

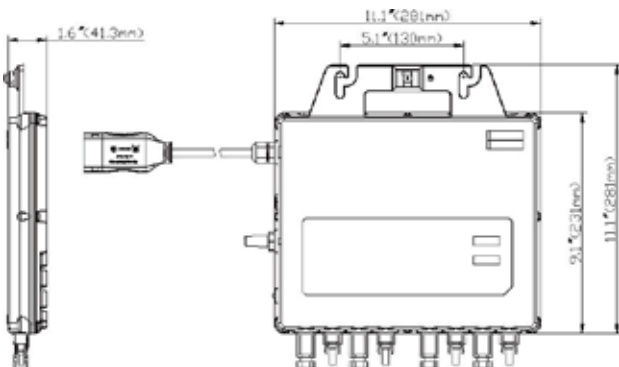


## QS1-MX

### Microinversor

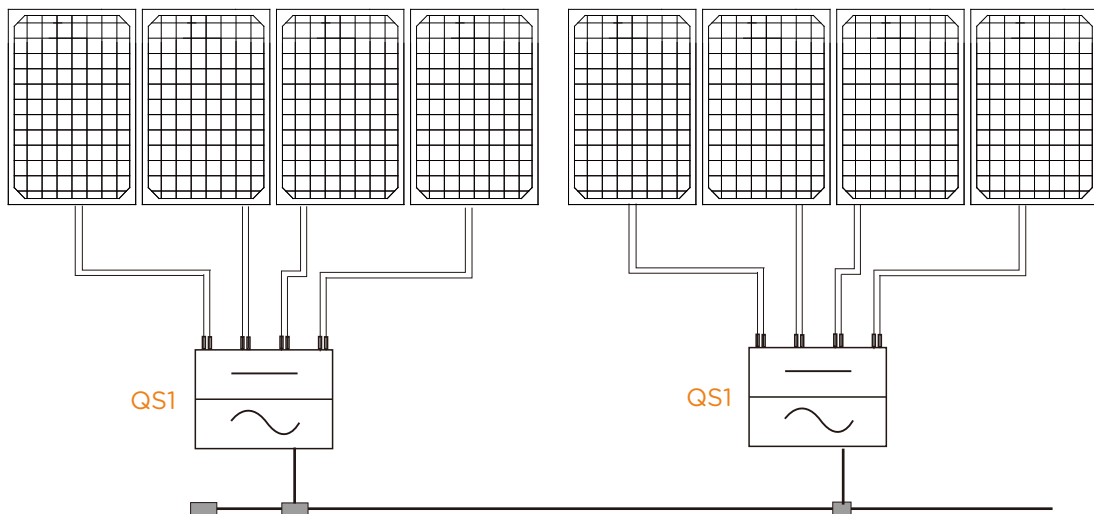
- Un Micro Inversor para 4 módulos
- 4 canales de entrada con MPPT independiente y función de monitoreo
- Máxima potencia continua de salida de más de 1200W

### DIMENSIONES



El QS1 microinversor APsystems es de interconexión a la red eléctrica inteligente y sistemas avanzados de monitoreo para asegurar la máxima eficiencia. Alta eficiencia, alta confiabilidad del QS1 con 4 entradas MPPT independientes, la potencia máxima de salida continua es de 1200W. Un cuarto de los inversores y un cuarto de la instalación significan ahorros de costos reales para clientes residenciales y comerciales.

### Esquema de cableado



# Ficha Técnica QS1 Microinversor

## Datos de Entrada (DC)

Potencia de Módulo PV Recomendada	250Wp-375Wp+
Rango de Voltaje MPPT	22V-48V
Rango de Voltaje de Operación	16V-55V
Voltaje de Entrada Máximo	60V
Corriente de Entrada Máxima	12A x 4

## Datos de Salida (AC)

Potencia Máxima de Salida Continua	1200W
Voltaje de Salida Nominal	240V/211V-264V*
Voltaje Ajustable de salida	160V-278V
Corriente de Salida Nominal	5A
Unidades Máximas por Ramal	4 (16PV modules)
Rango de Frecuencia de Salida	60Hz/59.3Hz-60.5Hz*
Rango de Frecuencia de Salida Ajustable	55.1Hz-64.9Hz
Factor de Potencia	>0.99
Distorsión Armónica Total	<3%
Protección Máxima de Sobrecorriente de Salida	10A

## Eficiencia

Eficiencia Máxima	96.5%
Nominal MPPT Eficiencia	99.5%
Consumo de Energía Nocturno	30mW

## Datos Mecánicos

Rango de Temperatura Ambiental	-40 °F to +149 °F (-40 °C to +65 °C )
Rango de Temperatura de Almacenamiento	-40 °F to +185 °F (-40 °C to +85 °C )
Dimensiones (A x L x P)	11.1" x 9.1" x 1.6" (281mm x 231mm x 41.3mm)
Peso	9.9lbs (4.5kg)
Corriente Máxima del Bus de CA	20A
Tipo de Conector	MC4 Type or Customize
Clasificación Ambiental del Aparato	TYPE 6
Enfriamiento	Convección Natural - Sin Ventiladores

## Características

Comunicación (Inversor Para ECU)	Wireless
Diseño de Transformador	High Frequency Transformers, Galvanically Isolated
Monitoreo	Via EMA** Online Portal

## Certificado de Cumplimiento

Certificados	UL1741; CSA C22.2 No.107.1-01; FCC Part15; ANSI C63.4; ICES-003; IEEE1547
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\*Programable mediante el ECU para las necesidades del cliente.

\*\*APsystems en línea Energy Management Analysis (EMA) plataforma

Especificaciones sujetas a cambios sin previo aviso - asegúrese de que está utilizando La actualización más reciente se encuentra en [latam.APsystems.com](http://latam.APsystems.com)

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APsystems en Guadalajara:

AV. Lazaro Cardenas 2850-5º Piso, Colonia Jardines del Bosque C.P. 44520, Guadalajara, Jalisco

+52 1 33 3188 4604 | 01 800 890 6030

[info.latam@apsystems.com](mailto:info.latam@apsystems.com) | [latam.APsystems.com](http://latam.APsystems.com)

# HiPower Series

144-CELL HALF CUT MONOCRYSTALLINE  
SOLAR MODULE

# 450 Watt

STPXXXS - B72H/Vnh



## Features



**High power output**  
Compared to 158.75mm module, the power output can increase 25W-30W



**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



**Lower operating temperature**  
Lower operating temperature and temperature coefficient increases the power output



**Extended load tests**  
Module certified to withstand front side maximum static test load (5400 Pascal) and rear side maximum static test loads (3800 Pascal) \*



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

Certifications and standards:  
IEC 61215, IEC 61730, conformity to CE



## Trust Suntech to Deliver Reliable Performance Over Time

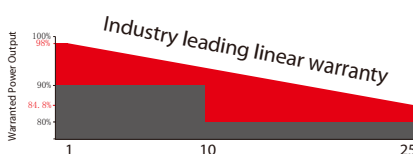
- World-class manufacturer of crystalline silicon photovoltaic modules
- Unrivaled manufacturing capacity and world-class technology
- Rigorous quality control meeting the highest international standards: ISO 9001, ISO 14001 and ISO17025
- Regular independently checked production process from international accredited institute/company
- Long-term reliability tests
- 2 × 100% EL inspection ensuring defect-free modules

## 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.

## Industry-leading Warranty based on nominal power



- 98% in the first year, thereafter, for years two (2) through twenty-five (25), 0.55% maximum decrease from MODULE's nominal power output per year, ending with the 84.8% in the 25th year after the defined WARRANTY STARTING DATE.\*\*\*\*
- 15-year product warranty
- 25-year linear performance warranty

## IP68 Rated Junction Box



The Suntech IP68 rated junction box ensures an outstanding waterproof level, supports installations in all orientations and reduces stress on the cables. High reliable performance, low resistance connectors ensure maximum output for the highest energy production.

\* Please refer to Suntech Standard Module Installation Manual for details. \*\*WEEE only for EU market.  
\*\*\* Please refer to Suntech Product Warranty for details.  
made in China & Vietnam

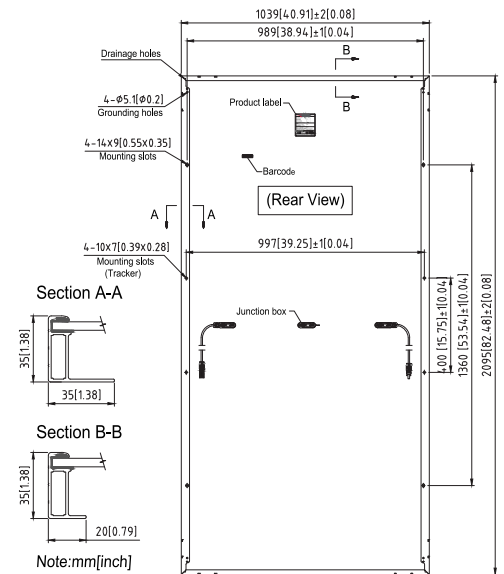
### Electrical Characteristics

STC	STPXXS-B72H/Vnh				
Maximum Power at STC (Pmax)	450 W	445 W	440 W	435 W	430 W
Optimum Operating Voltage (Vmp)	41.4 V	41.2 V	41.0 V	40.8 V	40.6 V
Optimum Operating Current (Imp)	10.87 A	10.81 A	10.74 A	10.67 A	10.60 A
Open Circuit Voltage (Voc)	49.2 V	49.0 V	48.8 V	48.6 V	48.4 V
Short Circuit Current (Isc)	11.61 A	11.54 A	11.47 A	11.40 A	11.32 A
Module Efficiency	20.7%	20.4%	20.2%	20.0%	19.8%
Operating Module Temperature	-40 °C to +85 °C				
Maximum System Voltage	1500 V DC (IEC)				
Maximum Series Fuse Rating	20 A				
Power Tolerance	0/+5 W				

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25 °C, AM=1.5;  
Tolerance of Pmax is within +/- 5% and tolerances of Voc and Isc are within +/- 5%.

NMOT	STPXXS-B72H/Vnh				
Maximum Power at NMOT (Pmax)	339.4 W	335.8 W	332.7 W	327.7 W	324.6 W
Optimum Operating Voltage (Vmp)	38.2 V	38.0 V	37.8 V	37.6 V	37.5 V
Optimum Operating Current (Imp)	8.89 A	8.84 A	8.78 A	8.73 A	8.67 A
Open Circuit Voltage (Voc)	46.2 V	46.0 V	45.8 V	45.5 V	45.4 V
Short Circuit Current (Isc)	9.37 A	9.31 A	9.25 A	9.20 A	9.13 A

NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20 °C, AM=1.5, wind speed 1 m/s.



### Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 ± 2 °C
Temperature Coefficient of Pmax	-0.36%/°C
Temperature Coefficient of Voc	-0.304%/°C
Temperature Coefficient of Isc	0.050%/°C

### Mechanical Characteristics

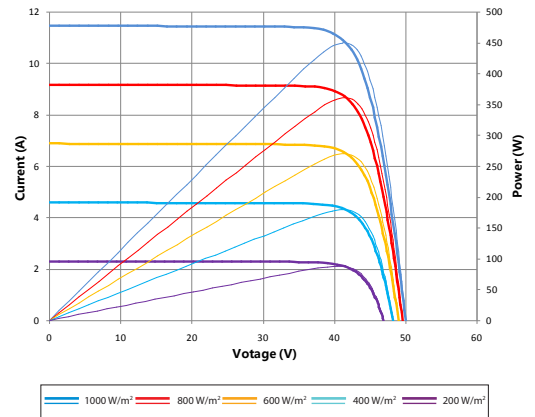
Solar Cell	Monocrystalline silicon 166 mm
No. of Cells	144 (6 × 24)
Dimensions	2095 × 1039 × 35 mm (82.5 × 40.9 × 1.4 inches)
Weight	24.5 kgs (54.0 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	IP68 rated (3 bypass diodes)
Output Cables	4.0 mm <sup>2</sup> , Portrait: (-)350 mm and (+)160 mm in length Landscape: (-)1400 mm and (+)1400 mm in length or customized length
Connectors	Genuine MC4 EVO2, TL-Cable01S
Fire Class Rating	C in accordance with UL 790

### Packing Configuration

Container	20' GP	40' HC
Pieces per pallet	31	31
Pallets per container	5	22
Pieces per container	155	682
Packaging box dimensions	2125×1130×1205 mm	
Packaging box weight	812 kg	

Information on how to install and operate this product is available in the installation instruction. All values indicated in this data sheet are subject to change without prior announcement. The specifications may vary slightly. All specifications are in accordance with standard EN 50380. Color differences of the modules relative to the figures as well as discolorations of/in the modules which do not impair their proper functioning are possible and do not constitute a deviation from the specification.

Current-Voltage & Power-Voltage Curve (450S)



### Dealer information

