# **ARKA SERIES**

# WSMD-520 to WSMD-550









Highest reliability & Sustain heavy enhanced crack snow & wind loads tolerant MBB module (5400 Pa & 2400 Pa)



Highly efficient Mono PERC M10 cells



Best in class thermal coefficients



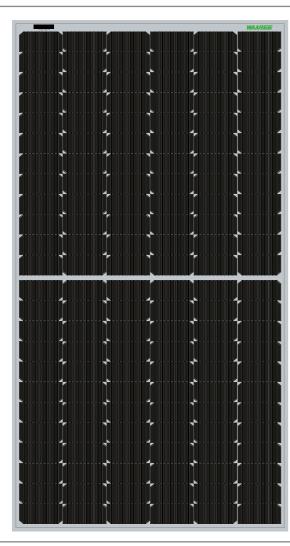
Highest commercial gains, lower LCOE



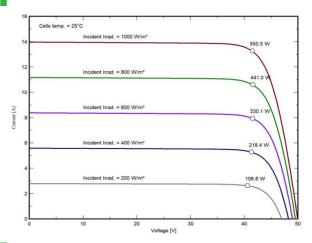
Split junction box improve heat dissipation



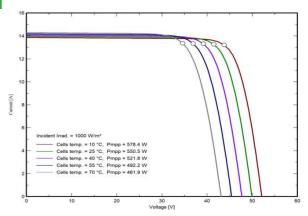
Increase shade tolerance



## I-V VARIATION WITH IRRADIANCE



# I-V VARIATION WITH TEMPERATURE



The Graphs are for reference purpose only. Please consult Waaree technical team for further clarifications



ISO 9001:2015 | ISO 14001:2015 | ISO 45001:2018 Independent assessment of factories by BLACK & VEATCH

### **ARKA SERIES**

### WSMD-520 to WSMD-550



### **ELECTRICAL CHARACTERISTICS**

| Models   | Pmax (W) |       | Vmp (V) |       | Imp (A) |       | Isc (A) |       | Voc (V) |       | Module Eff. (%)    |
|----------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|--------------------|
|          | STC      | NOCT  | STC     | NOCT  | STC     | NOCT  | STC     | NOCT  | STC     | NOCT  | IVIOUUIE EII. (90) |
| WSMD-520 | 520      | 391.9 | 41.14   | 37.70 | 12.65   | 10.34 | 13.55   | 10.94 | 49.01   | 46.00 | 20.20              |
| WSMD-525 | 525      | 395.6 | 41.29   | 37.90 | 12.73   | 10.40 | 13.63   | 11.00 | 49.16   | 46.10 | 20.39              |
| WSMD-530 | 530      | 399.2 | 41.45   | 38.00 | 12.80   | 10.45 | 13.69   | 11.05 | 49.31   | 46.20 | 20.58              |
| WSMD-535 | 535      | 403.1 | 41.60   | 38.20 | 12.88   | 10.51 | 13.76   | 11.11 | 49.46   | 46.40 | 20.78              |
| WSMD-540 | 540      | 406.7 | 41.75   | 38.40 | 12.95   | 10.56 | 13.83   | 11.16 | 49.61   | 46.50 | 20.98              |
| WSMD-545 | 545      | 410.4 | 41.90   | 38.50 | 13.02   | 10.62 | 13.90   | 11.22 | 49.76   | 46.70 | 21.17              |
| WSMD-550 | 550      | 414.1 | 42.03   | 38.80 | 13.08   | 10.68 | 13.96   | 11.27 | 49.91   | 46.80 | 21.37              |

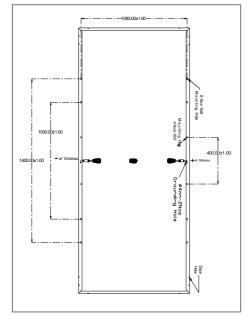
\*Standard Test Conditions (STC) - 1000 W/m² irradiance, Air Mass 1.5 and 25°C cell temperature. Nominal Operating Cell Temperature (NOCT) - 800 W/m² irradiance, Air Mass 1.5, Ambient temperature 20°C and Wind speed 1 m/s. Average power reduction of 4.5% at 200 W/m² as per IEC 60904-1. Measuring Uncertainty ± 3%.

| System Voltage | 1500 V |  | Series Fuse Rating | 25 A |
|----------------|--------|--|--------------------|------|
|----------------|--------|--|--------------------|------|

#### **MECHANICAL CHARACTERISTICS**

| Length x Width x Thickness (L x W x T)       | 2272 mm (L) x 1133 mm (W) x 35 mm (T)               |
|--|---|
| Weight                                       | 27.5 kgs  |
| Solar Cells per Module (Units) / Arrangement | 144 cells / (12x6     12x6)                         |
| Solar Cell Type & Size                       | Mono PERC, 91 x 182 mm                              |
| Front Glass                                  | 3.2 mm Low Iron and Tempered glass with ARC coating |
| Encapsulate                                  | PID & UV Resistant                                  |
| Junction Box (Protection degree/ Material )  | IP68 / Weatherproof PPO                             |
| Cable & Connector (Protection degree / Type) | IP68 rated / MC4 compatible                         |
| Cable cross - section & Length               | 4 mm² & 500mm                                       |
| Frame  | Anodized Aluminium Alloy                            |

### **DESIGN** SPECIFICATIONS



#### 12 Years Product Warranty • 27 Years Power Output Warranty

- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order.
- Refer installation Manual instructions & Waaree warranty statement for terms & conditions.
- Waaree Reserves the right to change the specifications without prior notice.z

## **THERMAL** CHARACTERISTICS

| Temperature coefficient of Current (Isc), $\alpha$ (%/°C) | 0.05      |
|---|-----------|
| Temperature coefficient of Voltage (Voc), ß (%/°C)        | -0.25     |
| Temperature coefficient of Power (Pm), γ (%/°C)           | -0.34     |
| NOCT (°C)   | 43 ± 2    |
| Operating temperature range (°C)                          | -40 to 85 |

Waaree Energies Ltd. is amongst the top Solar Energy Companies and has the country's largest Solar PV Module manufacturing capacity of 12 GW. In addition, it is committed to provide top notch EPC services, project development, rooftop solutions, solar water pumps and also in an Independent Power Producer. Waaree has its presence in over 350+ locations nationally and 68 countries globally.

<sup>\*</sup>If you need specific product certificates, and if module installations are to deviate from our guidance specified in our installation manual, please contact your local Waaree sales and technical representatives.