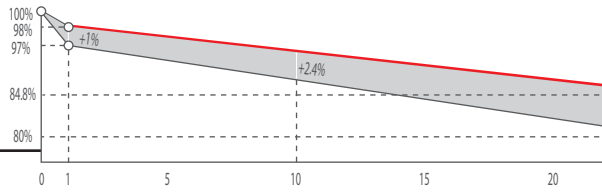
Features

Module e cienc up to **20.9%** achieved through advanced cell technolog and manufacturing process

Up to **2%** po er loss caused b current mismatch could be diminish b current sorting technique to ma imi e s stem po er output

More po er output in eak light condition, such as cloud , morning and sunset

Industr -leading Warrant **



First ear po er degradation: 2%

Annual degradation: 0.55%

Product arrant : 12

linear arrant : 25

* Please refer to Suntech Standard Module Installation Manual for details.
** Please refer to Suntech Limited Warrant for details.

High Efficiency

2

Weak light

Harsh

Mechanical Characteristics

Solar Cell	Monocr stalline 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 \ Back Glass	3.2 mm (0.126 inches) full tempered glass
Output Cables	4.0 mm², (-) 350 mm and (+) 160 mm in length or customi ed length
Junction Bo	IP68 rated (3 b pass diodes)
Operating Module Temperature	-40 to +85
Ma imum S stem Voltage	1500 V DC (IEC)
Ma imum Series Fuse Rating	20 A
Po er Tolerance	0/+5 W
Refer. Bifacialit Factor	(70 5)%
Packing Con guration	Packaging bo dimensions (mm) : 2125 1130 1205 Packaging bo eight (kg) : 814 31 Pieces per pallet 155 Pieces per container / 20' GP 682 Pieces per container / 40' HC

For tracker installation, please turn to Suntech for mechanical load information.

Electrical Characteristics

Module T pe	STP**455**S-B72/Pnhg		STP**450**S-B72/Pnhg		STP**445**S-B72/Pnhg		STP**440**S-B72/Pnhg		STP**435**S-B72/Pnhg	
Testing Condition	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Ma imum Po er (Pma /W)	455	343.1	450	339.4	445	335.8	440	332.7	435	328.9
Optimum Operating Voltage (Vmp/V)	41.6	38.4	41.4	38.2	41.2	38.0	41.0	37.8	40.8	37.7
Optimum Operating Current (Imp/A)	10.94	8.94	10.87	8.89	10.81	8.84	10.74	8.78	10.67	8.73
Open Circuit Voltage (Voc/V)	49.4	46.3	49.2	46.2	49.0	46.0	48.8	45.8	48.6	45.7
Short Circuit Current (Isc/A)	11.67	9.42	11.61	9.37	11.54	9.31	11.47	9.25	11.40	9.20
Module E cienc (%)	20.9		20.7		20.4		20.2		20.0	

STC: Irradiance 1000 W/m², module temperature 25, AM=1.5; NMOT: Irradiance 800 W/m², ambient temperature 20, AM=1.5, ind speed 1 m/s; Tolerance of Pma is ithin +/- 3%;

Di erent Rearside Po er Gain Reference to 445S Front

Rearside Po er Gain	5%	15%	25%
Ma imum Po er at STC (Pma)	467.3	511.8	556.3
Optimum Operating Voltage (Vmp/V)	41.2	41.2	41.3
Optimum Operating Current (Imp/A)	11.35	12.43	13.51
Open Circuit Voltage (Voc/V)	49.0	49.0	49.1
Short Circuit Current (Isc/A)	12.12	13.27	14.43
Module E cienc (%)	21.5	23.5	25.6

Temperature Characteristics

Nominal Module Operating Temperature (NMOT)	42 2
Temperature Coe cient of Pma	-0.36%/
Temperature Coe cient of Voc	-0.304%/
Temperature Coe cient of Isc	0.050%/

Graphs Current-Voltage & Po er-Voltage (455S)