

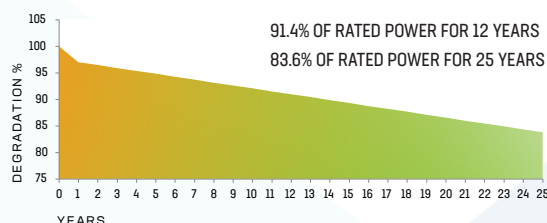
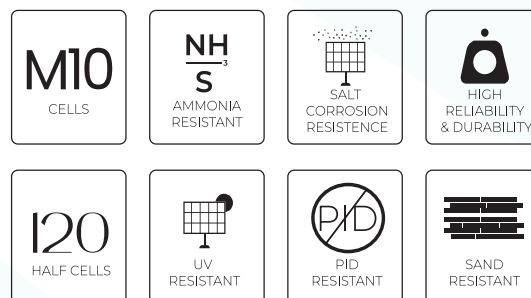
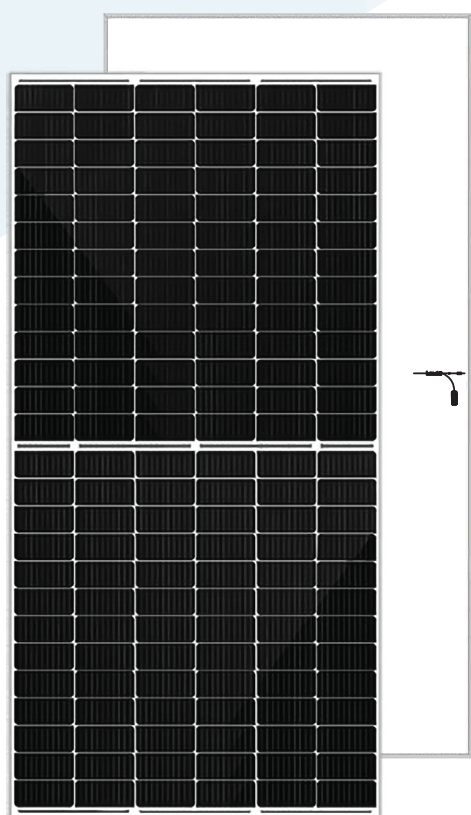
# EFFICIENT EXCELLENT ENERGY++

HIGH EFFICIENCY  
MONO PERC  
PV MODULE  
TeSirius



MONOFACIAL PV MODULES P-TYPE 120 HALF CUT

## 435 - 455 W<sub>p</sub>



### 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 & 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.

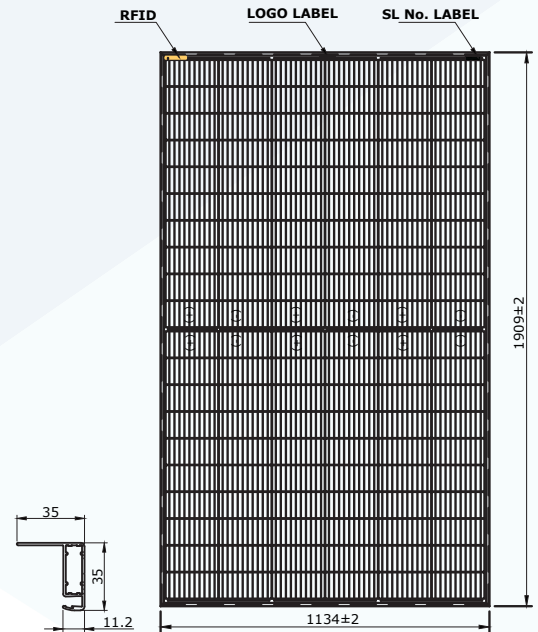
### Comprehensive Product & System Certificates\*

- ✓ 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

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

ELECTRICAL CHARACTERISTICS		SWM11BN 2435	SWM11BN 2440	SWM11BN 2445	SWM11BN 2450	SWM11BN 2455
RATED POWER ( $P_{max}$ )	Wp	435	440	445	450	455
OPEN CIRCUIT VOLTAGE ( $V_{oc}$ )	V	40.64	40.86	41.08	41.30	41.52
MAXIMUM POWER VOLTAGE ( $V_{mp}$ )	V	33.97	34.20	34.43	34.66	34.89
SHORT CIRCUIT CURRENT ( $I_{sc}$ )	A	13.67	13.71	13.75	13.79	13.83
MAXIMUM POWER CURRENT ( $I_{mp}$ )	A	12.91	12.95	12.99	13.03	13.07
MODULE EFFICIENCY ( $\eta$ )	%	20.09	20.33	20.56	20.79	21.02
POWER BINNING	W			-0/ +4.99		



TEMPERATURE RATINGS	
NOCT	45°C ± 2°C
Tc of $V_{oc}$	-0.27%/°C
Tc of $I_{sc}$	+0.04%/°C
Tc of $P_{max}$	-36%/°C
Operating Range	-40°C to +85°C

MAXIMUM RATINGS	
System Voltage	1500 V <sub>dc</sub>
Fuse Rating	25 A
Application / Safety	Class A; Protection Class II Fire - C; Type 4
Snow Load	5400 Pa
Wind Load	2400 Pa

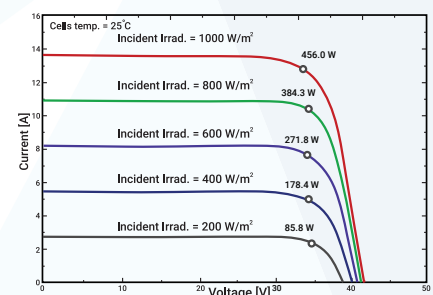
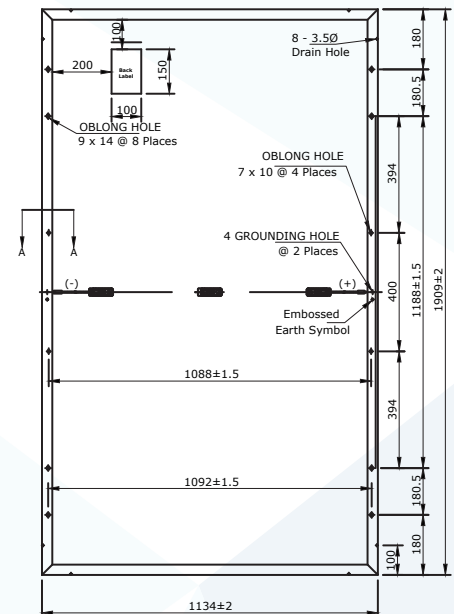
CONSTRUCTION	
Cell / Matrix	120; Mono PERC bifacial Half cut 2 x (10 x 6)
Dimension	1909 x 1134 x 35 mm
Weight	23.5 kg
Glass	ARC; Low Iron; Tempered; High Light Transmission; 3.2 mm
Junction Box	IP68; Potted
Cable	4 mm <sup>2</sup> ; 500 mm Cable Length (Customized Length upto 1000 mm)
Connector	MC4 Compatible
Diode	Schottky Bypass Diodes
Frame	18 μ Anodized aluminum alloy; twin wall profile
Locking	Corner key type
Encapsulation	High Volume Resistivity and Low MVTR
Substrate	White Backsheet

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 / m<sup>2</sup>). Test uncertainty for Pmp ±3% Please refer to installation manual and strictly adhere to instruction / guidelines to qualify for warranty terms.



swelectes.com



I-V Curve of 455W at 25°C cell temp. and different Irradiance level

## 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

