



**AATMANIRBHAR**  
ENERGY FOR NATION

**URANUS SERIES** 0~+5W  
**495-520W**  
MONOPERC Monocrystalline Bifacial Module  
MODEL NO- ASPL XXXMP132



#### Higher Power Output

Module power increases by 5-25% generally, bringing significantly lower LCOE and higher IRR. 0~5w positive tolerance output warranty.



#### PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and material control.



#### Optimal Choice for Ultra-large Power Plant

Contribute to Lower BOS cost and LCOE.



#### Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance, Lower temperature coefficient and operating temperature.



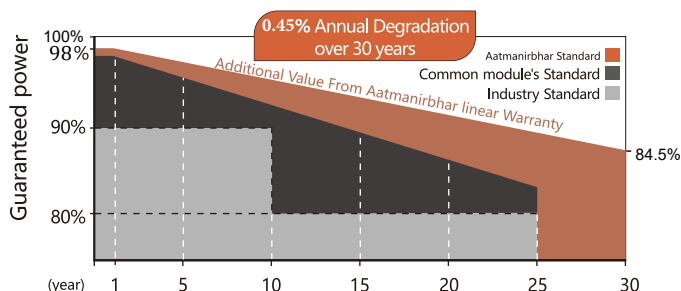
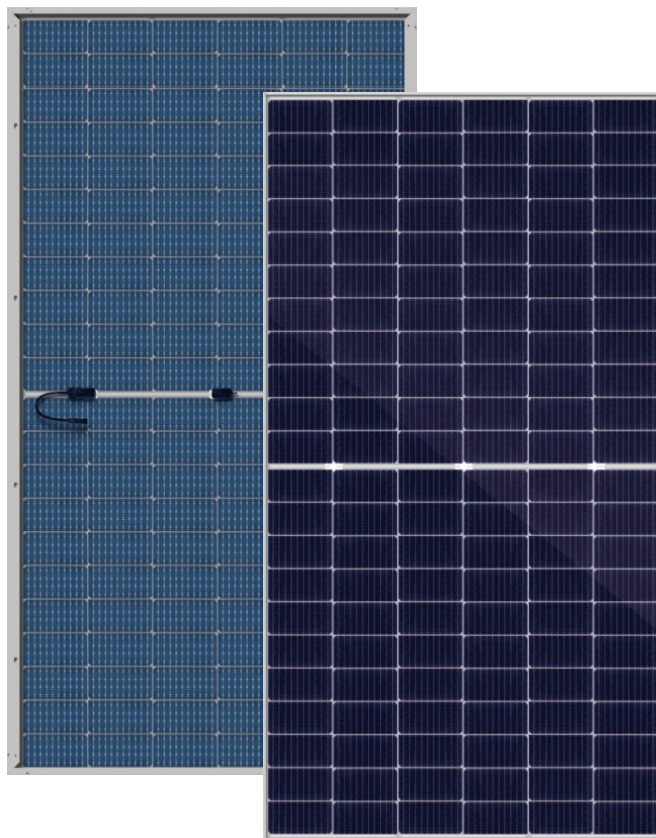
#### More Outstanding Low-light Performance

Higher power output even under low-light environments like on cloudy days.



#### Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).



MAXIMUM EFFICIENCY %

**21.89**

CELL TYPE

**M10R<sup>132</sup>CELL**  
**HALF CUT**

MAX. SYSTEM VOLTAGE

**1500** V<sub>DC</sub>

BIFACIALITY FACTOR

**75%**

#### PRODUCT CERTIFICATES



#### SYSTEM CERTIFICATES

IS/IEC 61215 : 2021, IS/IEC 14286, IS/IEC 61730, IS/IEC 61730, IEC 61701, IEC 62716, IEC 60068-2-68, IEC 62804

#### INTERNATIONAL ORGANIZATION FOR STANDARDIZATION:

- ISO 9001:2015/ Quality Management System
- ISO 14001:2015/ Environmental Management System
- ISO 45001:2018/ Occupational Health and Safety Management System

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## ELECTRICAL CHARACTERISTICS (STC\*)

| Model Number                              | ASPL520MP132 | ASPL515MP132 | ASPL510MP132 | ASPL505MP132 | ASPL500MP132 | ASPL495MP132 |
|-------------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Peak Power P <sub>max</sub> (Wp)          | 520          | 515          | 510          | 505          | 500          | 495          |
| Open Circuit Voltage V <sub>oc</sub> (V)  | 46.20        | 46.00        | 45.75        | 45.34        | 45.14        | 45.28        |
| Short Circuit Current I <sub>sc</sub> (A) | 13.64        | 13.59        | 13.56        | 13.51        | 13.47        | 13.43        |
| Maximum Voltage V <sub>mp</sub> (V)       | 40.31        | 39.98        | 39.72        | 39.39        | 39.04        | 38.72        |
| Maximum Current I <sub>mp</sub> (A)       | 12.90        | 12.88        | 12.84        | 12.82        | 12.81        | 12.78        |
| Module Efficiency (%)                     | 21.89        | 21.68        | 21.47        | 21.26        | 21.05        | 20.84        |

1) STC: 1000 W/M<sup>2</sup> IRRADIANCE, 25°C CELL TEMPERATURE, AM1.5G SPECTRUM ACCORDING TO EN 60904-3 | 2) TOLERANCE OF RATING AT STC (PMPP / ISC / VOC) [%] : 0-3/±5/±5

## WORKING CHARACTERISTICS (NOCT\*)

| Model Number | ASPL520MP132 | ASPL515MP132 | ASPL510MP132 | ASPL505MP132 | ASPL500MP132 | ASPL495MP132 |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Wp           | 419.66       | 415.63       | 411.59       | 407.56       | 403.52       | 399.48       |
| Voc          | 43.83        | 43.65        | 43.40        | 43.02        | 42.83        | 42.96        |
| Isc          | 11.01        | 10.97        | 10.94        | 10.90        | 10.87        | 10.84        |
| Vmp          | 40.31        | 39.98        | 39.72        | 39.39        | 39.04        | 38.72        |
| Imp          | 10.41        | 10.39        | 10.36        | 10.35        | 10.34        | 10.32        |
| Eff          | 18.89        | 18.71        | 18.53        | 18.35        | 18.16        | 17.98        |

3) NOCT: Irradiance 800W/m<sup>2</sup>, Module Temperature 45°C ±2, AM 1.5, Ambient Temperature 20°C, Wind Speed-1m/s, Operating Temperature -40°C~85°C measuring Uncertainty ±2%

## BI-FACIAL OUTPUT BACKSIDE POWER GAIN'S

|     |                       |       |        |       |        |       |        |
|-----|-----------------------|-------|--------|-------|--------|-------|--------|
| 5%  | P <sub>max</sub> (Wp) | 546   | 540.75 | 535.5 | 530.25 | 525   | 519.75 |
|     | Efficiency(%)         | 22.98 | 22.76  | 22.54 | 22.32  | 22.10 | 21.88  |
| 15% | P <sub>max</sub> (Wp) | 598   | 592.25 | 586.5 | 580.75 | 575   | 569.25 |
|     | Efficiency(%)         | 25.17 | 24.93  | 24.69 | 24.69  | 24.20 | 23.96  |
| 25% | P <sub>max</sub> (Wp) | 650   | 643.75 | 637.5 | 637.5  | 625   | 618.75 |
|     | Efficiency(%)         | 27.36 | 27.10  | 26.83 | 26.83  | 26.31 | 26.04  |

## MECHANICAL CHARACTERISTICS

|                                              |                                               |
|----------------------------------------------|-----------------------------------------------|
| Length x Width x Thickness (L x W x T)       | 2094 mm (L) x 1134 mm (W) x 35 mm (T)         |
| Weight                                       | 28 kgs                                        |
| Solar Cells per Module (Units) / Arrangement | 132 cells/ (11x6    11x6)                     |
| Solar Cell Type & Size                       | M10R_10BB_Bifacial Mono PERC Solar cell       |
| Front Glass (Material / Thickness)           | 2mm Low iron solar textured glass             |
| BackGlass(Material/Thickness)                | 2mm Low iron solar textured glass             |
| Junction Box (Protection degree / Material)  | IP68/Weatherproof PPO, 3 Diodes               |
| Cable & Connector (Protection degree / Type) | IP68 rated/4 mm <sup>2</sup> & MC4 compatible |
| Cable cross-section & Length                 | 4 mm <sup>2</sup> & 300mm                     |
| Frame                                        | Anodized Aluminium Alloy                      |

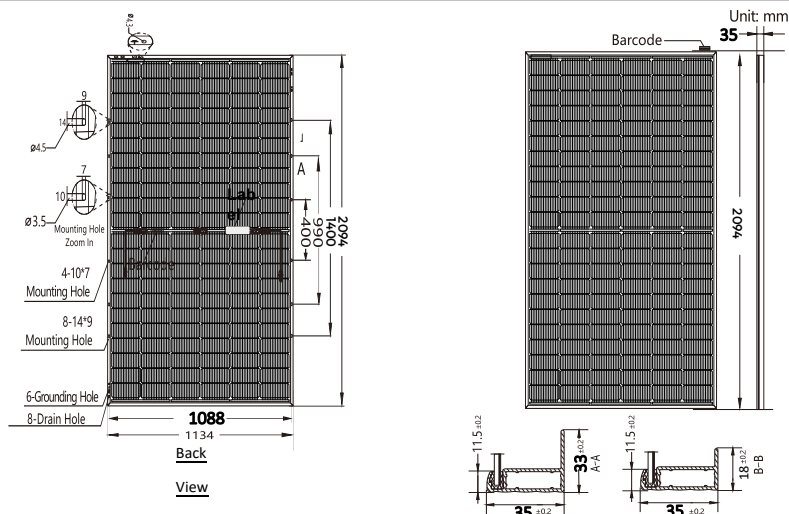
TEMPERATURE COEFFICIENT(T<sub>c</sub>)

|                                          |            |
|------------------------------------------|------------|
| Maximum system voltage                   | 1500V      |
| Fuse Rating(A)                           | 25A        |
| Temperature coefficient P <sub>max</sub> | -0.302%/°C |
| Temperature coefficient I <sub>sc</sub>  | +0.044%/°C |
| Temperature coefficient V <sub>oc</sub>  | -0.256%/°C |

## PACKAGING INFORMATION

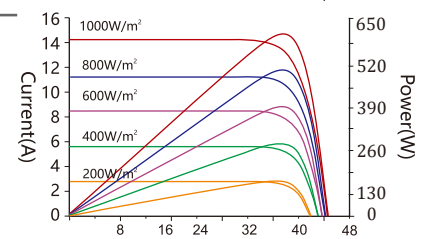
|                            |     |
|----------------------------|-----|
| Quantity /Pallet           | 28  |
| Pallets/Container (40'HC)  | 22  |
| Quantity/Container (40'HC) | 616 |

## Module Dimension



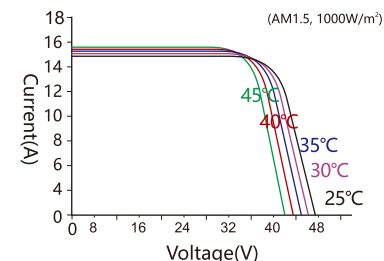
## I-V VARIATION WITH IRRADIANCE

Cells temp.=25°C



## I-V VARIATION WITH TEMPERATURE

(AM1.5, 1000W/m²)



## Reg. Office :

304 - Vraj Valencia, B/H, Mahindra Show Room,  
S.G. Hwy, Sola, Ahmedabad, Gujarat 380060

## Factory Address 1 :

Survey No: 192, At Dudhathal Village, Taluko-Kapadvanj,  
Dist. Kheda, Pin 387 620, Gujarat, India.