# AHNAY SERIES 

Bi-25-390 to Bi-25-405
Framed Dual Glass Bifacial module


Better performance under all climatic conditions
output due to revolutionary design


Enhanced power


Split junction box


PID resistant with long term reliability


Sustain heavy wind \& snow loads (2400 pa \& 5400 pa)


Full square Mono PERC cells


## I-I UARIATION WITH IRRADIANCE


| I-V VARIATION WITH TEMPERATURE


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

## INTERNATIONAL \&

NATIONAL CERTIFICATIONS ^

IEC 61215 | IEC 61730 | UL61730

| Models | Pmax (W) |  | Vmp (V) |  | Imp (A) |  | Isc (A) |  | Voc (V) |  | Module Eff. (\%) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |  |
| Bi-25-390 | 390 | 288.3 | 40.61 | 37.29 | 9.61 | 7.73 | 10.09 | 8.16 | 49.29 | 45.48 | 19.05 |
| Bi-25-395 | 395 | 292.1 | 40.88 | 37.52 | 9.68 | 7.78 | 10.16 | 8.22 | 49.62 | 45.78 | 19.29 |
| Bi-25-400 | 400 | 296.7 | 41.15 | 37.89 | 9.73 | 7.83 | 10.23 | 8.27 | 49.72 | 46.24 | 19.54 |
| Bi-25-405 | 405 | 300.3 | 41.36 | 38.13 | 9.80 | 7.88 | 10.29 | 8.32 | 49.95 | 46.52 | 19.78 |

*Standard Test Conditions (STC) - $1000 \mathrm{~W} / \mathrm{m2}$ irradiance, Air Mass 1.5 and $25^{\circ} \mathrm{C}$ cell temperature. Nominal Operating Cell Temperature (NOCT) - $800 \mathrm{~W} / \mathrm{m} 2$ irradiance, Air Mass 1.5 , Ambient temperature $20^{\circ} \mathrm{C}$ and Wind speed $1 \mathrm{~m} / \mathrm{s}$.
Average power reduction of $4.5 \%$ at $200 \mathrm{~W} / \mathrm{m} 2$ as per IEC 60904-1. Measuring Uncertainty $\pm 3 \%$.

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

## BI-FACIAL OUTPUT - BACKSIDE POWER GAIN

|  |  | Bi-25-390 | Bi-25-395 | Bi-25-400 | Bi-25-405 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15\% | Power Output (W) | 449 | 454 | 460 | 466 |
|  | Module Efficiency (\%) | 21.91\% | 22.19\% | 22.47\% | 22.75\% |
| 20\% | Power Output (W) | 468 | 474 | 480 | 486 |
|  | Module Efficiency (\%) | 22.86\% | 23.15\% | 23.45\% | 23.74\% |
| 25\% | Power Output (W) | 488 | 494 | 500 | 506 |
|  | Module Efficiency (\%) | 23.81\% | 24.12\% | 24.42\% | 24.73\% |
| 30\% | Power Output (W) | 507 | 514 | 520 | 527 |
|  | Module Efficiency (\%) | 24.76\% | 25.08\% | 25.40\% | 25.72\% |

## DESIGN SPECIFICATIONS



THERMAL CHARACTERISTICS

| Temperature coefficient of Current (lsc), a $\left(\% /{ }^{\circ} \mathrm{C}\right)$ | 0.05 |
| :--- | :---: |
| Temperature coefficient of Voltage (Voc), $\mathrm{B}\left(\% /{ }^{\circ} \mathrm{C}\right)$ | -0.27 |
| Temperature coefficient of Power (Pm), $\gamma\left(\% /{ }^{\circ} \mathrm{C}\right)$ | -0.37 |
| NOCT $\left({ }^{\circ} \mathrm{C}\right)$ | $45 \pm 2$ |
| Operating temperature range $\left.{ }^{\circ} \mathrm{C}\right)$ | -40 to 85 |

## MECHANICAL CHARACTERISTICS

| Length $\times$ Width x Thickness (L x W x T) | $2029 \mathrm{~mm}(\mathrm{~L}) \times 1009 \mathrm{~mm}(W) \times 40 \mathrm{~mm}(\mathrm{~T})$ |
| :--- | :--- |
| Weight | 28 kgs |
| Solar Cells per Module (Units) / Arrangement | 72 cells / (12x6) |
| Solar Cell | Mono PERC Bifacial |
| Front / Back Glass (Material / Thickness) | 2.0 mm Low Iron and Tempered glass |
| Encapsulate | PID Free \& UV Resistant |
| Junction Box (Protection degree / Material ) | IP68 / Weatherproof PPO |
| Cable \& Connector (Protection degree / Type) | IP68 rated / MC4 compatible |
| Cable cross - section \& Length | $4 \mathrm{~mm}^{2}$ \& 500mm |
| Frame | Anodized Aluminium Alloy |

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[^0]:    Waaree Energies Ltd. is amongst the top Solar Energy Companies and has the country's largest Solar PV Module manufacturing capacity of 2 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 $325+$ locations nationally and 68 countries globally.
    10 Years Product Warranty • 25 Years Power Output Warranty
    ( ^) FEW MODELS MAY BE UNDER CERTIFICATION
    *F 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.

    - 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

