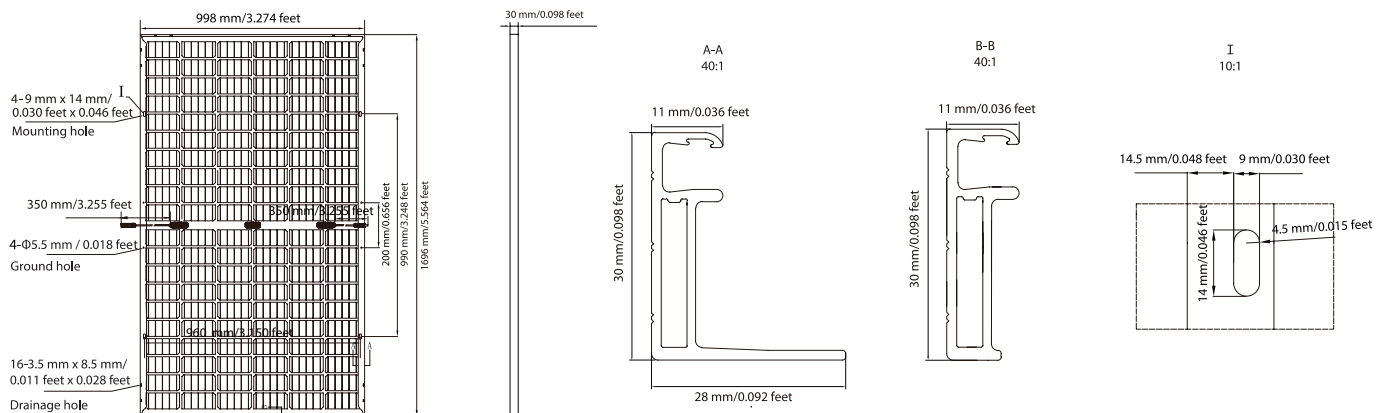
① Refer to Astronomy crystalline installation manual or contact technical department.
Maximum Mechanical Test Load=1.5×Maximum Mechanical Design Load.

PACKING SPECIFICATIONS

① Weight (module only)	25.3 kg / 55.78 lbs
② Packing unit	36 pcs / box
Weight of packing unit (for 40'HQ container)	953 kg / 2101 lbs
Number of modules per 40'HQ container	936 pcs

① Tolerance +/- 1.0kg
② Subject to sales contract

MODULE DIMENSION DETAILS



© Chint Solar (Zhejiang) Co., Ltd. Reserves the right of final interpretation. please contact our company to use the latest version for contract.