

Nova

Unimacts, with over 20 years in the renewable industry, is a top provider of Solar Piles, Torque Tubes, Solar Panels, and solar equipment for North American Developers, EPCs, and Tracker OEMs. Leveraging a global supply chain and factories in the US, India, and South East Asia, Unimacts delivers premium, cost-efficient solutions to major solar customers.

NOVA-72HD 540-555M

BIFACIAL DUAL GLASS MODULE

High Power Output

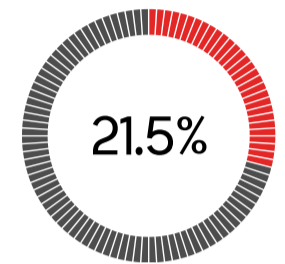
Highly efficient cells with MBB and high density encapsulation ensures higher power output

High Reliability

Excellent harsh test results and advanced half-cell tech improve product reliability for long-term life cycle



MAXIMUM POWER OUTPUT



MAXIMUM MODULE EFFICIENCY

More Power Generation

Gallium doped wafers reduce annual power degradation, optimized circuit design ensures more power generation under shading

High ROI

Bifacial power generation reduces BOS and system LCOE dramatically, promoting the project ROI



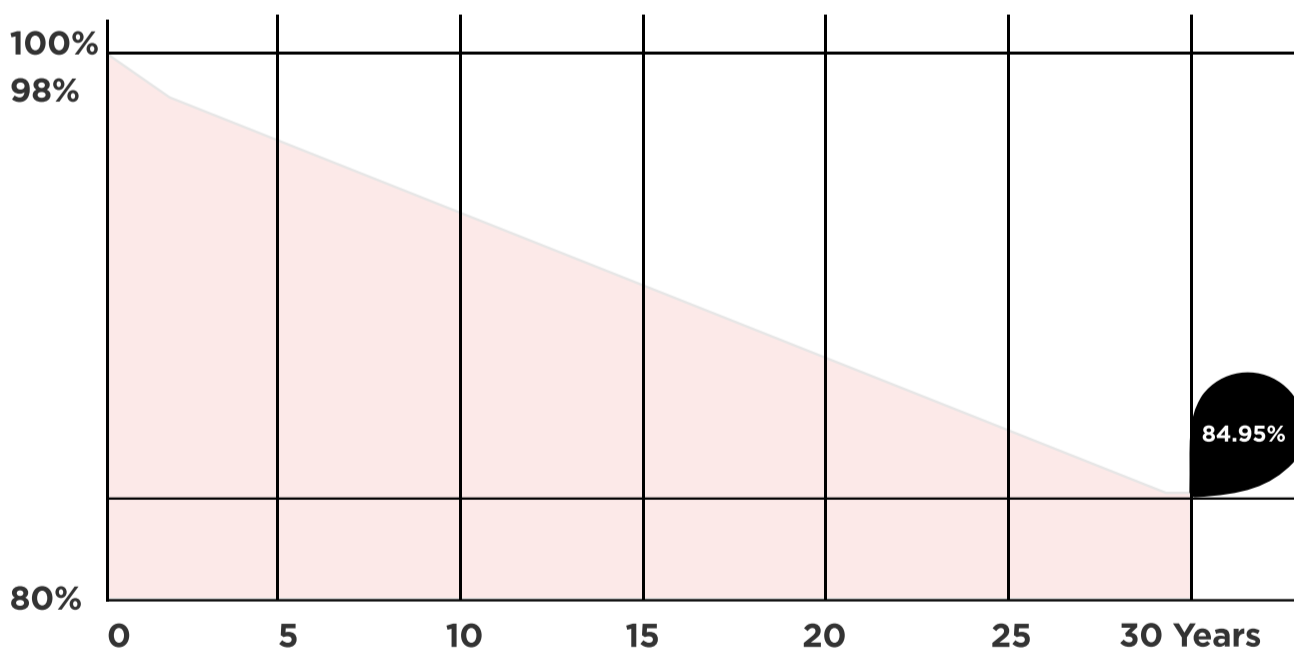
12 YEARS PRODUCT WARRANTY



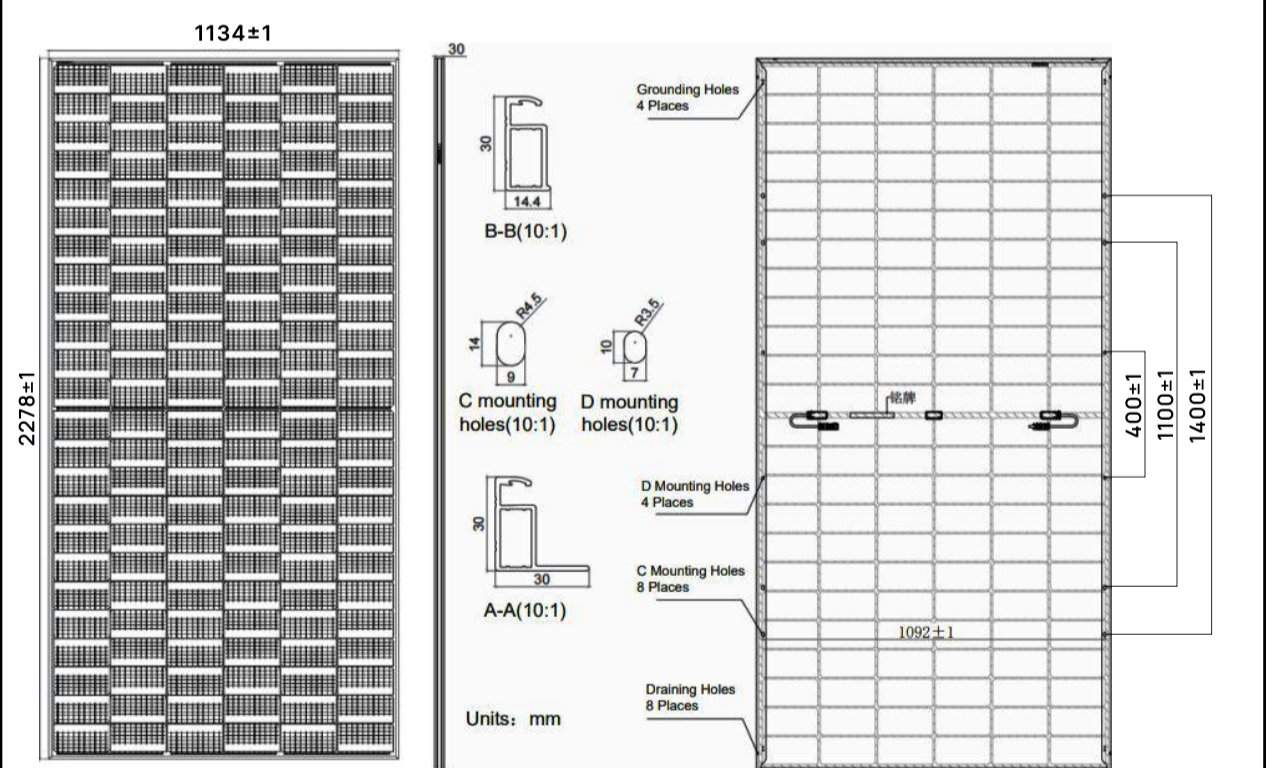
30 YEARS LINEAR POWER WARRANTY

≤ 2% 1st YEAR DEGRADATION

≤ 0.45% ANNUAL DEGRADATION

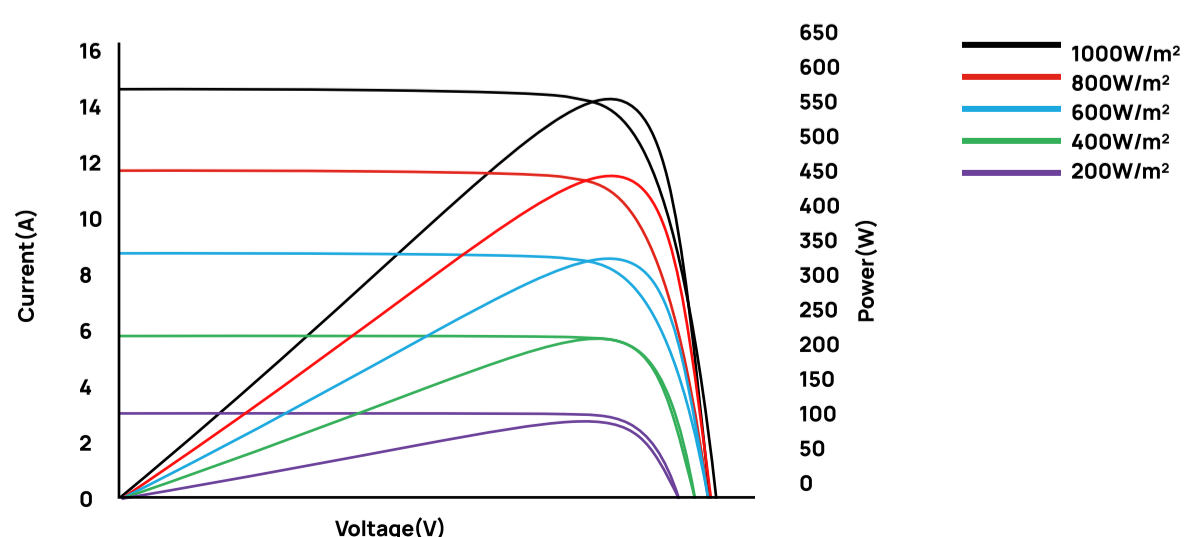


ENGINEERING DESIGN

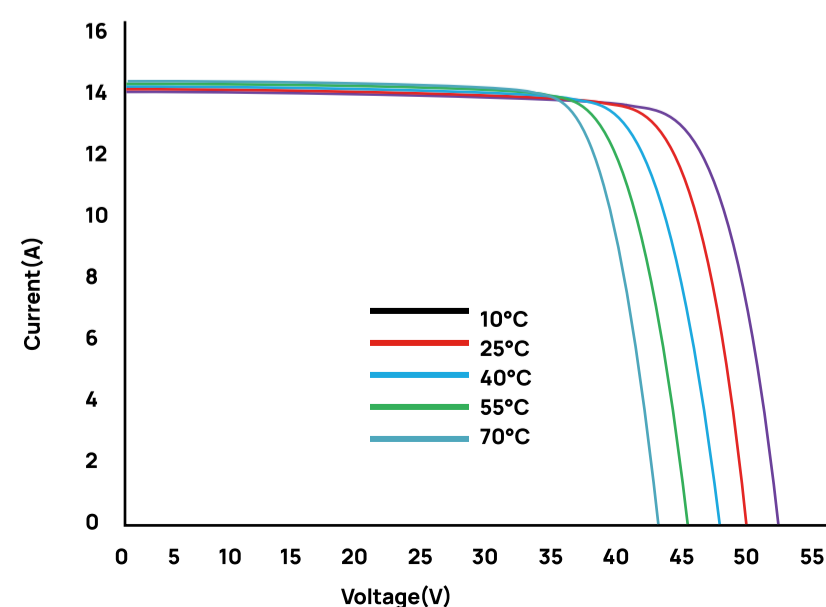


CHARACTERISTICS

I-V/P-V CURVE AT DIFFERENT IRRADIATION
SS8-72HD-545M



I-V CURVE AT DIFFERENT TEMPERATURE
SS8-72HD-545M



ELECTRIC CHARACTERISTICS (STC)

MODULE TYPE	SS8- 72HD -525M		SS8- 72HD -530M		SS8- 72HD -535M		SS8- 72HD -540M		SS8- 72HD -545M		SS8- 72HD -550M		SS8- 72HD -555M	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
MAXIMUM POWER (Pmax) [W]	525	397	530	401	535	405	540	408	545	412	550	416	555	420
OPEN- CIRCUIT VOLTAGE (Voc)[V]	49.14	45.99	49.31	46.15	49.44	46.31	49.61	46.43	49.76	46.55	49.91	46.68	50.03	46.84
MAXIMUM POWER VOLTAGE (Vmp) [V]	41.16	38.70	41.32	38.77	41.46	38.84	41.65	39.00	41.81	39.21	41.97	39.44	42.15	39.67
SHORT- CIRCUIT CURRENT (Isc)[A]	13.64	10.91	13.73	10.98	13.78	11.05	13.85	11.10	13.92	11.13	14.02	11.18	14.07	11.22
MAXIMUM POWER CURRENT (Imp) [A]	12.75	10.25	12.83	10.34	12.90	10.43	12.97	10.47	13.04	10.51	13.10	10.55	13.17	10.59
MODULE EFFICIENCY	20.32%		20.52%		20.71%		20.90%		21.10%		21.29%		21.48%	
POWER TOLERANCE	0-+5W													
TEMPERATURE COEFFICIENT OF Isc	+0.045%/°C													
TEMPERATURE COEFFICIENT OF Voc	-0.275%/°C													
TEMPERATURE COEFFICIENT OF Pmax	-0.350%/°C													

Irradiation 1000W/m², Cell Temperature 25°C, AM=1.5 NMOT: Irradiance 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s, AM=1.5

MECHANICAL CHARACTERISTICS

CELL TYPE	MONO PERC (M10)
NUMBER OF CELLS	144(6X24)
DIMENSIONS	2278 X 1134 X 30mm
WEIGHT	31.2 Kg
GLASS	FRONT GLASS, 2.0mm AR COATED TEMPERED GLASS, BACKGLASS,2.0mm GLAZED TEMPERED GLASS
FRAME	SILVER, ANODIZED ALUMINUM ALLOY
OUTPUT CABLES	4mm ² (IEC), 12AWG (UL), 300mm (INCLUDING CONNECTOR) OR CUSTOMIZED LENGTH
JUNCTION BOX	IP68 RATED, 3 DIODES
CONNECTOR	MC4-EVO2 OR MC4 COMPATIBLE
PACKAGING	36 PIECES/PALLET, 720 PIECES/40' CONTAINER
MECHANICAL LOAD FRONT SNOW	5400 Pa
MECHANICAL LOAD BACK WIND	2400 Pa

OPERATING CONDITIONS

MAXIMUM SYSTEM VOLTAGE	1500V DC(IEC)
OPERATING TEMPERATURE	-40°C~+85°C
MAXIMUM SERIES FUSE RATING	25 A
NOMINAL OPERATING CELL TEMPERATURE	45±2°C
BIFACIALITY	70±10%

BIFACIAL OUTPUT-REAR SIDE POWER GAIN (545W)

POWER GAIN	5%	10%	15%	20%	25%
MAXIMUM POWER (Pmax) [W]	572	600	627	654	681
OPEN- CIRCUIT VOLTAGE (Voc)[V]	49.77	49.77	49.77	49.87	49.87
MAXIMUM POWER VOLTAGE (Vmp) [V]	41.81	41.82	41.82	41.92	41.92
SHORT- CIRCUIT CURRENT (Isc)[A]	14.59	15.29	15.99	16.68	17.37
MAXIMUM POWER CURRENT (Imp) [A]	13.69	14.35	15.01	15.64	16.26

COMPREHENSIVE CERTIFICATES OF OEM

- ✓ IEC61215
- ✓ IEC61730
- ✓ IEC61701:Salt mist corrosion test
- ✓ IEC62716: Ammonia corrosion test
- ✓ IEC60068: Dust and Sand test
- ✓ ISO9001:2015: Quality Management System
- ✓ ISO14001:2015: Environment Management System
- ✓ ISO45001:2018: Occupational Health and Safety Management Systems

