

The image features a large, modern building with a complex, high-ceilinged interior. The ceiling is a prominent feature, composed of a dense grid of white, perforated metal panels supported by a network of steel beams. The building's architecture includes multiple levels with curved, white balconies and glass railings. A large, curved glass wall on the left side of the building allows natural light to flood the interior. In the foreground, there are several potted plants and a red reception desk. The Suntech logo is visible on a balcony and within a large, stylized circular graphic on the right side of the image.

**SUNTECH**

SOLAR MODULES





# THE POWER OF THE SUN THE BEST ALLY FOR THE FUTURE

CHOOSING SOLAR ENERGY MEANS CHOOSING SUSTAINABILITY FOR ALL.  
CHOOSING SUNTECH MEANS CHOOSING THE SPECIALISTS OF THE PHOTOVOLTAIC SECTOR.



In over 19 years, **SUNTECH** has become **one of the world's largest producer of monocrystalline and polycrystalline photovoltaic modules**. A record achieved starting from a simple assumption: deep knowledge of the product combined

with constant innovation. **SUNTECH** team of **350 photovoltaic specialists and researchers** develops and tests high-performance solutions for a future more sustainable for all. **In 2020, SUNTECH photovoltaic modules will light the lives**

**of over 30 million people**. A number that brings us closer to the ultimate goal: to bring solar energy to all homes in the world.











# PRODUCTION: SUNTECH IN NUMBERS IN THE WORLD

**MORE THAN 20 GW**

TOTAL POWER PRODUCED  
UNTIL JUNE 2019

3,4 GW: power of SUNTECH  
photovoltaic solar modules sent all  
over the world in 2018.

**400**

**MORE THAN**

THE NUMBER OF PATENTS OWNED  
BY SUNTECH UNTIL TODAY

Of these, 85 patents for inventions and 389  
patents for photovoltaic module models.

**80**

COUNTRIES IN THE WORLD  
WHERE SUNTECH PRODUCTS  
ARE DISTRIBUTED

Thanks to a network of widespread  
distributors, SUNTECH products can  
reach every corner of the world from the  
Gobi desert to the most remote islands.



# GLOSSARY

## HOW TO READ THE SUNTECH CATALOGUE

Below is a brief glossary to correctly understand the indications given in the catalogue.

**MONOCRYSTALLINE** Solar panels with higher efficiency, ideal for small spaces.

**POLYCRYSTALLINE** Solar panels that usually reach lower efficiencies than monocrystalline ones, but can be purchased at lower prices.

**MONOPERC TECHNOLOGY** It allows you to "imprison" more light and achieve greater efficiencies.

**FULL CELL / HALF CELL**  
Full cell: traditional cell with the size of 6 "/  
Half cell: thanks to the cells half cut, there is a reduction in the loss of power, obtaining a greater energy yield.

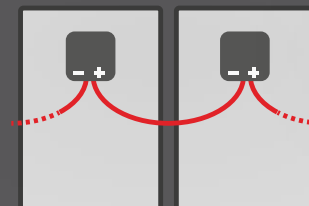
**PID PHENOMENON** Phenomenon linked to a negative polarization that affects the production capacity of the module.

**(LOSSES FROM) MISMATCH** In systems with modules connected in series, the yield of the modules of the entire series is limited to the behavior of the one with the lowest performance.

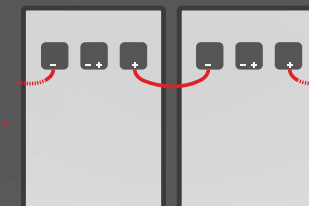
**REVAMPING** Replacement of PV modules in systems - subject to incentives in many countries (like in Italy with Conto Energia).

## THE JUNCTION BOX: FROM MODULE TO MODULE

### TRADITIONAL



### DISTRIBUTED



New Junction Box with distributed design to reduce power losses.



SMART DESIGN JUNCTION BOX



GLASS / GLASS



BIFACIAL MODULE



MODULE HIGHER THAN STANDARDS



FRAMELESS DESIGN



# SUNTECH QUALITY

## DESIGN, TEST, CHECK: THE VIRTUOUS CYCLE OF SUNTECH RESEARCH CENTERS.

The **CNAS certified SUNTECH national laboratory** (*China National Accreditation Service to Conformity Assessment*) is equipped with the most sophisticated instruments to test photovoltaic panels, simulating even the most adverse weather conditions.

All **SUNTECH** modules are subject to **rigorous tests to respond to precise internal protocols and the highest international quality standards in relation to corrosion resistance from salt** (IEC61701), **sand** (DIN EN 60068-2-68) and **ammonia** (IEC62716).

The result is increasingly high-performance PV panels with a **25-year guarantee on linear performance** and a **12-year warranty on the product**.



### HAILSTORM RESISTANCE TEST

The modules are impacted at different points and with hail balls of different sizes.



### DYNAMIC LOAD TESTS ON MECHANICAL STRESS

Simulates the combined action of snow and wind to determine the total load capacity of the module.



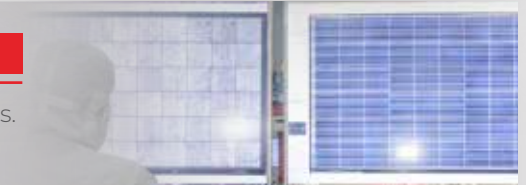
### PID TEST

Essential to prevent the PID (Potential induced Degradation) effect that may appear some years after installation.



### ELECTROLUMINESCENCE TEST

Ensures the absence of micro-cracks inside the modules.





## STANDARD SERIES

**STP380S - 24/VFW**  
**STP375S - 24/VFW**  
**STP370S - 24/VFW**



SUITABLE FOR  
REVAMPING



### NEW DESIGN WITH 5 BUSBARS

The unique cell design leads to reduction in electrodes resistance, shading area and raise in conversion efficiency. Residual stress distribution can be more even, reducing the micro-cracks risks.

Up to  
WATT  
**380**

**MONOCRYSTALLINE  
SOLAR MODULE**  
72 STANDARD CELLS

## TECHNICAL DATA

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	72 (6 x 12)
■ <b>DIMENSION</b>	1960 x 992 x 40 mm
■ <b>WEIGHT</b>	22.1 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



IDEAL FOR  
COMMERCIAL PLANTS



## 72 MONOCRYSTALLINE CELLS

### STANDARD SERIES

STP380S - 24/VFW

STP375S - 24/VFW

STP370S - 24/VFW

**MONOCRYSTALLINE  
MODULE IDEAL  
FOR COMMERCIAL  
INSTALLATIONS IN WHICH  
YOU NEED EXCELLENT  
POWER IN REDUCED  
SPACES.**

### WARRANTY

**12 years** on the product  
**25 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

ISO 9001:2008 ISO 14001:2004 ISO 17025:2005

IEC 61215 IEC 61730 IEC 61701 IEC 62716

DIN EN 60068-2-68 CE Declaration of Conformity

**19,5%**

#### HIGH MODULE CONVERSION EFFICIENCY

Module efficiency from 19% to 19,5% achieved through advanced cell technology and manufacturing capabilities.

**2%**

#### SUNTECH CURRENT SORTING PROCESS

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage.

**0/+5W**

#### POSITIVE TOLERANCE

Positive tolerance of up to 5W delivers higher output reliability.

**3800 PA  
5400 PA**

#### EXTENDED WIND AND SNOW LOAD TESTS

Module certified to withstand extreme wind (3800 Pa) and snow loads (5400 Pa).

#### HIGH PID RESISTANT

Advanced cell technology and qualified materials lead to high resistance to PID.

#### FULL CELL

#### WITHSTANDING HARSH ENVIRONMENT

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.

**STANDARD  
SERIES**

**STP320S - 20/WFW**  
**STP315S - 20/WFW**  
**STP310S - 20/WFW**



SUITABLE FOR  
REVAMPING



**ADVANCED HYPRO  
TECHNOLOGY**

The Hypro cell uses back surface passivation and local BSF technology, which can improve cell efficiency by a large margin.

Up to  
WATT  
**320**

**MONOCRYSTALLINE  
SOLAR MODULE**  
60 STANDARD CELLS

**TECHNICAL DATA**

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	60 (6 x 10)
■ <b>DIMENSION</b>	1650 x 992 x 35 mm
■ <b>WEIGHT</b>	18.3 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



**IDEAL FOR  
COMMERCIAL PLANTS**



## 60 MONOCRYSTALLINE CELLS

**STANDARD SERIES**  
**STP320S - 20/WFW**  
**STP315S - 20/WFW**  
**STP310S - 20/WFW**

MONOCRYSTALLINE  
 MODULE FROM  
 THE EXCELLENT  
 QUALITY / PRICE RATIO  
 IDEAL FOR STANDARD  
 INSTALLATIONS.

### WARRANTY

**12 years** on the product  
**25 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to  
 obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **Fire Class 1** **CE Declaration of Conformity**

**19,6%**

#### HIGH MODULE CONVERSION EFFICIENCY

Module efficiency from 18,9%  
 to 19,6% achieved through  
 advanced cell technology and  
 manufacturing capabilities.

**2%**

#### SUNTECH CURRENT SORTING PROCESS

System output maximized  
 by reducing mismatch  
 losses up to 2% with  
 modules sorted & packaged  
 by amperage.

**0/+5W**

#### POSITIVE TOLERANCE

Positive tolerance of up  
 to 5W delivers higher  
 output reliability.

**3800 PA**  
**5400 PA**

#### EXTENDED WIND AND SNOW LOAD TESTS

Module certified to  
 withstand extreme  
 wind (3800 Pa) and  
 snow loads (5400 Pa).

#### HIGH PID RESISTANT

Advanced cell technology  
 and qualified materials  
 lead to high resistance to  
 PID.

#### FULL CELL


#### WITHSTANDING HARSH ENVIRONMENT

Reliable quality leads to a  
 better sustainability even  
 in harsh environment like  
 desert, farm and coastline.



## STANDARD SERIES

**STP385S - 24/VFH**  
**STP380S - 24/VFH**  
**STP375S - 24/VFH**

 **MODULE HIGHER  
THAN STANDARDS**



### SPECIAL CELL DESIGN

The unique cell design leads to reduced electrodes resistance and lower current, thus enables a higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear and increase reflection within module glass.

Up to  
**WATT**  
**385**

**MONOCRYSTALLINE  
SOLAR MODULE**  
144 HALF CUT CELLS

## TECHNICAL DATA

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	144 (6 x 24)
■ <b>DIMENSION</b>	1988 x 992 x 40 mm
■ <b>WEIGHT</b>	22.3 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



**IDEAL FOR  
COMMERCIAL PLANTS**



## 144 HALF-CUT MONOCRYSTALLINE CELLS

**STANDARD SERIES**  
**STP385S - 24/VFH**  
**STP380S - 24/VFH**  
**STP375S - 24/VFH**

**MONOCRYSTALLINE  
 MODULE WITH 144 CELLS  
 AVAILABLE. IDEAL FOR  
 PLANTS WHERE YOU  
 NEED GREAT POWER IN  
 REDUCED SPACES.**

### WARRANTY

**12 years** on the product  
**25 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **CE Declaration of Conformity**

# 19,5%

#### HIGH MODULE CONVERSION EFFICIENCY

Module efficiency from 19% to 19,5% achieved through advanced cell technology and manufacturing capabilities.

#### BETTER TEMPERATURE PERFORMANCE

Due to the cell design we have lower inner resistance, which results in a higher power output of the module, especially in warm/hot environment.

#### EXCELLENT WEAK LIGHT PERFORMANCE

More power output in weak light condition, such as haze, cloudy and morning hours.

# 3800 PA 5400 PA

#### EXTENDED WIND AND SNOW LAOD TESTS

Module certified to withstand extreme wind (3800 Pa) and snow loads (5400 Pa).

#### HIGH PID RESISTANT

Advanced cell technology and qualified materials lead to high resistance to PID.

**HALF CUT**

#### WITHSTANDING HARSH ENVIRONMENT

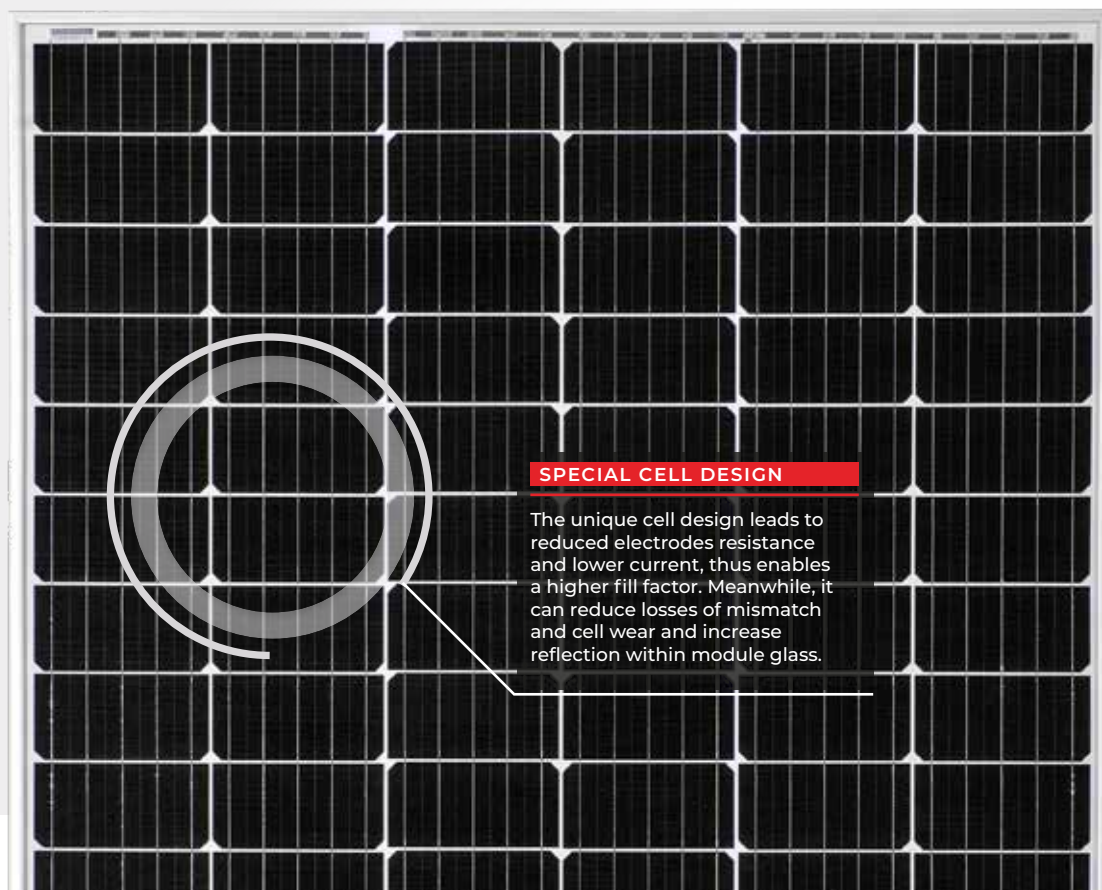
Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.

**STANDARD  
SERIES**

**STP320S - 20/WFH**  
**STP315S - 20/WFH**  
**STP310S - 20/WFH**



SUITABLE FOR  
REVAMPING



**SPECIAL CELL DESIGN**

The unique cell design leads to reduced electrodes resistance and lower current, thus enables a higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear and increase reflection within module glass.

Up to  
WATT  
**320**

**MONOCRYSTALLINE  
SOLAR MODULE**  
120 HALF CUT CELLS

**TECHNICAL DATA**

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	120 (6 x 20)
■ <b>DIMENSION</b>	1670 x 992 x 35 mm
■ <b>WEIGHT</b>	18.5 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



## 120 HALF-CUT MONOCRYSTALLINE CELLS

**STANDARD SERIES**  
**STP320S - 20/WFH**  
**STP315S - 20/WFH**  
**STP310S - 20/WFH**

MONOCRYSTALLINE  
 MODULE IDEAL FOR  
 RESIDENTIAL SYSTEMS,  
 WHERE IT IS NECESSARY  
 TO HAVE A MODULE WITH  
 STANDARD DIMENSIONS  
 BUT WITH HALF CUT  
 TECHNOLOGY.

### WARRANTY

**12 years** on the product  
**25 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to  
 obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **CE Declaration of Conformity**

# 19,3%

#### HIGH MODULE CONVERSION EFFICIENCY

Module efficiency from 18,7%  
 to 19,3% achieved through  
 advanced cell technology and  
 manufacturing capabilities.

#### BETTER TEMPERATURE PERFORMANCE

Due to the cell design  
 we have lower inner  
 resistance, which results  
 in a higher power  
 output of the module,  
 especially in warm/hot  
 environment.

#### EXCELLENT WEAK LIGHT PERFORMANCE

More power output in weak  
 light condition, such as  
 haze, cloudy and morning  
 hours.

# 3800 PA 5400 PA

#### EXTENDED WIND AND SNOW LAOD TESTS

Module certified to  
 withstand extreme  
 wind (3800 Pa) and  
 snow loads (5400 Pa).

#### HALF CUT

#### HIGH PID RESISTANT

Advanced cell technology  
 and qualified materials  
 lead to high resistance to  
 PID.

#### WITHSTANDING HARSH ENVIRONMENT

Reliable quality leads to a  
 better sustainability even  
 in harsh environment like  
 desert, farm and coastline.

## STANDARD SERIES

**STP310S - 20/WFK**  
**STP305S - 20/WFK**  
**STP300S - 20/WFK**



**MONOCRYSTALLINE  
SOLAR MODULE**  
60 DOUBLE GLASS CELLS  
*FRAMELESS*

### TECHNICAL DATA

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	60 (6 x 10)
■ <b>DIMENSION</b>	1658 x 992 x 6 mm (without J-box)
■ <b>WEIGHT</b>	23.5 kg
■ <b>GLASS</b> front/back	Heat strengthened 2.5 mm
■ <b>FRAMELESS</b>	
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



**IDEAL FOR SHELTERS OR  
VERANDAS**



## 60 MONOCRYSTALLINE DOUBLE GLASS CELLS

**STANDARD SERIES**  
**STP310S - 20/WFK**  
**STP305S - 20/WFK**  
**STP300S - 20/WFK**

**DOUBLE GLASS  
 MONOCRYSTALLINE  
 MODULE FRAMELESS,  
 IDEAL FOR DESIGN  
 INSTALLATIONS.**

### WARRANTY

**12 years** on the product  
**30 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **CE Declaration of Conformity**

**18,8%**

**HIGH MODULE  
 CONVERSION EFFICIENCY**

Module efficiency from 18,2% to 18,8% achieved through advanced cell technology and manufacturing capabilities.

**2%**

**SUNTECH CURRENT  
 SORTING PROCESS**

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage.

**0/+5W**

**POSITIVE  
 TOLERANCE**

Positive tolerance of up to 5W delivers higher output reliability.

**2400 PA  
 2400 PA**

**EXTENDED WIND  
 AND SNOW LOAD  
 TESTS**

Module certified to withstand extreme wind (2400 Pa) and snow loads (2400 Pa).

**HIGH PID RESISTANT**

Advanced cell technology and qualified materials lead to high resistance to PID.

**FULL CELL**

**WITHSTANDING  
 HARSH ENVIRONMENT**

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.



**STANDARD  
SERIES**

**STP310S - 20/WFK+**  
**STP305S - 20/WFK+**  
**STP300S - 20/WFK+**



**SMART DESIGN  
JUNCTION BOX**



**GLASS/GLASS**



**MONOCRYSTALLINE  
SOLAR MODULE**  
60 DOUBLE GLASS CELLS

**TECHNICAL DATA**

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	60 (6 x 10)
■ <b>DIMENSION</b>	1664 x 998 x 35 mm (without J-box)
■ <b>WEIGHT</b>	21.7 kg
■ <b>GLASS</b> front/back	Heat strengthened 2.0 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**

## 60 MONOCRYSTALLINE DOUBLE GLASS CELLS

### STANDARD SERIES

**STP310S - 20/WFK+**  
**STP305S - 20/WFK+**  
**STP300S - 20/WFK+**

**DOUBLE GLASS  
 MONOCRYSTALLINE  
 MODULE FRAMELESS,  
 IDEAL FOR DESIGN  
 INSTALLATIONS.**

### WARRANTY

**12 years** on the product  
**30 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **CE Declaration of Conformity**

**18,7%**

#### HIGH MODULE CONVERSION EFFICIENCY

Module efficiency from 18,1% to 18,7% achieved through advanced cell technology and manufacturing capabilities.

**2%**

#### SUNTECH CURRENT SORTING PROCESS

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage.

**0/+5W**

#### POSITIVE TOLERANCE

Positive tolerance of up to 5W delivers higher output reliability.

**3800 PA  
 5400 PA**

#### EXTENDED WIND AND SNOW LOAD TESTS

Module certified to withstand extreme wind (3800 Pa) and snow loads (5400 Pa).

#### HIGH PID RESISTANT

Advanced cell technology and qualified materials lead to high resistance to PID.

#### FULL CELL

#### WITHSTANDING HARSH ENVIRONMENT

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.

## **HIPERFORMA** SERIES

**STP310S - 60/PFD+**  
**STP305S - 60/PFD+**  
**STP300S - 60/PFD+**



**SMART DESIGN  
JUNCTION BOX**



**BIFACIAL  
MODULE**



### **HIGH EFFICIENCY BIFACIAL PERC CELL**

By using bifacial PERC cell and double glass technology, the front side power can reach up to 320W, increased by up to 25% from the backside power generation.

Up to  
**WATT**  
**310**

**MONOCRYSTALLINE  
SOLAR MODULE**  
60 BIFACIAL CELLS

## **TECHNICAL DATA**

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	60 (6 x 10)
■ <b>DIMENSION</b>	1664 x 992 x 35 mm
■ <b>WEIGHT</b>	21.7 kg
■ <b>GLASS</b>	Heat strengthened 2.0 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



## 60 CELLS HIGH EFFICIENCY BIFACIAL PERC CELL

### HIPERFORMA SERIES

**STP310S - 60/PFD+**  
**STP305S - 60/PFD+**  
**STP300S - 60/PFD+**

**BIFACIAL  
 MONOCRYSTALLINE  
 SOLAR MODULE, TO  
 EXPLOIT BETTER  
 THE SURFACE.  
 RECOMMENDED FOR  
 INSTALLATIONS ON FLAT  
 ROOFS WITH SLIGHTLY  
 INCLINED STRUCTURES.**

### WARRANTY

**12 years** on the product  
**30 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **CE Declaration of Conformity**

## 18,8%

**HIGH MODULE  
 CONVERSION  
 EFFICIENCY**

Module efficiency from 18,2% to 18,8% achieved through advanced cell technology and manufacturing capabilities.

## UP TO 25%

**HIGHER POWER  
 OUTPUT**

The power generation can increase up to 25%.

**EXCELLENT WEAK  
 LIGHT PERFORMANCE**

More power output in weak light condition, such as haze, cloudy and morning hours.

**DISTRIBUTED  
 JUNCTION BOX**

Special distributed Junction Box Design avoids shading on the back side.

**HIGH PID RESISTANT**

Advanced cell technology and qualified materials lead to high resistance to PID.

**FULL CELL**

**WITHSTANDING  
 HARSH ENVIRONMENT**

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.



## **HIPERFORMA** SERIES

**STP400S - A72/PFH+**  
**STP395S - A72/PFH+**  
**STP390S - A72/PFH+**



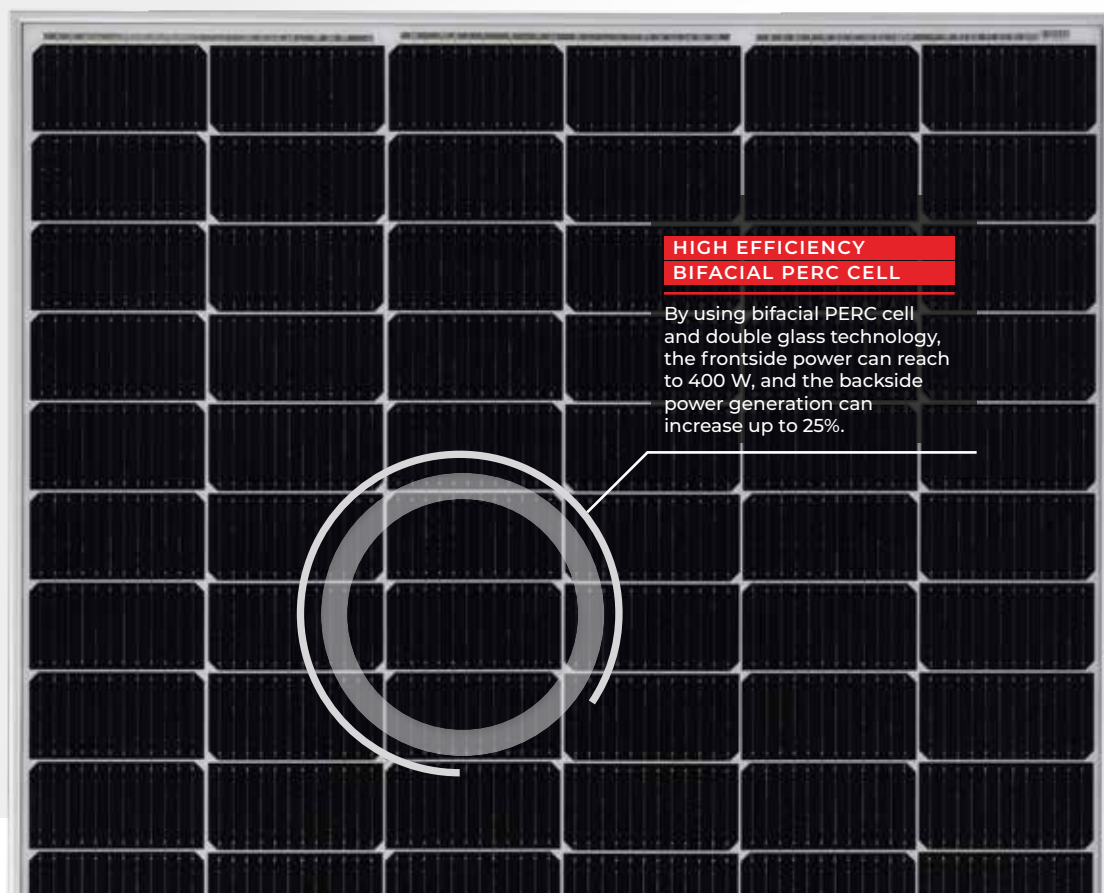
**SMART DESIGN  
JUNCTION BOX**



**BIFACIAL  
MODULE**



**MODULE HIGHER  
THAN STANDARDS**



### **HIGH EFFICIENCY BIFACIAL PERC CELL**

By using bifacial PERC cell and double glass technology, the frontside power can reach to 400 W, and the backside power generation can increase up to 25%.



**N-TYPE PERT  
SOLAR MODULE**  
144 HALF CUT BIFACIAL  
CELLS

## **TECHNICAL DATA**

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	144 (6 x 24)
■ <b>DIMENSION</b>	2028 x 1002 x 35 mm
■ <b>WEIGHT</b>	27 kg
■ <b>GLASS</b>	Heat strengthened 2.0 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**

## 144 HALF CUT CELLS N-TYPE PERT MONOCRYSTALLINE BIFACIAL

**HIPERFORMA SERIES**  
**STP400S - A72/PFH+**  
**STP395S - A72/PFH+**  
**STP390S - A72/PFH+**

**N-TYPE PERT FOR THOSE WHO WANT THE MAXIMUM OF POWER. ESPECIALLY SUITABLE IN MOUNTAIN AREAS. JUNCTION BOX DISPLACED IN THE CENTRAL PART OF THE MODULE.**

### WARRANTY

**12 years** on the product  
**30 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **CE Declaration of Conformity**

**20,0%**

**HIGH MODULE  
CONVERSION  
EFFICIENCY**

Module efficiency from 19,5% to 20,0% achieved through advanced cell technology and manufacturing capabilities.

**2%**

**SUNTECH CURRENT  
SORTING PROCESS**

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage.

**LOW RISK OF  
MICRO-CRAKS**

No internal stress from the symmetrical N-Bifacial cell scheme.

**ZERO LIGHT  
DEGRADATION  
(LID)**

No LID, more power generation.

**HIGH PID RESISTANT**

Advanced cell technology and qualified materials lead to high resistance to PID.

**HALF CUT**

**WITHSTANDING  
HARSH ENVIRONMENT**

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.





## STANDARD SERIES

**STP410S - 78/VFH**  
**STP405S - 78/VFH**  
**STP400S - 78/VFH**



**SMART DESIGN  
JUNCTION BOX**



**MODULE HIGHER  
THAN STANDARDS**



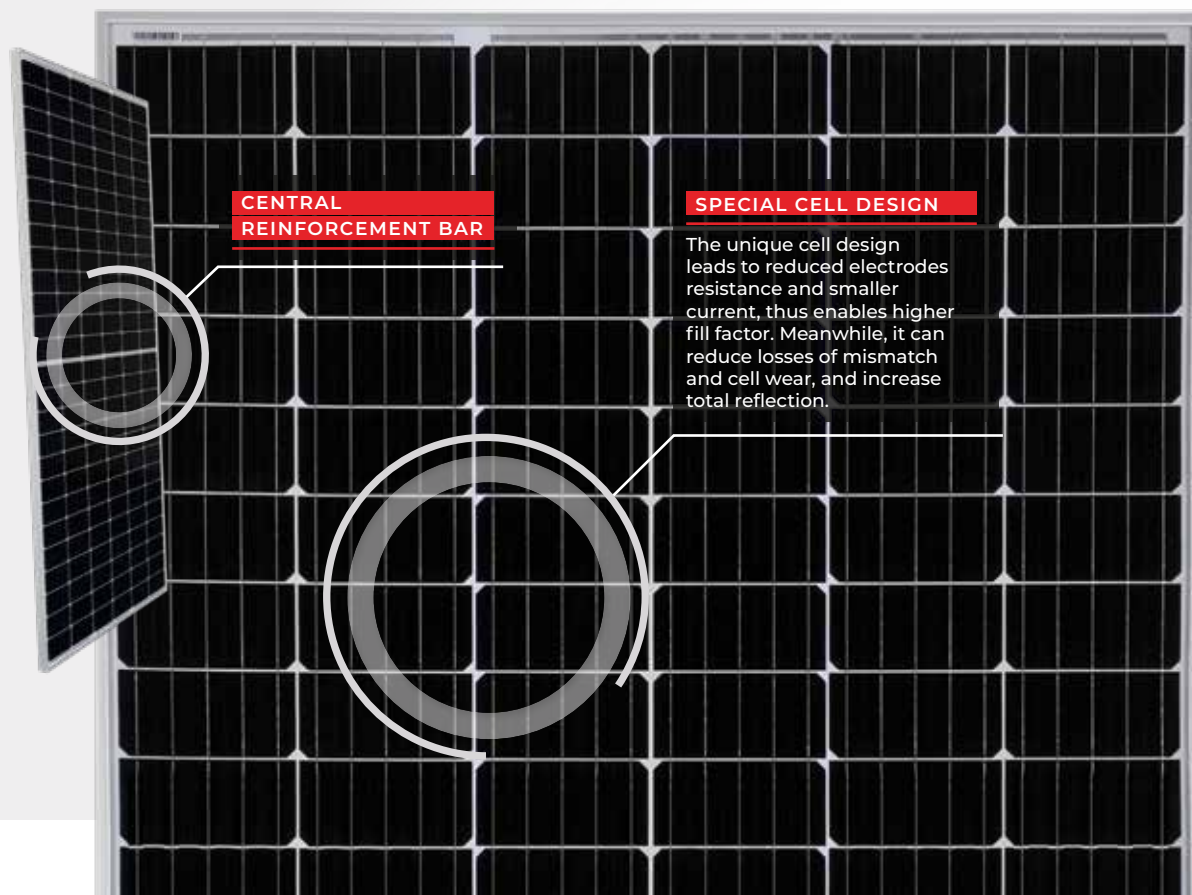
**MONOCRYSTALLINE  
SOLAR MODULE**  
156 HALF CUT CELL

## TECHNICAL DATA

■ <b>SOLAR CELL</b>	Monocrystalline silicon 6 inches
■ <b>CELL NR</b>	156 (6 x 26 )
■ <b>DIMENSION</b>	2166 × 992 × 35 mm
■ <b>WEIGHT</b>	25.3 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



**CENTRAL  
REINFORCEMENT BAR**

**SPECIAL CELL DESIGN**

The unique cell design leads to reduced electrodes resistance and smaller current, thus enables higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear, and increase total reflection.

## 156 HALF-CUT MONOCRYSTALLINE CELLS

**STANDARD SERIES**  
**STP410S - 78/VFH**  
**STP405S - 78/VFH**  
**STP400S - 78/VFH**

HALF CUT CELLS  
 MONOCRYSTALLINE  
 MODULE, OF BIG  
 DIMENSION FOR  
 MAXIMUM POWER.

### WARRANTY

**12 years** on the product  
**30 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**  
**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**  
**DIN EN 60068-2-68** **CE Declaration of Conformity**

**19,1%**

**HIGH MODULE  
 CONVERSION  
 EFFICIENCY**

Module efficiency from 18,6% to 19,1% achieved through advanced cell technology and manufacturing capabilities.

**BETTER  
 TEMPERATURE  
 PERFORMANCE**

Due to the cell design we have lower inner resistance, which results in a higher power output of the module, especially in warm/hot environment.

**EXCELLENT WEAK  
 LIGHT PERFORMANCE**

More power output in weak light condition, such as haze, cloudy and morning hours.

**3800 PA  
 5400 PA**

**EXTENDED WIND  
 AND SNOW LOAD  
 TESTS**

Module certified to withstand extreme wind (3800 Pa) and snow loads (5400 Pa).

**HALF CUT**

**HIGH PID RESISTANT**

Advanced cell technology and qualified materials lead to high resistance to PID.

**HIGH SYSTEM  
 VOLTAGE  
 COMPATIBLE**

Maximum 1500V  
 DC system voltage  
 reduces total system  
 cost.



**STANDARD  
SERIES**

**STP350 - 24/VFW**  
**STP345 - 24/VFW**  
**STP340 - 24/VFW**



SUITABLE FOR  
REVAMPING



**SOLAR POLYCRYSTALLINE  
MODULE**  
72 STANDARD CELLS

**TECHNICAL DATA**

■ <b>SOLAR CELL</b>	Polycrystalline silicon 6 inches
■ <b>CELL NR</b>	72 (6 x 12)
■ <b>DIMENSION</b>	1960 x 992 x 40 mm
■ <b>WEIGHT</b>	22.1 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
COMMERCIAL PLANTS**

**NEW DESIGN WITH  
5 BUSBARS**

The unique cell design leads to reduction in electrodes resistance, shading area and raise in conversion efficiency. Residual stress distribution can be more even, reducing the micro-cracks risks.



## 72 CELLS POLYCRYSTALLINE

### STANDARD SERIES

STP350 - 24/VFW

STP345 - 24/VFW

STP340 - 24/VFW

**POLYCRYSTALLINE  
MODULE IDEAL FOR  
COMMERCIAL ROOF  
INSTALLATIONS IN WHICH  
YOU NEED A SIGNIFICANT  
POWER IN REDUCED  
SPACES.**

### WARRANTY

**12 years** on the product  
**25 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

ISO 9001:2008 ISO 14001:2004 ISO 17025:2005

IEC 61215 IEC 61730 IEC 61701 IEC 62716

DIN EN 60068-2-68 CE Declaration of Conformity

# 18%

**HIGH MODULE  
CONVERSION  
EFFICIENCY**

Module efficiency from 17.5% to 18% achieved through advanced cell technology and manufacturing capabilities.

# 2%

**SUNTECH CURRENT  
SORTING PROCESS**

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage.

# 0/+5W

**POSITIVE  
TOLERANCE**

Positive tolerance of up to 5W delivers higher output reliability.

# 3800 PA 5400 PA

**EXTENDED WIND  
AND SNOW LOAD  
TESTS**

Module certified to withstand extreme wind (3800 Pa) and snow loads (5400 Pa).

**HIGH PID RESISTANT**

Advanced cell technology and qualified materials lead to high resistance to PID.

**FULL CELL**

**WITHSTANDING  
HARSH ENVIRONMENT**

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.

**STANDARD  
SERIES**

**STP290 - 20/WFW**  
**STP285 - 20/WFW**  
**STP280 - 20/WFW**



SUITABLE FOR  
REVAMPING



**SOLAR POLYCRYSTALLINE  
MODULE**  
60 STANDARD CELLS

## TECHNICAL DATA

■ <b>SOLAR CELL</b>	Polycrystalline silicon 6 inches
■ <b>CELL NR</b>	60 (6 x 10)
■ <b>DIMENSION</b>	1650 × 992 × 35 mm
■ <b>WEIGHT</b>	18.3 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



**IDEAL FOR  
COMMERCIAL PLANTS**

**NEW DESIGN WITH  
5 BUSBARS**

The unique cell design leads to reduction in electrodes resistance, shading area and raise in conversion efficiency. Residual stress distribution can be more even, reducing the micro-cracks risks.

## 60 CELLS POLYCRYSTALLINE

**STANDARD SERIES**  
**STP290 - 20/WFW**  
**STP285 - 20/WFW**  
**STP280 - 20/WFW**

**POLYCRYSTALLINE**  
**MODULE OF EXCELLENT**  
**QUALITY / PRICE RATIO**  
**IDEAL FOR STANDARD**  
**INSTALLATIONS.**

### WARRANTY

**12 years** on the product  
**25 years** on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to obtaining certifications:

**ISO 9001:2008** **ISO 14001:2004** **ISO 17025:2005**

**IEC 61215** **IEC 61730** **IEC 61701** **IEC 62716**

**DIN EN 60068-2-68** **Fire Class 1** **CE Declaration of Conformity**

**17,7%**

**HIGH MODULE  
CONVERSION  
EFFICIENCY**

Module efficiency from 17,1% to 17,7% achieved through advanced cell technology and manufacturing capabilities.

**2%**

**SUNTECH CURRENT  
SORTING PROCESS**

System output maximized by reducing mismatch losses up to 2% with modules sorted & packaged by amperage.

**0/+5W**

**POSITIVE  
TOLERANCE**

Positive tolerance of up to 5W delivers higher output reliability.

**3800 PA  
5400 PA**

**EXTENDED WIND  
AND SNOW LOAD  
TESTS**

Module certified to withstand extreme wind (3800 Pa) and snow loads (5400 Pa).

**HIGH PID RESISTANT**

Advanced cell technology and qualified materials lead to high resistance to PID.

**FULL CELL**

**WITHSTANDING  
HARSH ENVIRONMENT**

Reliable quality leads to a better sustainability even in harsh environment like desert, farm and coastline.





## STANDARD SERIES

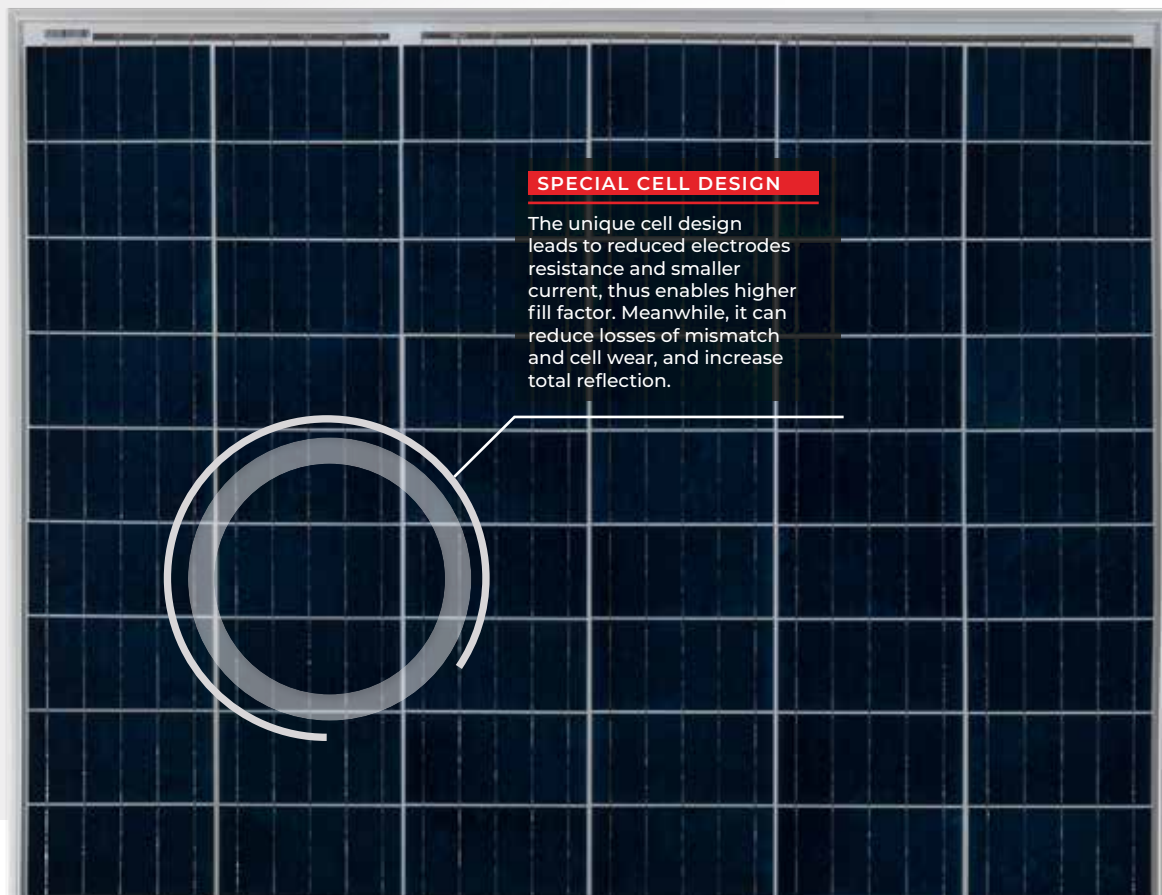
**STP360 - 24/VFH**  
**STP355 - 24/VFH**  
**STP350 - 24/VFH**



SUITABLE FOR  
REVAMPING



MODULE HIGHER  
THAN STANDARDS



### SPECIAL CELL DESIGN

The unique cell design leads to reduced electrodes resistance and smaller current, thus enables higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear, and increase total reflection.



**SOLAR POLYCRYSTALLINE  
MODULE**  
144 HALF CUT CELLS

## TECHNICAL DATA

■ <b>SOLAR CELL</b>	Polycrystalline silicon 6 inches
■ <b>CELL NR</b>	144 (6 x 24)
■ <b>DIMENSION</b>	1988 x 992 x 40 mm
■ <b>WEIGHT</b>	22.3 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



IDEAL FOR  
RESIDENTIAL PLANTS

## 144 HALF-CUT POLYCRYSTALLINE CELLS

### STANDARD SERIES

STP360 - 24/VFH

STP355 - 24/VFH

STP350 - 24/VFH

POLYCRYSTALLINE  
MODULE WITH 144 CELLS  
AVAILABLE. IDEAL FOR  
PLANTS WHERE YOU  
NEED BIG POWER IN  
REDUCED SPACES.

### WARRANTY

12 years on the product  
25 years on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to  
obtaining certifications:

ISO 9001:2008 ISO 14001:2004 ISO 17025:2005

IEC 61215 IEC 61730 IEC 61701 IEC 62716

DIN EN 60068-2-68 CE Declaration of Conformity

## 18,3%

HIGH MODULE  
CONVERSION  
EFFICIENCY

Module efficiency from 17,7%  
to 18,3% achieved through  
advanced cell technology and  
manufacturing capabilities.

BETTER  
TEMPERATURE  
PERFORMANCE

Due to the cell design  
we have lower inner  
resistance, which results  
in a higher power  
output of the module,  
especially in warm/hot  
environment.

EXCELLENT WEAK  
LIGHT PERFORMANCE

More power output in weak  
light condition, such as  
haze, cloudy and morning  
hours.

## 3800 PA 5400 PA

EXTENDED WIND  
AND SNOW LOAD  
TESTS

Module certified to  
withstand extreme  
wind (3800 Pa) and  
snow loads (5400 Pa).

HALF CELL

HIGH PID RESISTANT

Advanced cell technology  
and qualified materials  
lead to high resistance to  
PID.

WITHSTANDING  
HARSH ENVIRONMENT

Reliable quality leads to a  
better sustainability even  
in harsh environment like  
desert, farm and coastline.



**STANDARD  
SERIES**

**STP300 - 20/WFH**  
**STP295 - 20/WFH**  
**STP290 - 20/WFH**



SUITABLE FOR  
REVAMPING



**SOLAR POLYCRYSTALLINE  
MODULE**  
120 HALF CUT CELLS

**SPECIAL CELL DESIGN**

The unique cell design leads to reduced electrodes resistance and smaller current, thus enables higher fill factor. Meanwhile, it can reduce losses of mismatch and cell wear, and increase total reflection.

**TECHNICAL DATA**

■ <b>SOLAR CELL</b>	Polycrystalline silicon 6 inches
■ <b>CELL NR</b>	120 (6 x 20)
■ <b>DIMENSION</b>	1670 × 992 × 35 mm
■ <b>WEIGHT</b>	18.5 kg
■ <b>GLASS</b>	Tempered 3.2 mm
■ <b>FRAME</b>	Anodized aluminium alloy
■ <b>JUNCTION BOX</b>	IP68



**IDEAL FOR  
RESIDENTIAL PLANTS**



## 120 HALF-CUT POLYCRYSTALLINE CELLS

### STANDARD SERIES

STP300 - 20/WFH

STP295 - 20/WFH

STP290 - 20/WFH

POLYCRYSTALLINE  
MODULE IDEAL FOR  
RESIDENTIAL SYSTEMS, IN  
WHICH IT IS NECESSARY  
TO HAVE A MODULE OF  
STANDARD DIMENSIONS  
BUT WITH HALF CUT  
TECHNOLOGY.

### WARRANTY

12 years on the product  
25 years on performance

### CERTIFICATIONS AND STANDARDS

Strict quality controls have led to  
obtaining certifications:

ISO 9001:2008 ISO 14001:2004 ISO 17025:2005

IEC 61215 IEC 61730 IEC 61701 IEC 62716

DIN EN 60068-2-68 Fire Class 1 CE Declaration of Conformity

## 18,1%

HIGH MODULE  
CONVERSION  
EFFICIENCY

Module efficiency from 17,5%  
to 18,1% achieved through  
advanced cell technology and  
manufacturing capabilities.

## 2%

SUNTECH CURRENT  
SORTING PROCESS

System output maximized  
by reducing mismatch  
losses up to 2% with  
modules sorted & packaged  
by amperage.

EXCELLENT WEAK  
LIGHT PERFORMANCE

More power output in weak  
light condition, such as  
haze, cloudy and morning  
hours.

## 3800 PA 5400 PA

EXTENDED WIND  
AND SNOW LOAD  
TESTS

Module certified to  
withstand extreme  
wind (3800 Pa) and  
snow loads (5400 Pa).

HALF CELL

HIGH PID RESISTANT

Advanced cell technology  
and qualified materials  
lead to high resistance to  
PID.

WITHSTANDING  
HARSH ENVIRONMENT

Reliable quality leads to a  
better sustainability even  
in harsh environment like  
desert, farm and coastline.







**SUNTECH IS THE MOST ADVANCED  
COMPANY OF THE SOLAR SECTOR FROM  
THE TECHNOLOGICAL POINT OF VIEW**

**Technological innovation**  
is the heart of all **SUNTECH**  
**production** and is achieved  
thanks to the continuous  
commitment to R&D

in specific areas such as  
***research centers*** and ***test***  
***laboratories.***


SUNTECH firmly believes  
that technological innovation  
can lead the way for a more  
"green" and sustainable  
future for all.





# SOLAR PANELS FOR RESIDENTIAL USE

**SUNTECH REALIZES RESIDENTIAL PROJECTS FOR EVERY KIND OF HOUSES**

 **SUNTECH** photovoltaic modules adapt perfectly to the installation on individual houses, apartment buildings or terraced houses. The roof installation optimizes the available space allowing to produce totally clean energy and to obtain an additional

gain by reselling the excess energy to the grid.

**The initial investment can be easily amortized: also in Italy there are incentives and tax reductions that facilitate the transition to solar energy, the safest and cleanest form of energy.** An intelligent

choice from a financial and environmental point of view. **SUNTECH** relies on a dense network of distributors present throughout Italy. Find out more by contacting us for a non-binding quote.



# SOLAR PANELS FOR COMMERCIAL- AND INDUSTRIAL USE

SUNTECH REALIZES PHOTOVOLTAIC PLANTS FOR COMPANIES AND BUSINESS ACTIVITIES OF EVERY SIZE

SUNTECH photovoltaic modules are the perfect solution for all those companies and businesses that wish to abandon traditional energy sources, choosing a path to optimize costs and reduce energy consumption. It should also be emphasized that in an

industrial type installation it is possible to take advantage of large surfaces often with few shaded areas.

**The modernization of industrial plants from the energy point of view, also called photovoltaic revamping, is easily**

**implemented for more or less large-scale activities. The initial investment can be amortized through incentives and ad hoc tax reductions.**



**SAN FRANCISCO, USA**  
TERMINAL T3  
INTERNATIONAL AIRPORT





**MANDALUYONG, PHILIPPINES**  
ASIAN DEVELOPMENT BANK

**CALIFORNIA, USA**  
GOOGLE CAMPUS

**STEENOKKERZEEL, BELGIUM**  
MUNICIPALITY

**SHANDONG, CHINA**  
WATER PLANT



**SYDNEY, AUSTRALIA**  
OPERA HOUSE





## SUNTECH DESIGNS AND MANUFACTURES PHOTOVOLTAIC PARKS OF LARGE SCALE FOR EVERY ENVIRONMENTAL TYPE

**SUNTECH photovoltaic modules are the perfect solution for large photovoltaic power plants.** The panels are connected in series through grid-connected systems, connected to an electricity distribution network.

The needs of this type of installation are obviously different: the parks are equipped with large transformers and inverters and are designed to handle huge amounts of energy. The plants are often located in

highly sunny places, such as deserts, where, however, the solar module is continuously exposed to hard atmospheric conditions.

Even in the case of solar parks, state tax incentives are available to facilitate the transition to solar energy, the safest and cleanest form of energy. **The use of a photovoltaic system also allows for a constant economic return and the support of banks.**



**EBERSWALDE, GERMANY**

# LARGE SCALE PV PLANTS

**ADANI, TAMIL NADU  
INDIA**



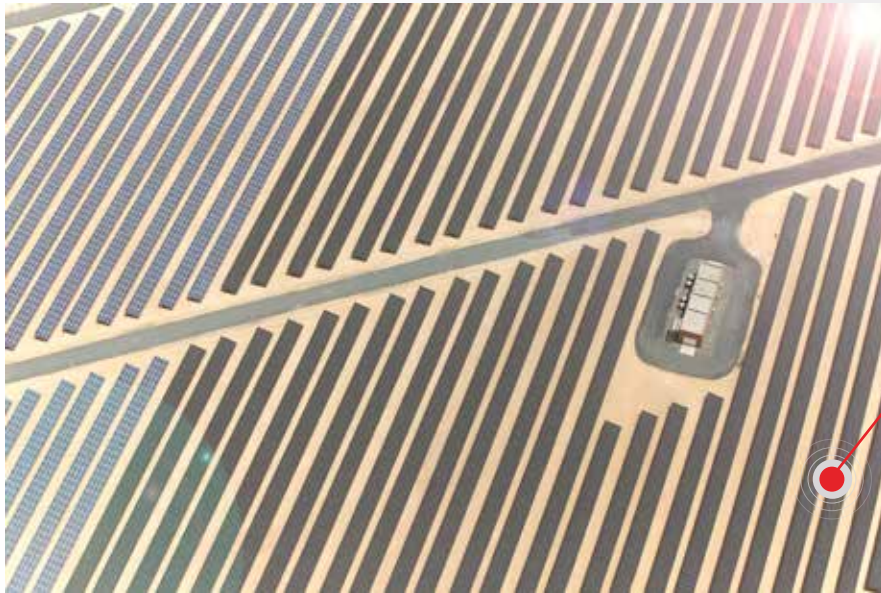




**NELLIS, USA**



**POZOHONDO, SPAIN**



**MASDAR, UNITED ARAB EMIRATES**



**KEYU, HENAN CHINA**



**KYUSHU, JAPAN**



**ZAVODSKAYA, RUSSIA**





**Suntech Power Co., Ltd.**

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Wuxi Jiangsu Province

**[www.suntech-power.com](http://www.suntech-power.com)**

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