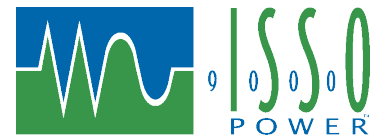


SUNNY BOY 3.0-US / 3.8-US / 5.0-US / 6.0-US / 7.0-US / 7.7-US



SB3.0-1 SP-US-40 / SB3.8-1 SP-US-40 / SB5.0-1 SP-US-40
SB6.0-1 SP-US-40 / SB7.0-1 SP-US-40 / SB7.7-1 SP-US-40



**WORLD'S FIRST
SECURE POWER SUPPLY**



OUTLET NOT INCLUDED

Value-Added Improvements

- World's first Secure Power Supply now offers up to 2,000 W
- Full grid management capabilities ensure a utility-compliant solution for any market

Reduced Labor

- New Installation Assistant with direct access via smartphone minimizes time in the field
- Integrated disconnect simplifies equipment stocking and speeds installation

Unmatched Flexibility

- SMA's proprietary OptiTrac™ Global Peak technology mitigates shade with ease
- Multiple independent MPPTs accommodate hundreds of stringing possibilities

Trouble-Free Servicing

- Two-part enclosure concept allows for simple, expedited servicing
- Enhanced AFCI technology reduces false tripping while improving sensitivity in real arcs

SUNNY BOY 3.0-US / 3.8-US / 5.0-US / 6.0-US / 7.0-US / 7.7-US

Reduce costs across your entire residential business model

The residential PV market is changing rapidly, and we understand that your bottom line matters more than ever. That's why we've designed a superior residential solution that will help you decrease costs throughout all stages of your business operations. The Sunny Boy 3.0-US/3.8-US/5.0-US/6.0-US/7.0-US/7.7-US join the SMA lineup of field-proven solar technology backed by the world's #1 service team, along with a wealth of improvements. Simple design, improved stocking and ordering, value driven sales support and streamlined installation are just some of the ways that SMA is working to help your business operate more efficiently.

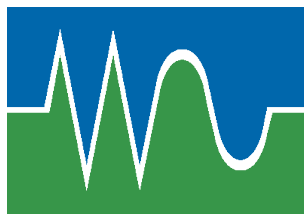
Technical data	Sunny Boy 3.0-US		Sunny Boy 3.8-US		Sunny Boy 5.0-US	
	208 V	240 V	208 V	240 V	208 V	240 V
Input (DC)						
Max. usable DC power	3100 W	3100 W	3450 W	4000 W	5150 W	5150 W
Max. DC voltage	600 V					
Rated MPP voltage range	155 - 480 V		195 - 480 V		220 - 480 V	
MPPT operating voltage range	100 - 550 V					
Min. DC voltage / start voltage	100 V / 125 V					
Max. operating input current per MPPT	10 A					
Max. short circuit current per MPPT	18 A					
Number of MPPT tracker / string per MPPT tracker	2/1				3 / 1	
Output (AC)						
AC nominal power	3000 W	3000 W	3330 W	3800 W	5000 W	5000 W
Max. AC apparent power	3000 VA	3000 VA	3330 VA	3800 VA	5000 VA	5000 VA
Nominal voltage / adjustable	208 V / ●	240 V / ●	208 V / ●	240 V / ●	208 V / ●	240 V / ●
AC voltage range	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 V
AC grid frequency	60 Hz / 50 Hz					
Max. output current	14.5 A	12.5 A	16.0 A	16.0 A	24.0 A	24.0 A
Power factor (cos φ)	1					
Output phases / line connections	1 / 2					
Harmonics	< 4 %					
Efficiency						
Max. efficiency	97.2 %	97.6 %	97.2 %	97.5 %	97.2 %	97.5 %
CEC efficiency	96 %	96.5 %	96.5 %	96.5 %	96.5 %	97 %
Protection devices						
DC disconnect device	●					
DC reverse polarity protection	●					
Ground fault monitoring / Grid monitoring	●					
AC short circuit protection	●					
All-pole sensitive residual current monitoring unit (RCMU)	●					
Arc fault circuit interrupter (AFCI)	●					
Protection class / overvoltage category	I / IV					
General data						
Dimensions (W / H / D) in mm (in)	535 x 730 x 198 (21.1 x 28.5 x 7.8)					
Packaging Dimensions (W / H / D) in mm (in)	600 x 800 x 300 (23.6 x 31.5 x 11.8)					
Weight	26 kg (57 lb)					
Packaging weight	30 kg (66 lb)					
Operating temperature range	- 25 °C ...+60 °C					
Noise emission (typical)	39 dB(A)					
Internal power consumption at night	< 5 W					
Topology	Transformerless					
Cooling concept	Convection					
Features						
Secure Power Supply	●					
Display (2 x 16 characters)	●					
Interfaces: Ethernet / WLAN	● / ●					
Sensor module / External WLAN antenna	○ / ○					
Warranty: 10 / 15 / 20 years	● / ○ / ○					
Certificates and approvals	UL 1741, UL 1998, UL 1699B, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1					
● Standard features ○ Optional features – Not available	Data at nominal conditions NOTE: US inverters ship with gray lids.					
Type designation	SB3.0-1SP-US-40		SB3.8-1SP-US-40		SB5.0-1SP-US-40	



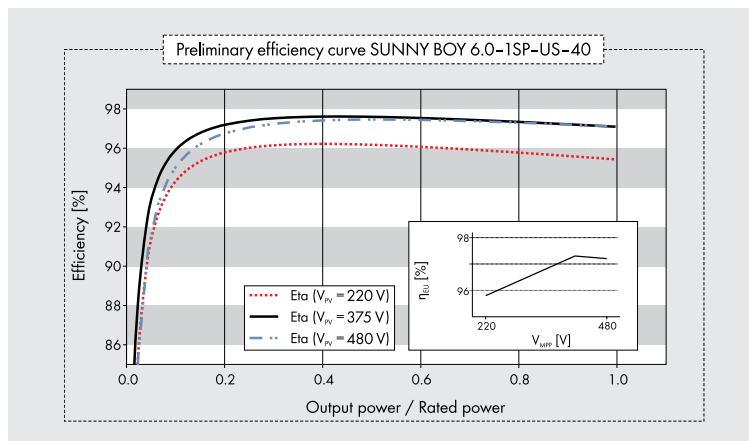
Sensor module
MD.SEN-US-40



External WLAN antenna
EXTANT-US-40



ISSO
POWER™



Technical data	Sunny Boy 6.0-US		Sunny Boy 7.0-US		Sunny Boy 7.7-US	
	208 V	240 V	208 V	240 V	208 V	240 V
Input (DC)						
Max usable DC power	5400 W	6200 W	6900 W	7200 W	6900 W	7950 W
Max. DC Voltage	600 V					
Rated MPP Voltage range	220 - 480 V		245 - 480 V		270 - 480 V	
MPPT operating voltage range	100 - 550 V					
Min. DC voltage / start voltage	100 V / 125 V					
Max. operating input current per MPPT	10 A					
Max. short circuit current per MPPT	18 A					
Number of MPPT tracker / string per MPPT tracker	3 / 1					
Output (AC)						
AC nominal power	5200 W	6000 W	6660 W	7000 W	6660 W	7680 W
Max. AC apparent power	5200 VA	6000 VA	6660 VA	7000 VA	6660 VA	7680 VA
Nominal voltage / adjustable	208 V / ●	240 V / ●	208 V / ●	240 V / ●	208 V / ●	240 V / ●
AC voltage range	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 V	183 - 229 V	211 - 264 V
AC grid frequency	60 Hz / 50 Hz					
Max. output current	25.0 A	25.0 A	32.0 A	29.2 A	32.0 A	32.0 A
Power factor (cos φ)	1					
Output phases / line connections	1 / 2					
Harmonics	< 4 %					
Efficiency						
Max. efficiency	97.2 %	97.6 %	97.1 %	97.5 %	97.1 %	97.5 %
CEC efficiency	96.5 %	97 %	96.5 %	97 %	96.5 %	97 %
Protection devices						
DC disconnect device	●					
DC reverse polarity protection	●					
Ground fault monitoring / Grid monitoring	●					
AC short circuit protection	●					
All-pole sensitive residual current monitoring unit (RCMU)	●					
Arc fault circuit interrupter (AFCI)	●					
Protection class / overvoltage category	I / IV					
General data						
Dimensions (W / H / D) in mm (in)	535 x 730 x 198 (21.1 x 28.5 x 7.8)					
Packaging Dimensions (W / H / D) in mm (in)	600 x 800 x 300 (23.6 x 31.5 x 11.8)					
Weight	26 kg (57 lb)					
Packaging weight	30 kg (66 lb)					
Operating temperature range	- 25 °C ...+60 °C					
Noise emission (typical)	36 dB(A)		45 dB(A)			
Internal power consumption at night	< 5 W					
Topology	Transformerless					
Cooling concept	Convection			Fan		
Features						
Secure Power Supply	●					
Display (2 x 16 characters)	●					
Interfaces: Ethernet / WLAN	● / ●					
Sensor module / External WLAN antenna	○ / ○					
Warranty: 10 / 15 / 20 years	●/○/○					
Certificates and approvals	UL 1741, UL 1998, UL 1699B, IEEE1547, FCC Part 15 (Class A & B), CAN/CSA V22.2 107.1-1					
● Standard features ○ Optional features – Not available	Data at nominal conditions NOTE: US inverters ship with gray lids.					
Type designation	SB6.0-1SP-US-40		SB7.0-1SP-US-40		SB7.7-1SP-US-40	

SAME NAME, NEW GAME

The Sunny Boy 3.0-US through 7.7-US are once again raising the bar by offering improved performance, enhanced features, and most importantly, an economical approach to residential solar. Your business model is a value chain. The new Sunny Boy-US series can help you stay competitive in an increasingly price sensitive residential market by driving down costs across all of your business operations.





SIMPLE, FLEXIBLE DESIGN

Speed the completion of customer proposals and maximize the efficiency of your design team with the Sunny Boy-US series, which provides a new level of flexibility in system design by offering:

- » Hundreds of stringing configurations and multiple independent MPPTs
- » SMA's proprietary OptiTrac™ Global Peak shade mitigation technology
- » Diverse application options including on- and off-grid compatibility



VALUE-DRIVEN SALES ENABLEMENT

SMA wants to enable your sales team by arming them with an abundance of feature/benefit support. Show your customers the value of the Sunny Boy-US series by utilizing:

- » Secure Power Supply, now with 2,000 W of opportunity power in the event of a grid outage, as an increased value-add or upsell opportunity
- » SMA's 35 year history and status as the #1 global inverter manufacturer instills homeowners with peace of mind and the long-term security they demand from a PV investment
- » An economical solution for shade mitigation and the challenges of complex roofs



IMPROVED STOCKING AND ORDERING

Ensure that your back office business operations run smoothly and succinctly while mitigating potential errors. The Sunny Boy-US series can help achieve cost savings in these areas by providing:

- » An integrated DC disconnect that simplifies equipment stocking and allows for a single inverter part number
- » All communications integrated into the inverter, eliminating the need to order additional equipment



STREAMLINED INSTALLATION AND COMMISSIONING

Expedite your operations in the field by taking advantage of the new Sunny Boy's installer-friendly feature set including:

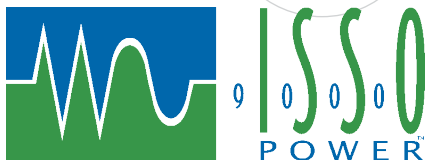
- » Direct access via smartphone and utilization of SMA's Installation Assistant, which minimizes time/labor spent in the field and speeds the path to commissioning
- » Improved communication—no need to install additional equipment
- » Integrated DC disconnect that simplifies onsite logistics and eliminates the need to install a separate disconnect unit, speeding overall installation time



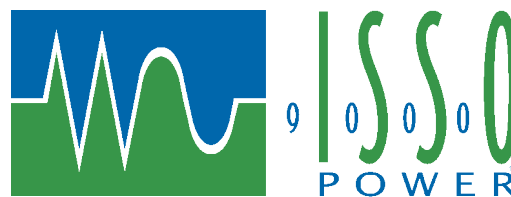
SUPERIOR SERVICE

SMA understands the factors that contribute to lifetime PV ownership cost, that's why the Sunny Boy-US series was designed for maximum reliability and backstopped by an unmatched service offering. Benefit from:

- » The new Sunny Boy's two-part enclosure concept that separates the connection unit from the power unit, which allows for simple, expedited servicing
- » The #1 service team in the PV industry, as recognized by IMS research, with experience servicing an installed base of more than 40 GW



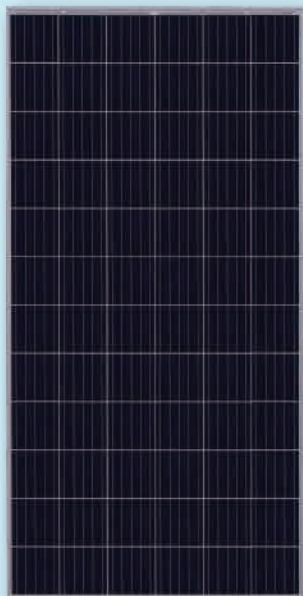
ISSO POWER 9000 SA DE CV
 AV VALLE DE SNATIAGO 27. COL. VALLE DE ARAGON 1a SECC NEZAHUALCYOTL
 EDO DE MEXICO . C.P 57100
 50620700 / 50620701 / 50620702 / 57120329 / 57120939 / 57120965
www.tiendaisso9000.com / www.isso9000.com.mx



JAP72S01

310-330 1000V Cypress Series

MÓDULO SOLAR DE SILICIO POLICRISTALINO



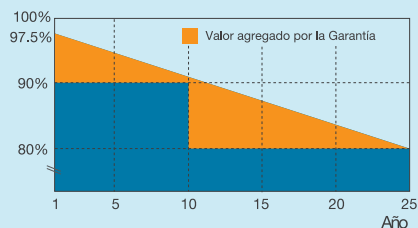
JA Solar Holdings Co., Ltd.

JA Solar Holdings Co., Ltd. es un fabricante líder mundial de productos de energía solar de alto rendimiento, que convierten la luz solar en energía eléctrica para uso residencial, comercial y a gran escala. La compañía se fundó en mayo de 2005, y cotiza públicamente en el NASDAQ desde febrero de 2007. JA Solar ha sido el productor líder mundial de células desde 2010, y se ha establecido firmemente como proveedor de módulos de primer nivel (Tier 1). Capitalizando su fortaleza en la tecnología de células solares, está dedicada a suministrar módulos con inigualable eficiencia de conversión, eficiencia de producción y fiabilidad para que sus clientes maximicen la rentabilidad de sus proyectos fotovoltaicos. Con su experiencia líder en la industria, continuo esfuerzo de Investigación y desarrollo (R & D), servicio orientado al cliente y sólidas condiciones financieras, JA Solar se convierte a largo plazo en su socio de mayor confianza.

Dirección: Building No.8, Noble Center, Automobile Museum East Road, Fengtai District, Beijing - China
 T e l +86 (10) 63611888
 F a x : +86 (10) 63611999
 Email: sales@jasolar.com market@jasolar.com

Garantía Superior

- Garantía de producto por 12 años
- Garantía de potencia de salida lineal por 25 años



Características Principales



El módulo de diseño 5BB reduce la resistencia y el estrés de las series de las células entre los interconectores, mejorando la fiabilidad y la eficiencia de conversión



Alta potencia de salida, máxima eficiencia de conversión: 16.99%



Diseñado para aplicaciones de 1000 V DC (IEC)



Superficie anti-suciedad que reduce la pérdida de potencia por acumulación de polvos y otras partículas



Excelente rendimiento en entornos de baja irradiación solar



Excelente resistencia a la carga mecánica: Certificado para soportar altas cargas de viento(2400Pa) y de nieve(5400Pa)



Certificado para resistencia a la niebla salina y al amoníaco por TÜV NORD

Calidad y Fiabilidad

- Tolerancia de potencia positiva: 0~+5W
- Clasificación de los módulos por tipo de corriente para mejorar el rendimiento del sistema
- Resistentes a la Degradación inducida por potencial(PID) de acuerdo con IEC62804

Certificados

- IEC 61215, IEC 61730, UL1703, CEC Listed, MCS y CE
- ISO 9001: 2008: - Sistemas de gestión de la calidad
- ISO 14001: 2004:- Sistemas de gestión medioambiental
- BS OHSAS 18001: 2007: - Sistemas de gestión de salud y seguridad ocupacional
- Política medioambiental: Primera compañía solar en China en completar el programa de evaluación de huella de carbono de Intertek y recibir la verificación Green Leaf Mark por sus productos



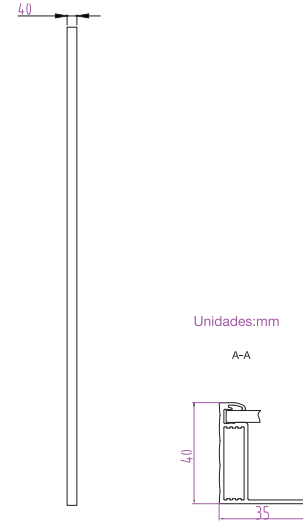
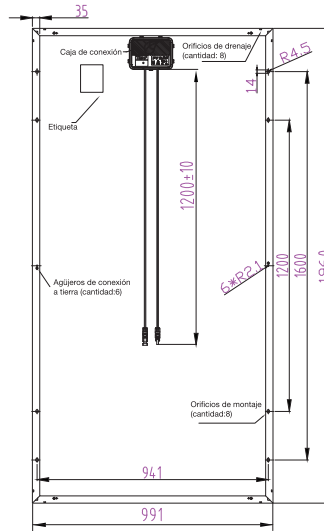
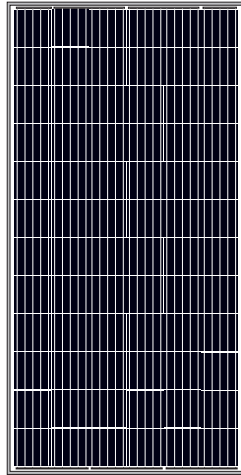
Especificaciones sujetas a pruebas y cambios técnicos.
 JA Solar se reserva el derecho de la interpretación final.

JAP72S01 310-330/SC

1000V Cypress Series

www.tiendaisso9000.com
www.isso9000.com.mx

PLANOS DE INGENIERÍA



■ Puede obtenerse una longitud de cable personalizada

PARÁMETROS MECÁNICOS

Célula	Poli 156.75x156.75mm
Peso	22.5kg±3%
Dimensiones	1960x991x40mm
Tamaño de la sección transversal de cables	4mm ²
Número de células y conexiones	72 (6x12)
Caja de conexión	TS4-D IP67, 3 Diodos
Conector	Compatible con MC4
Configuración de embalaje	27 por tarima (pallet)

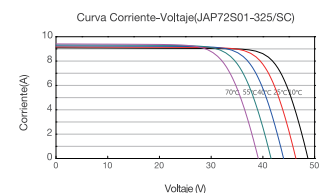
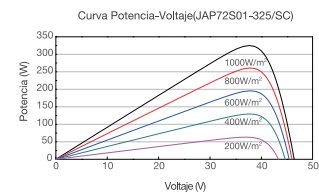
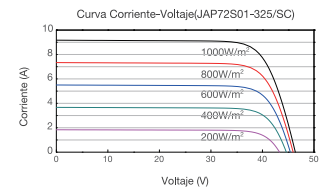
CONDICIONES DE FUNCIONAMIENTO

Voltaje máximo del sistema	1000V DC (IEC)
Temperatura de operación	-40°C ~ +85°C
Capacidad máxima de fusible	20A
Carga estática máxima, delantera	5400Pa
Carga estática máxima, trasera	2400Pa
Temperatura de operación normal de las células (NOCT)	45±2°C
Clase de aplicación	Clase A

PARÁMETROS ELÉCTRICOS EN STC

TIPO	JAP72S01 -310/SC	JAP72S01 -315/SC	JAP72S01 -320/SC	JAP72S01 -325/SC	JAP72S01 -330/SC
Potencia nominal máxima (Pmax) [W]	310	315	320	325	330
Tensión de circuito abierto (Voc) [V]	45.56	45.85	46.12	46.38	46.40
Tensión a potencia máxima (Vmp) [V]	36.89	37.09	37.28	37.39	37.65
Corriente de cortocircuito (Isc) [A]	8.92	9.01	9.09	9.17	9.28
Corriente a potencia máxima (Imp) [A]	8.40	8.49	8.58	8.69	8.77
Eficiencia del módulo [%]	15.96	16.22	16.47	16.73	16.99
Tolerancia de potencia	-0 ~ +5W				
Coefficiente de temperatura de Isc (α _{Isc})	+0.058%/°C				
Coefficiente de temperatura de Voc (β _{Voc})	-0.330%/°C				
Coefficiente de temperatura de Pmax (γ _{Pmp})	-0.410%/°C				
Condiciones de prueba estándar (STC)	Irradiancia 1000 W/m ² , temperatura de célula 25 °C, masa de aire (AM) 1.5G				

CARACTERÍSTICAS



PARÁMETROS ELÉCTRICOS BAJO NOCT

TIPO	JAP72S01 -310/SC	JAP72S01 -315/SC	JAP72S01 -320/SC	JAP72S01 -325/SC	JAP72S01 -330/SC
Potencia máxima nominal (Pmax) [W]	229	233	237	241	244
Tensión de circuito abierto (Voc) [V]	42.63	42.84	43.04	43.24	43.41
Tensión a potencia máxima (Vmp) [V]	34.32	34.45	34.64	34.82	35.03
Corriente de cortocircuito (Isc) [A]	7.18	7.23	7.29	7.35	7.40
Corriente a potencia máxima (Imp) [A]	6.68	6.77	6.84	6.91	6.97
Temperatura de operación normal de las células (NOCT)	Irradiancia 800 W/m ² , temperatura ambiente 20 °C, velocidad del viento 1m/s, masa de aire (AM) 1.5G				

ISSO POWER 9000 SA DE CV

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