

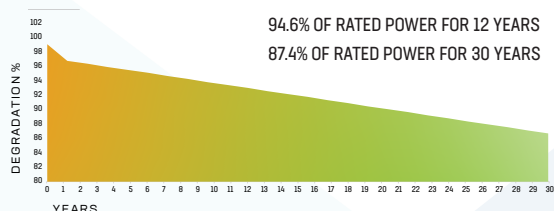
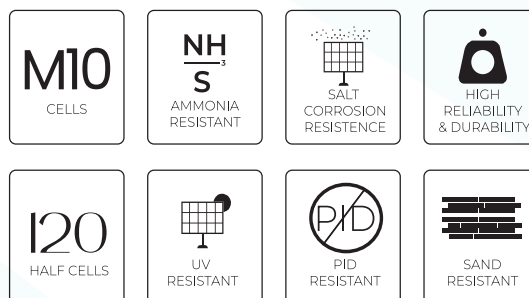
EFFICIENT EXCELLENT ENERGY++

HIGH EFFICIENCY
TOPCON
PV MODULE
Celestia



BIFACIAL PV MODULES N -TYPE 120 HALF CUT

455 - 480 Wp



16BB 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 & ANTI - PID PERFORMANCE

Tested 3 times of IEC TS 62804.



SWELECT's solar modules meet global quality and safety standards, including IEC, UL, MCS, CEC, and BIS.

Comprehensive Product & System Certificates*

- ✓ BIS Certified (IS 14286 & IS/IEC 61730 - 1&2)
- ✓ 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

*Some are under process

Stay powerful when sun shines. And thereafter...

Electrical Characteristics Bi-Facial Gain @ Different Albedo %

ELECTRICAL CHARACTERISTICS	RATE POWER (P _{max})	OPEN CIRCUIT VOLTAGE (V _{oc})	MAXIMUM POWER VOLTAGE (V _{mp})	SHORT CIRCUIT CURRENT (I _{sc})	MAXIMUM POWER CURRENT (I _{mp})	MODULE EFFICIENCY η (%)
SWT15BG2455	455	42.08	34.74	14.00	13.18	21.02
	5%	42.08	34.74	14.70	13.84	22.07
	10%	42.08	34.74	15.40	14.50	23.12
	20%	42.08	34.74	16.80	15.82	25.22
SWT15BG2460	460	42.21	34.88	14.06	13.25	16.46
	5%	42.21	34.88	14.76	13.91	17.28
	10%	42.21	34.88	15.47	14.58	18.10
	20%	42.21	34.88	16.87	15.90	19.75
SWT15BG2465	465	42.34	35.02	14.12	13.32	16.64
	5%	42.34	35.02	14.83	13.99	17.47
	10%	42.34	35.02	15.53	14.65	18.30
	20%	42.34	35.02	16.94	15.98	19.96
SWT15BG2470	470	42.47	35.16	14.18	13.39	16.81
	5%	42.47	35.16	14.89	14.06	17.65
	10%	42.47	35.16	15.60	14.73	18.50
	20%	42.47	35.16	17.02	16.07	20.18
SWT15BG2475	475	42.60	35.30	14.24	13.46	16.99
	5%	42.60	35.30	14.95	14.13	17.84
	10%	42.60	35.30	15.66	14.81	18.69
	20%	42.60	35.30	17.09	16.15	20.39
SWT15BG2480	480	42.73	35.44	14.30	13.53	17.17
	5%	42.73	35.44	15.02	14.21	18.03
	10%	42.73	35.44	15.73	14.88	18.89
	20%	42.73	35.44	17.16	16.24	20.61

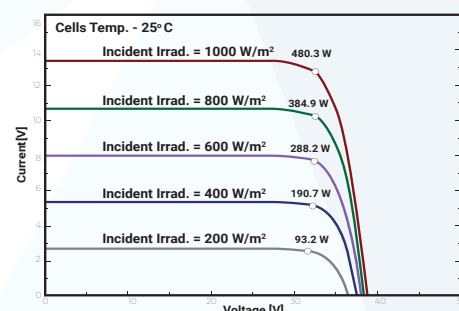
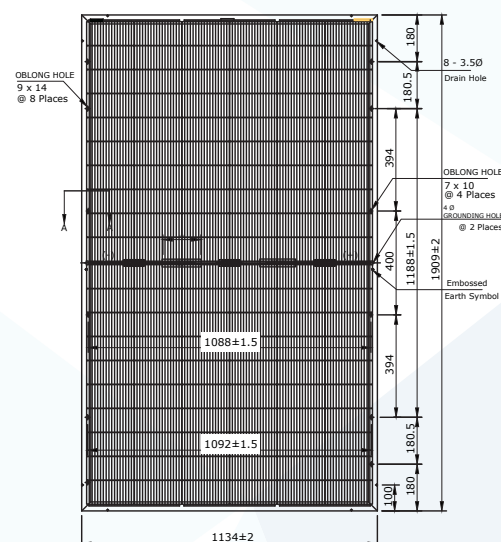
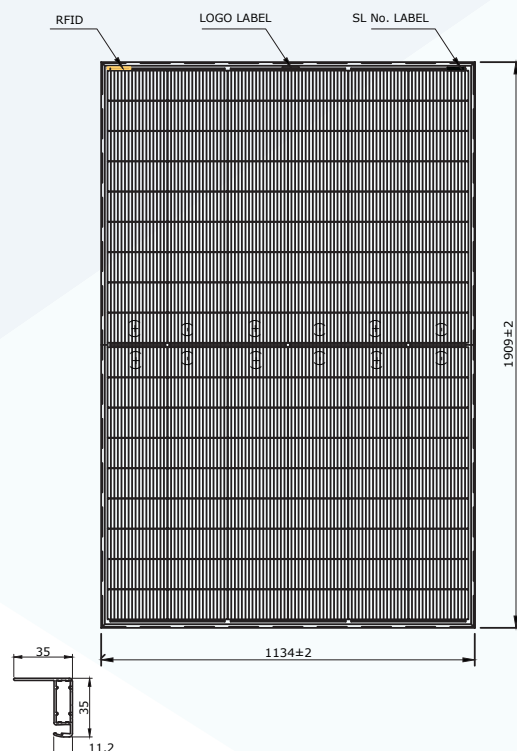
TEMPERATURE RATINGS	
NOCT	45°C ± 2°C
Tc of V _{oc}	-0.25%/°C
Tc of I _{sc}	+0.046%/°C
TC of Power	-0.30%/°C
Operating Range	-40°C to +85°C
Power Binning	-0/+4.99W

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	80±5%

CONSTRUCTION	
Cell / Matrix	N-Type Topcon Cells; 120, 2 x (10 x 6)
Dimension	1909 x 1134 x 35 mm
Weight	27.5 kg
Glass	ARC; Low Iron; Tempered; High Light Transmission; 2.0 mm
Encapsulation	High Volume Resistivity and Low MVTR
Substrate	Low Iron; Semi Tempered; High Light Transmission; 2.0mm
Frame	18μ Anodized Aluminium Alloy; Twin Wall Profile
Diode	Schottky Bypass Diodes
Locking	Corner Key Type
Junction Box	IP68; Junction Box
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.



I-V Curve of 480W at 25°C cell temp. and different Irradiance level

Celebrating
40 years

12 YEARS WARRANTY

swelectes.com

swelect
Stay powerful when sun shines. And thereafter...

SWELECT ENERGY SYSTEMS LIMITED

SWELECT HOUSE

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PV MODULE MANUFACTURING PLANT

SWELECT HHV SOLAR PHOTOVOLTAICS PRIVATE LIMITED

SF NO.169, Sembagounden Pudur, No.51, Kuppepalayam Village,
Coimbatore - 641 107. Tamil nadu, India.

SCAN QR CODE FOR
PRODUCT CATALOGS

