

144 CELLS

520-530 Wp

182.00 MM

MODULE CODE: SSPXXXS7-144



### UP TO 70% LOWER WEIGHT

The use of ultra-light composite materials allowed the module weight to be reduced by up to 70%



### LARGE BENDING RADIUS

The bending radius of the module is as much as 0.3 m, so installation is possible on an uneven surface



### REVOLUTIONARY EFFICIENCY UP TO 19.71%

**HIEFFICIENCY** technology is a guarantee of the highest performance and power as well as lower BOS cost



### QUICK INSTALLATION

Quick bonding technology reduces the time needed to install photovoltaic modules by up to 50%

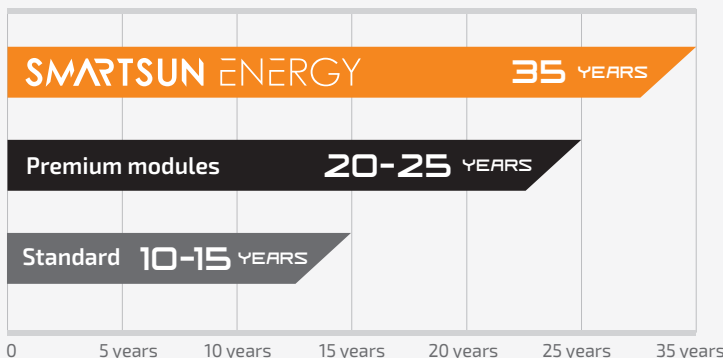


### TÜV SÜD CERTIFIED RESISTANCE

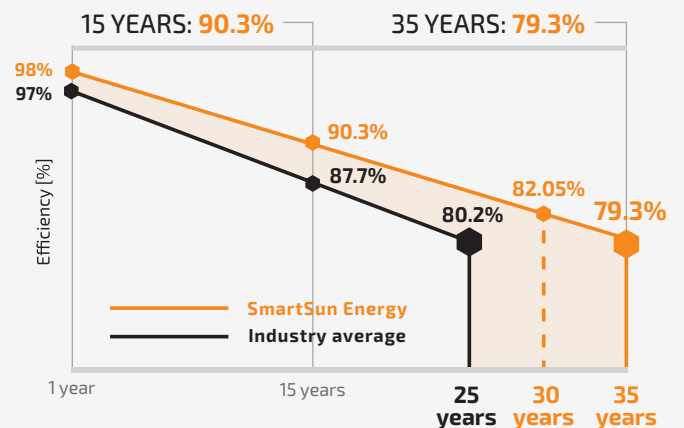
TÜV SÜD certificates confirming salt mist and ammonia resistance as well as PID

PRODUCT WARRANTY: **35 YEARS**

SMARTSUN ENERGY VS OTHER MODULES:



LINEAR POWER WARRANTY:



SMARTSUN ENERGY  
WE MAKE IT GREEN

## PRODUCT SPECIFICATION (STC)

MODULE CODE: SSPxxxS7-144

Maximum power	$P_{MPP}$	520 W	525 W	530 W
Maximum power voltage	$U_{MPP}$	40.60 V	40.80 V	41.00 V
Maximum power current	$I_{MPP}$	12.83 A	12.88 A	12.93 A
Open circuit voltage	$U_{OC}$	48.80 V	49.00 V	49.20 V
Short circuit current	$I_{SC}$	13.70 A	13.74 A	13.78 A
Module efficiency	$\eta$	19.34 %	19.52 %	19.71 %
Maximum system voltage	$U_{SYS}$	DC 1500 V (TÜV) / DC 1000 V (TÜV)		
Maximum series fuse rating	$I_{FUSE}$	25 A		

Electrical parameters at standard test conditions (STC: AM=1,5; 1000 W/m<sup>2</sup>; Cells temperature: 25°C)

## PRODUCT SPECIFICATION (NMOT)

Maximum power	$P_{MPP}$	387 W	391 W	395 W
Maximum power voltage	$U_{MPP}$	36.90 V	37.10 V	37.30 V
Maximum power current	$I_{MPP}$	10.49 A	10.54 A	10.59 A
Open circuit voltage	$U_{OC}$	44.90 V	45.10 V	45.30 V
Short circuit current	$I_{SC}$	11.10 A	11.13 A	11.16 A

Electrical parameters at standard test conditions (STC: AM=1,5; 800 W/m<sup>2</sup>; Cells temperature: 20°C, Wind speed: 1 m/s)

## MECHANICAL DATA

Dimensions	2246 x 1197 x 2 mm
Weight	8.0 kg
Cover	Lightweight, high transparent polymer materials
Output cables	Length: 2 x 140 cm Section: 4 mm <sup>2</sup>
Connectors	MC4 compatible, IP68
Cell type	Monocrystalline; Half-Cell (9BB) 91.00 x 182.00 mm
Number of cells	144 cells
Bypass diodes	3 pcs.

## TEST, CERTIFICATIONS AND WARRANTIES

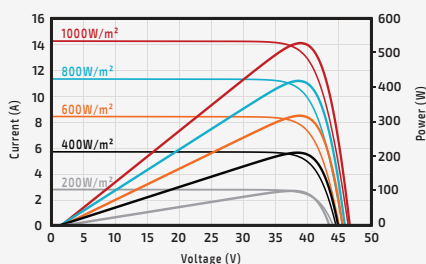
Standard tests	IEC 61215, IEC 61730, IEC 61701 IEC 62716, Utility class „A“ Protection class „II“, LID < 3% PPP 58042B
Fire resistance	Class „C“
System certs	ISO 9001, ISO 14001, ISO 45001
Certifications	TÜV SÜD, CE, WEEE
Extreme wind and snow loads testing	Wind: 2400 Pa Snow: 5400 Pa
Power tolerance	from 0 to +5W
Junction box	IP68
Warranties	35 years product warranty 35 years power warranty (79.3%)

## PACKING CONFIGURATION

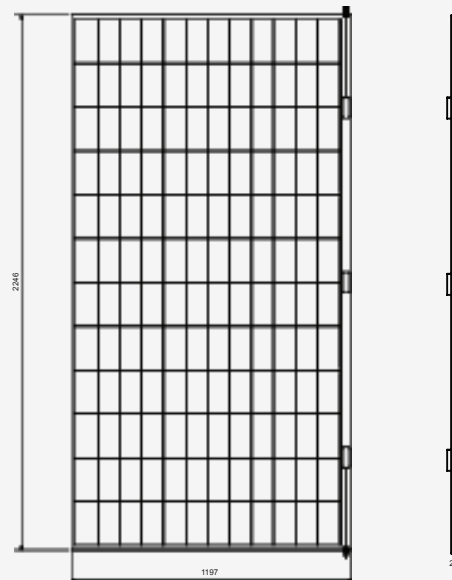
Container	40'HQ	Pieces per pallet	66
Pallets per container	17	Pieces per container	1122

## TEMPERATURE CHARACTERISTICS

$I_{SC}(T_K, I_{SC})$	0.048 %/°C	$V_{OC}(T_K, V_{OC})$	-0.28 %/°C
$P_{MPP}(T_K, P_{MPP})$	-0.35 %/°C	NMOT	+42 ± 2°C
Operating temperature	from -40 to +85°C		



## DIMENSIONS AND STRUCTURE (MM)



DUE TO CONTINUOUS PRODUCT IMPROVEMENT, SMARTSUN ENERGY RESERVES THE RIGHT TO MAKE CHANGES TO THE TECHNICAL DATA SHEET WITHOUT PRIOR NOTICE.