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# **EnergyPal**

## **Solar Panel Guide Specification Data Sheet**

**Guangdong Haotech New Energy Technology Co.,  
Ltd.**

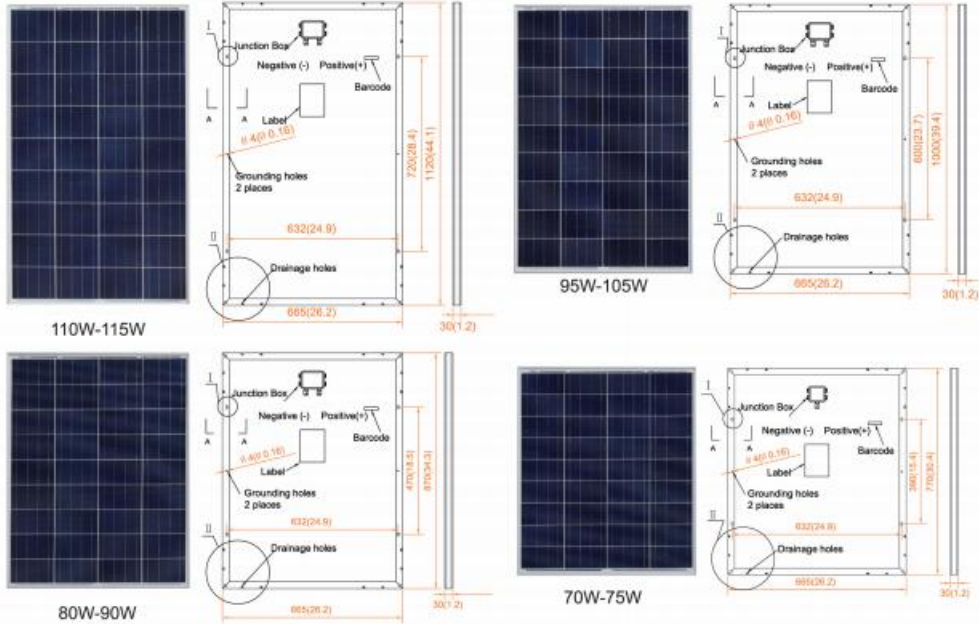
**HT-P-70-115**

**110P-12**

Also available on the web at  
[EnergyPal.com/guangdong-haotech-new-energy-technology-co-ltd-solar-panels/110p-12](http://EnergyPal.com/guangdong-haotech-new-energy-technology-co-ltd-solar-panels/110p-12)

# 70~115 Watt

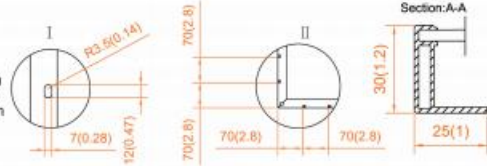
BLACK FRAME/BLACK BACK-SHEET PRODUCTS ARE AVAILABLE UPON REQUEST



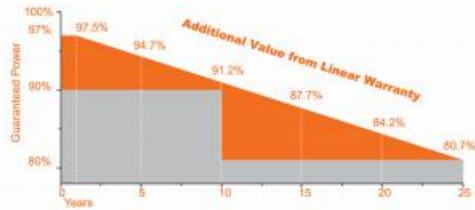
## MANAGEMENT SYSTEM

- ISO 9001: Quality management system
- ISO 14001: Standard for environmental management system
- OHSAS 18001: International standard for occupational health and safety assessment system

## PRODUCT CERTIFICATES



\*All Dimensions in mm(Inch)



## WARRANTY

- 5** Years Material & Craft Quality assurance
- 10** Years 50% Output Power guarantee
- 25** Years 80% Output Power guarantee

### Electrical Characteristics (STC)

Module Type	CST70P-12	CST75P-12	CST80P-12	CST85P-12	CST90P-12
Maximum Power- Pmax(W)	70	75	80	85	90
Open Circuit Voltage - Voc(V)	22.2	22.4	22.2	22.4	22.6
Short-Circuit Current - Isc(A)	4.15	4.40	4.75	4.99	5.23
Voltage at Pmax - Vmp(V)	18.2	18.4	18.2	18.4	18.6
Current at Pmax - Imp(A)	3.85	4.08	4.40	4.62	4.84
Module Efficiency - $\eta$ (%)	13.67	14.65	13.83	14.69	15.56

Module Type	CST95P-12	CST100P-12	CST105P-12	CST110P-12	CST115P-12
Maximum Power- Pmax(W)	95	100	105	110	115
Open Circuit Voltage - Voc(V)	22.2	22.4	22.6	22.2	22.4
Short-Circuit Current - Isc(A)	5.64	5.87	6.10	6.53	6.75
Voltage at Pmax - Vmp(V)	18.2	18.4	18.6	18.2	18.4
Current at Pmax - Imp(A)	5.22	5.43	5.85	6.04	6.25
Module Efficiency - $\eta$ (%)	14.29	15.04	15.79	14.77	15.44

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25 °C, Air Mass 1.5  
Power measurement tolerance 0+3%

### Mechanical Specifications

Module Type	CST110P/115P-12	CST95P-105P-12	CST80P-90P-12	CST70P/75P-12
External Dimensions	1120*865*30mm	1000*865*30 mm	870*865*30mm	770*865*30 mm
Weight	8.4kg	7.5 kg	6.5kg	5.7 kg
Poly Solar Cells	117*156mm (36pcs)	104*156mm (36pcs)	90*156mm (36pcs)	78*156mm (36pcs)
Front Glass	3.2 mm tempered, low iron	3.2 mm tempered, low iron	3.2 mm tempered, low iron	3.2 mm tempered, low iron
Frame	Anodized aluminum alloy	Anodized aluminum alloy	Anodized aluminum alloy	Anodized aluminum alloy
Junction Box	IP67	IP67	IP67	IP67
Mechanical Load	5400 Pa	5400 Pa	5400 Pa	5400 Pa

### Packing Configuration

Module Type	CST110P/115P-12	CST95P-105P-12	CST80P-90P-12	CST70P/75P-12
Carton Dimensions	1135*680*175mm	1015*680*175mm	885*680*175 mm	785*680*175 mm
Pallet Dimensions	1400*1150*2170mm	1400*1100*2160mm	1800*1100*2170mm	1600*1100*2170mm
Pallet Weight	1074kg	998kg	1264kg	1115kg
Pieces/Pallet	120(5pcs/carton)	120(5pcs/carton)	180(5pcs/carton)	190(5pcs/carton)

### I-V Curve (CST100P-12)

