

High Efficiency **MONO PERC PV MODULE**

TeSirius – *Efficient. Excellent. Energy++*

Bifacial PV Modules P-Type 120 HALF CUT

435 – 455 Wp

10BB Half-cut Cell Technology

New circuit design, lower internal current, lower resistive losses, energy yield is higher

Lower the Risk of Hot Spot

Special circuit design with a much lower hot spot temperature

Excellent Quality & Enhanced Reliability

More than 14+ years' experience of manufacturing and intensive 40+ quality tests above the IEC standard ensures reliable modules

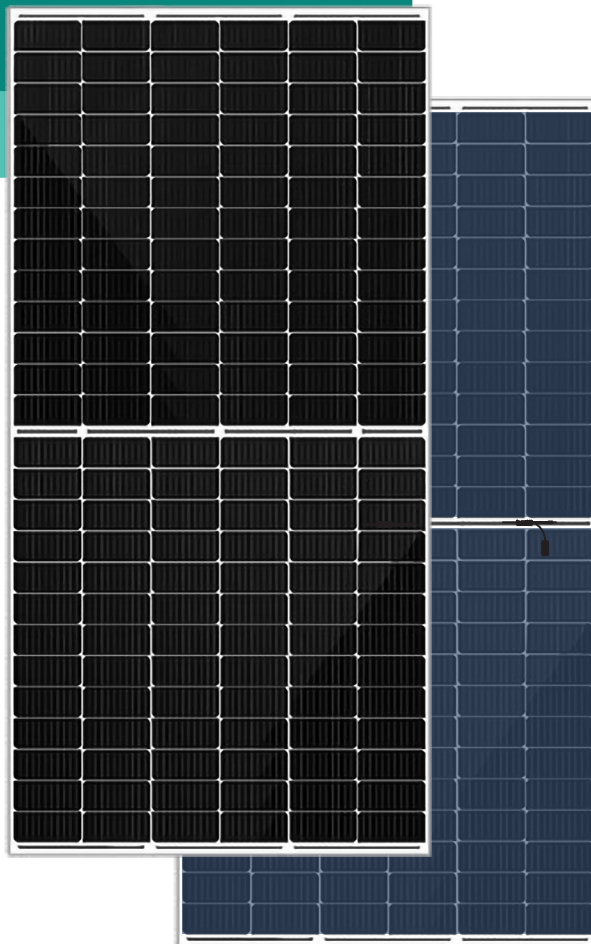
Super strong frame

Module certified to withstand extreme wind (2400 Pascal) and snow loads (5400 Pascal) with 18 microns anodization thickness

Excellent low light performance

Excellent Anti-PID Performance

Tested 3 times of IEC TS 62804

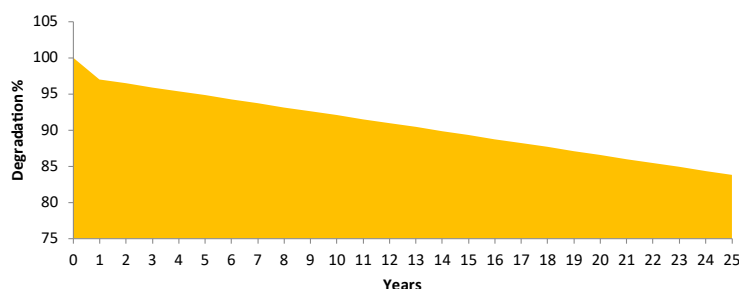


Comprehensive Product and System Certificates*

- IEC 61215: Design qualification and type approval
- IEC 61730: Module safety qualification
- IEC TS 62804: Potential Induced Degradation (PID)
- IEC 61701: Salt Mist Corrosion Test
- IEC 62716: Ammonia Corrosion Test
- ISO 9001: Quality Management System
- ISO 14001: Environmental Management System
- ISO 45001: Occupational Health and Safety Management Systems
- BIS Certified (IS 14286 & IS/IEC 61730 – 1&2)

*Some are under process

91.4% of rated power for 12 years
83.6% of rated power for 25 years



ELECTRICAL CHARACTERISTICS Bi-Facial Gain @ Different Albedo %

	Rated Power P _{max} (Wp)	Open Circuit Voltage Voc(V)	Maximum Power Voltage Vmp(V)	Short Circuit Current Isc(A)	Maximum Power Current Imp(A)	Module Efficiency(%)
SWM11BT2435	435	40.64	33.97	13.67	12.91	20.09
	5%	40.64	33.97	14.35	13.56	21.10
	10%	40.64	33.97	15.04	14.20	22.10
	20%	40.64	33.97	16.40	15.49	24.11
SWM11BT2440	440	40.86	34.20	13.71	12.95	20.33
	5%	40.86	34.20	14.40	13.60	21.34
	10%	40.86	34.20	15.08	14.25	22.36
	20%	40.86	34.20	16.45	15.54	24.39
SWM11BT2445	445	41.08	34.43	13.75	12.99	20.56
	5%	41.08	34.43	14.44	13.64	21.58
	10%	41.08	34.43	15.13	14.29	22.61
	20%	41.08	34.43	16.50	15.59	24.67
SWM11BT2450	450	41.30	34.66	13.79	13.03	20.79
	5%	41.30	34.66	14.48	13.68	21.83
	10%	41.30	34.66	15.17	14.33	22.87
	20%	41.30	34.66	16.55	15.64	24.94
SWM11BT2455	455	41.52	34.89	13.83	13.07	21.02
	5%	41.52	34.89	14.52	13.72	22.07
	10%	41.52	34.89	15.21	14.38	23.12
	20%	41.52	34.89	16.60	15.68	25.22

TEMPERATURE RATINGS

NOCT	45°C ±2°C
Temperature Coefficient of V _{oc}	-0.27%/°C
Temperature Coefficient of I _{sc}	+0.04%/°C
Temperature Coefficient of P _{max}	-0.36%/°C
Operating Range	-40°C to + 85°C
Power Binning	-0/+4.99 W

MAXIMUM RATINGS

System Voltage	1500 V _{dc}
Fuse Rating	30 A
Application / Safety	Class A; Protection Class II Fire - C; Type 4
Snow Load	5400 Pa
Wind Load	2400 Pa
Bifaciality Factor	70±5%

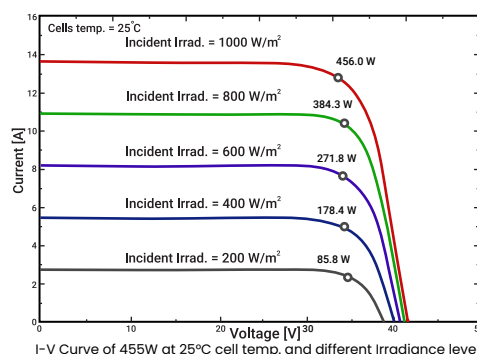
CONSTRUCTION

Cell / Matrix	120; Mono PERC bifacial Half cut 2 x (10 x 6)
Dimension	1909 x 1134 x 35 mm
Weight	23.5kg
Glass	ARC; Low Iron; Tempered; High Light Transmission; 3.2 mm
Encapsulation	High Volume Resistivity and Low MVTR
Substrate	Transparent Backsheet
Frame	18μ Anodized Aluminium Alloy; Twin Wall Profile
Diode	Schottky Bypass Diodes
Locking	Corner Key Type
Junction Box	IP68; Potted
Cable	4 mm ² ; 500 mm Cable Length (Customized Length upto 1000mm)
Connector	MC4 Compatible

PACKING CONFIGURATION

Container	20 feet (open type)	40 feet (HC)
Pieces per Pallet	29	29
Pallets per Container	12	24
Pieces per Container	348	696

Note: Design & Specifications are subjected to change without notice. Electrical Parameters measured at STC only (at 25°C, 1000 W/m²). Test uncertainty for P_{mp} ±3%. Please refer to installation manual and strictly adhere to instruction / guidelines to qualify for warranty terms.



435- 455Wp

