



**SINOTEC**  
**S**  **LAR**

**MADE IN US**

# ABOUT US

Since our founding in 2015, Sinotec Solar has risen to prominence as Southern California's leading renewable energy equipment manufacturer.

We are not just another name in the bustling solar industry; we represent the gold standard in American craftsmanship and sustainable energy solutions.

Conveniently located in the thriving City of Industry, California, Sinotec Solar is a bastion of innovation and quality, specializing in the production of high-caliber solar modules that are proudly manufactured in the United States.

**560,000**

Two manufacturer plants that have a total area of 560,000 square feet

**1.5GW**

The total production capacity is 1.5GW (2023)

**150**

Covering 150 acres





- + **American Excellence:** In addition to being made in the United States, Sinotec Solar's products carry the trusted seal of both Intertek's ETL and UL certifications, affirming our commitment to quality and safety.
- + **Versatile Energy Solutions:** Sinotec Solar offers a comprehensive range of panels with capacities from 335W to 595W, available in both Mono-Facial and Bi-Facial designs to suit various energy needs.
- + **Future-Ready Manufacturing:** Our state-of-the-art production line is designed for adaptability, seamlessly integrating with both current and emerging technologies such as PERC, TopCon, and HJT.
- + **Industry-Leading Warranty:** Invest with confidence—every Sinotec Solar product is backed by a robust 25-year linear performance and product warranty.



# IN CA



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# MONO MODULE

STS-410P-54BB  
108 PCS HALF-CUT BLACK  
400W – 415W



### Better Temperature Coefficient

Excellent temperature coefficient gives higher yield in the long term



### Low-light Performance

Outstanding performance in weak-light conditions



### PID Free

Excellent PID resistance



### Positive Tolerance

Positive tight power tolerance of + 5W



### Quality Assurance

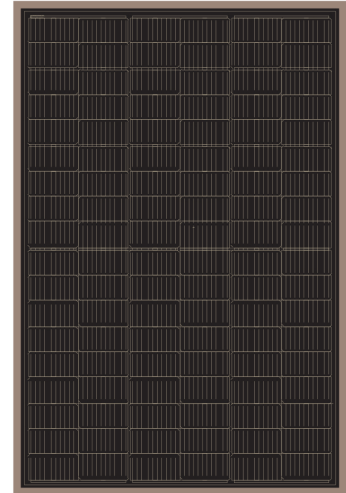
Double stage 100% EL inspection warranting defect-free products, with 8 high tech cameras to zoom in for a closer examination



### Durability And Weather Resistance

- Severe salt mist, ammonia & blown sand resistance for seaside, farm and desert environments.
- Certified for high snow (5400 pa) and wind (2400 pa) loads

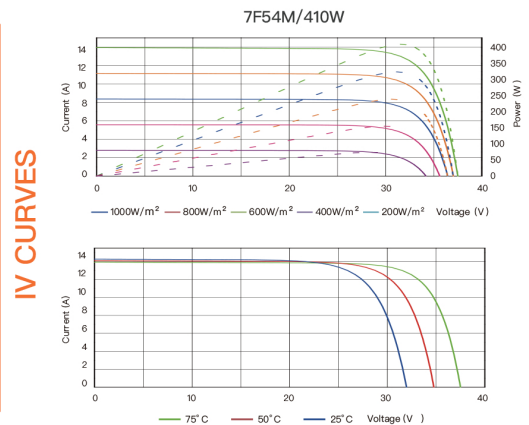
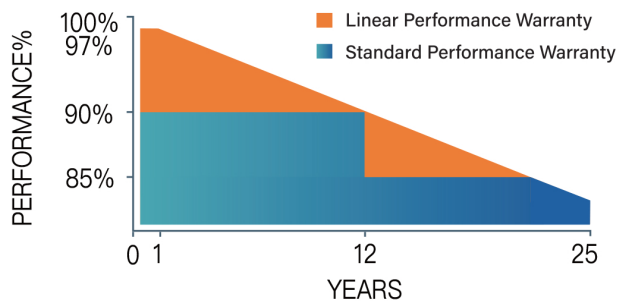
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25 years Product Warranty  
25 years Linear Warranty  
25 years Workmanship Warranty



## + ELECTRICAL CHARACTERISTICS AT STC

Type	STS-400P-54BB	STS-405P-54BB	STS-410P-54BB	STS-415P-54BB
Maximum Power (Pmax)	400W	405W	410W	415W
Open Circuit Voltage (Voc)	37.2V	37.4V	37.6V	37.8V
Short Circuit Current (Isc)	13.70A	13.76A	13.82A	13.88A
Voltage at Maximum Power (Vmp)	31.0V	31.2V	31.4V	31.6V
Current at Maximum Power (Imp)	12.91A	12.99A	13.06A	13.14A
Module Efficiency(%)	20.49	20.74	21.00	21.25
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1000V DC/1500V DC			
Fire Resistance Rating	Type 1 (in accordance with UL 1703)/Class C(IEC61730)			
Maximum Series Fuse Rating	25A			
STC: Irradiance 1000W/m2, Cell temperature 25°C, AM1 .5; Tolerance of Pmax: ±3%; Measurement Tolerance: ±3%				

## + ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power (Pmax)	300W	304W	308W	312W
Open Circuit Voltage (Voc)	34.2V	34.4V	34.6V	34.8V
Short Circuit Current (Isc)	11.10A	11.15A	11.20A	11.25A
Voltage at Maximum Power (Vmp)	28.2V	28.4V	28.6V	28.8V
Current at Maximum Power (Imp)	10.64A	10.71A	10.77A	10.84A
NOCT: Irradiance 800W/m2, Ambient temperature 20°C, Wind Speed 1 mis				

## + MECHANICAL DATA

Cell type	Monocrystalline PERC 182*91mm
Number of cells	108 (6x18)
Module dimensions	1722x1134x30mm (67.80x44.65x1.18inches)
Weight	21.5kg (47.4lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm2 (0.006inches2), Portrait: 300mm (11.81 inches)
Landscape	1200mm (47.24inches)
Connector	MC4 or MC4 compatible

## + TEMPERATURE CHARACTERISTICS

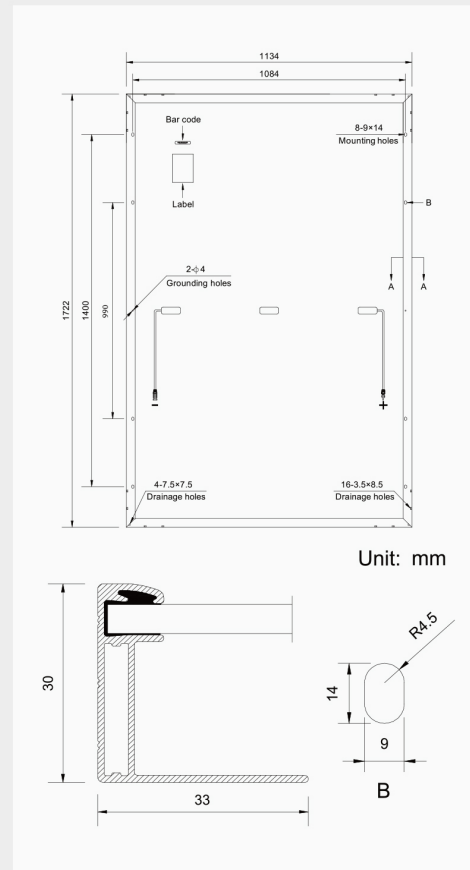
Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of Pmax	-0.36%/°C
Temperature Coefficients of Voc	-0.28%/°C
Temperature Coefficients of Isc	0.05%/°C

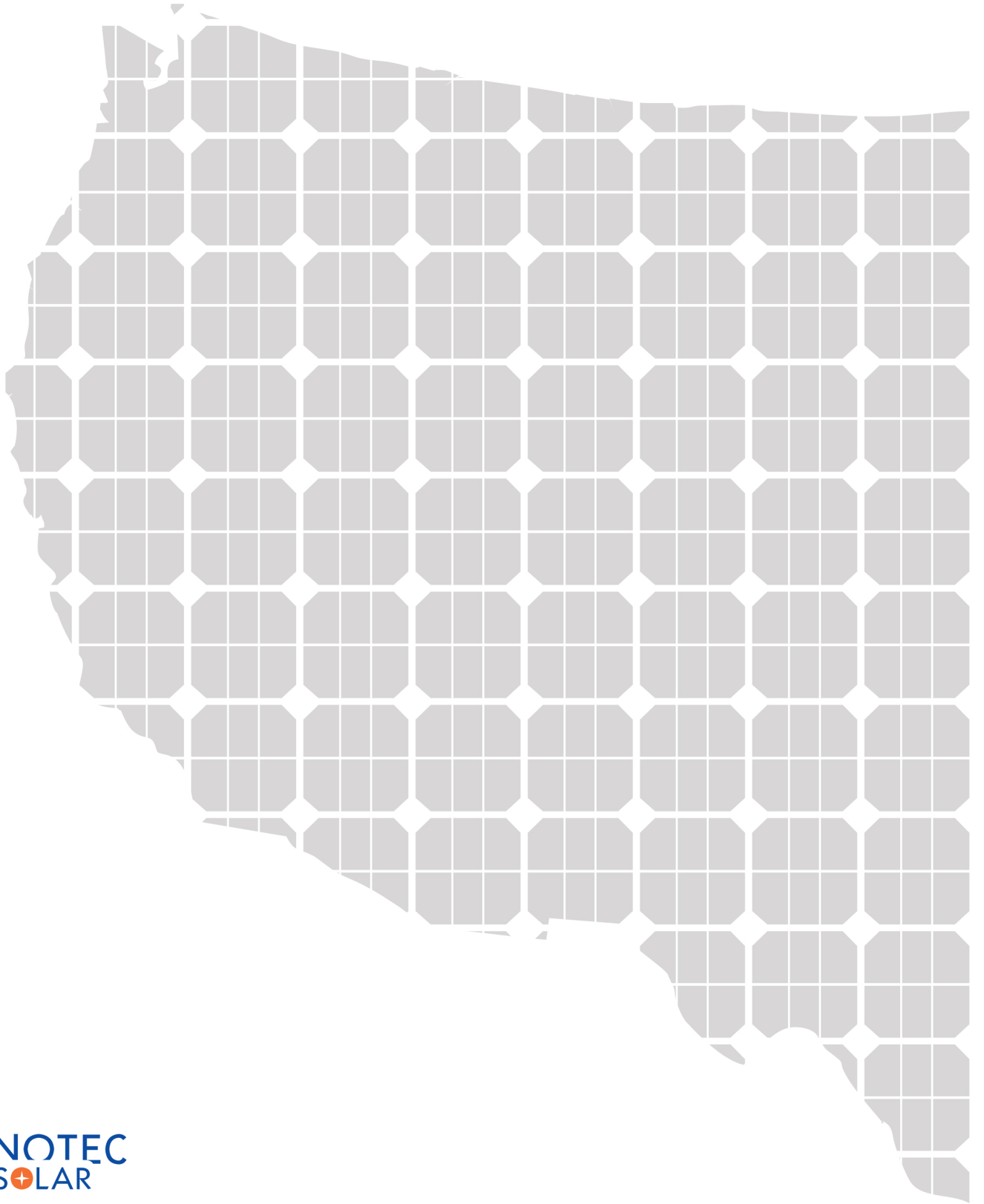
## + PACKAGING

Standard packaging	31 pcs/pallet
Module quantity per 53' container	1054 pcs
Module quantity per 40' container	806 pcs

Specifications in this datasheet are subject to change without prior notice.

## + ENGINEERING DRAWINGS





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[www.sinotecsolar.com](http://www.sinotecsolar.com)