

**MONOCRYSTALLINE SILICON | PHOTOVOLTAIC MODULES**

**500Wp – 520Wp**

**144 cell**



**YEAR**

**PRODUCT WARRANTY**

91.2% Power Output Up To 12 Years



**YEAR**

**PERFORMANCE WARRANTY**

80.7% Power Output Up To 30 Years

- Australian Brand manufactured with APS's high standards of design & quality control
- PV Modules with highly reliable and enhanced crack tolerant cells to minimize micro-cracks.
- PV Modules with positive tolerance that delivers reliable higher output.
- PV Modules having high concentrated Photovoltaic cells for better conversion efficiency
- PV Modules made from Half Cut Cells for optimum performance
- Split twin peak junction boxes with special heat dissipation design for minimizing leakage current
- PV Modules with high PID resistance
- High PV Energy yields even under low light and cloudy conditions
- PV Modules made from premium quality Raw Materials and advanced manufacturing processes to guarantee reliability



**MADE IN**  
**INDIA**

## ELECTRICAL TYPICAL VALUE

| Model                                    | APSAM-500/144 | APSAM-505/144 | APSAM-510/144 | APSAM-515/144 | APSAM-520/144 |
|--|---------------|---------------|---------------|---------------|---------------|
| Maximum Power (P <sub>max</sub> )        | 500W          | 505W          | 510W          | 515W          | 520W          |
| Maximum Power Voltage (V <sub>mp</sub> ) | 40.44 V       | 40.66 V       | 40.88 V       | 41.10 V       | 41.32 V       |
| Maximum Power Current (I <sub>mp</sub> ) | 12.39 A       | 12.44 A       | 12.49 A       | 12.54 A       | 12.59 A       |
| Open Circuit Voltage (V <sub>oc</sub> )  | 48.01 V       | 48.16 V       | 48.31 V       | 48.46 V       | 48.61 V       |
| Short Circuit Current (I <sub>sc</sub> ) | 13.09 A       | 13.13 A       | 13.17 A       | 13.21 A       | 13.25 A       |
| Module Efficiency                        | 19.42%        | 19.60%        | 19.79%        | 19.98%        | 20.16%        |

## MECHANICAL CHARACTERISTICS

|            |                      |
|------------|----------------------|
| Dimensions | 2277 X 1133 X 35 MM* |
| Weight     | 28.25 Kg*            |

\*NOTE : STC : Irradiance 1500W/m<sup>2</sup> Module Temperature 25°C AM=1.5

## TEMPERATURE CHARACTERISTICS

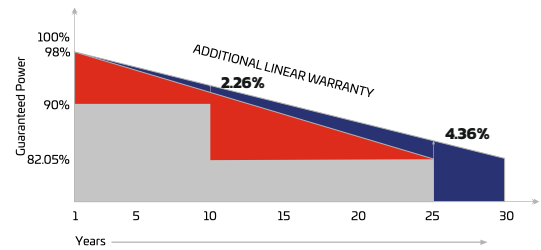
|   |             |
|---|-------------|
| NOCT (Nominal Operation Temperature )           | : 47 ± 2°C  |
| Temperature Coefficient of Voc (β)              | : -0.35%/°C |
| Temperature Coefficient of Isc (α)              | : 0.05%/°C  |
| Temperature Coefficient of P <sub>max</sub> (γ) | : -0.45%/°C |

## ABSOLUTE MAXIMUM RATING

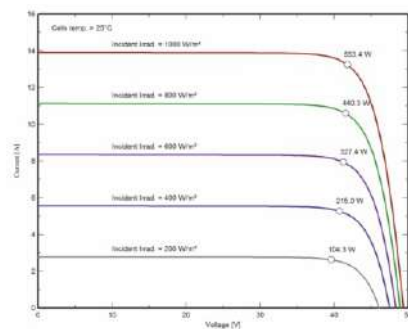
| Parameter                  | Values             |
|----------------------------|--------------------|
| Operating Temperature      | From -40° to 85°C  |
| Maximum Series Fuse Rating | 15 A               |
| Application Class          | IEC & BIS APPROVED |
| Maximum System Voltage     | 1500 Vdc           |

## MODULE CHARACTERISTICS

|                         |   |
|-------------------------|---|
| Solar Cells             | Half-cut mono crystallin                |
| No. of Cells            | 144 Cells                               |
| Glass                   | Low Iron, tempered glass, 3.2 / 2.8 mm* |
| Frame                   | Anodized aluminum alloy                 |
| Junction Box            | IP68                                    |
| Cable & Plug Connectors | 400MM X 4.0MM Mc4 compatible / IP 68    |
| Maximum Snow Load       | 2400 Pascal                             |
| Maximum Wind Load       | 5400 Pascal                             |
| Hailstorm Impact Test   | 80 km/h for 25mm ice ball               |



( Design In Australia | Manufactured in India )



I-V-CURVE

TEMPERATURE CHARACTERISTICS

### Note :

The Specifications in this datasheet are subject subject to change without any notice.  
The Electrical data given here is for reference purpose only.  
Please contact our sales team for any customized solutions.  
Please read safety and installation instructions before using the product.  
Subject to Ahmedabad Jurisdiction.

### \*Warranty :

Please read APS India warranty documents thoroughly on <http://australianpremiumsolar.co.in/warranty/>

**Toll Free : 1800-313-5052**

**Corporate Office :** 301, 3rd floor, Satyamev Eminence, Nr. Shukan Mall, Science City Road, Ahmedabad, Gujarat - 380060.

**Factory :** At & Post - Tajpur, N.H.-08, Ta - Prantij, Dist - Sabarkantha, Gujarat-383205 (India).

\* The images shown are for illustration purposes only and may not be an exact representation of the product.