



**DUAL GLASS** | TOPCON MODULE



## NEXT GEN *N-TYPE BIFACIAL* SOLAR PV MODULE

**610 - 625 Wp**

MAXIMUM POWER OUTPUT

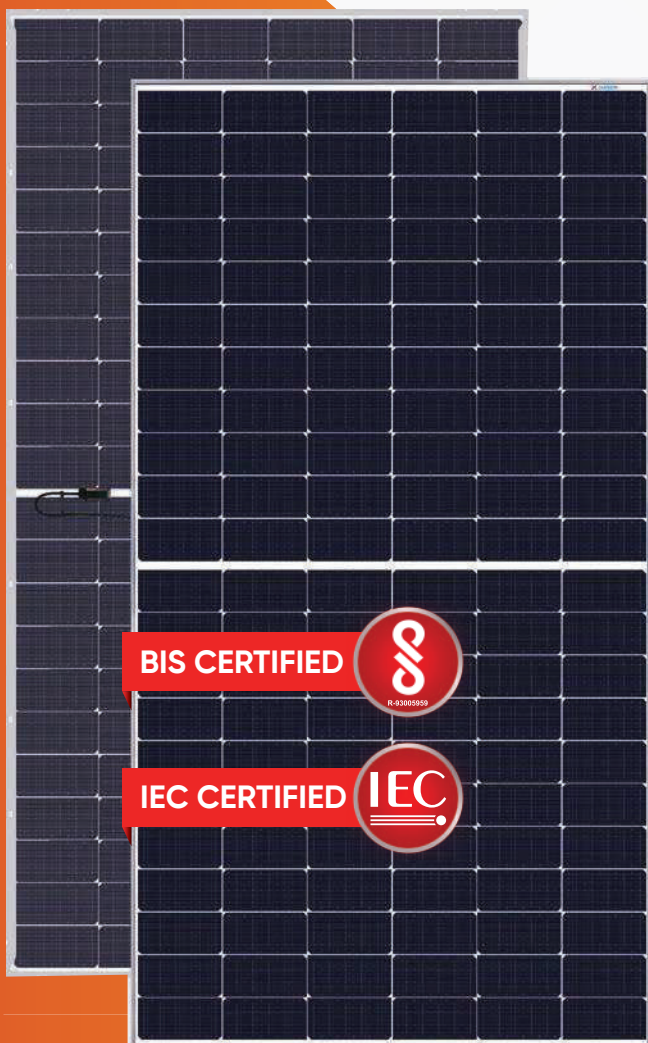
**0~+5W**

POSITIVE POWER TOLERANCE

**23.16 %**

MAXIMUM EFFICIENCY

## RECTANGULAR 132 CELLS, 16BB



Lower LID & Per Year Degradation - Enhanced Power Generation Using TOPCon Technology



Lower LCOE & Faster ROI  
Higher Bifaciality, Lower BOS Cost



Meeting Highest Quality Standards  
Manufactured Using Certified Tier 1 BOM



Improved Temperature Coefficients  
Better Generation at Higher Temperature

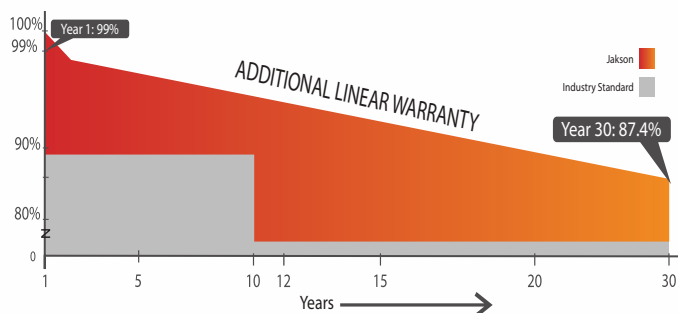


Excellent Module Performance  
Reduced Resistive Loss with MBB Technology



Bifacial gain of Up To 30% with Dual Glass Module,  
Capable of Energy Generation with Both Direct and Reflected Sunlight.

### Linear Performance Warranty

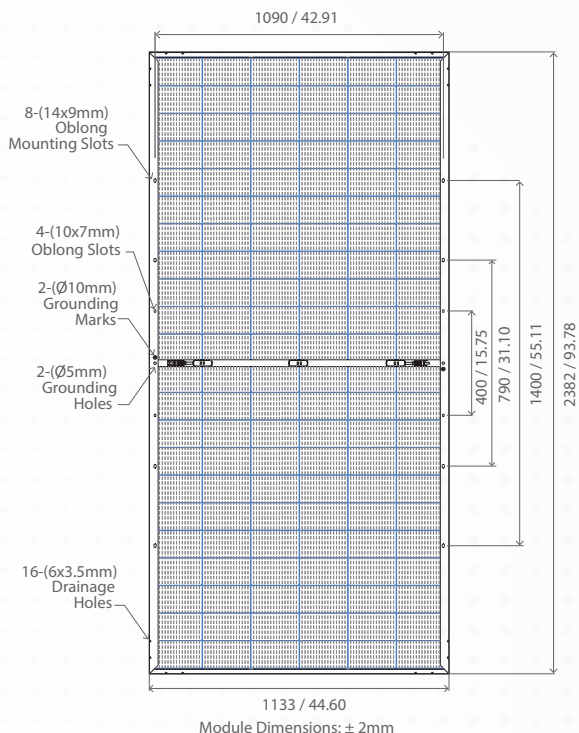


### Approvals and Certificates



IEC 61215, IEC 61730 (1 & II) IEC 61853, IEC 62804,  
IEC 60068, IEC 61701, IEC 62716, IS 14286 (BIS)  
ISO 9001: 2015, 14001: 2015, 45001: 2018 certified

**Dimension of PV Module**  
Unit: mm/in



**ELECTRICAL DATA - STC\* & NOCT\*\***

| Model                      | Unit | JN-610GR |       | JN-615GR |       | JN-620GR |       | JN-625GR |       |
|----------------------------|------|----------|-------|----------|-------|----------|-------|----------|-------|
| Parameters                 |      | STC      | NOCT  | STC      | NOCT  | STC      | NOCT  | STC      | NOCT  |
| Capacity rating Wp         | Pmax | 610      | 461   | 615      | 465   | 620      | 469   | 625      | 473   |
| Max. Power Volatage in V   | Vmp  | 40.94    | 38.55 | 41.09    | 38.69 | 41.23    | 38.82 | 41.37    | 38.96 |
| Max. Power Current in A    | Imp  | 14.90    | 11.96 | 14.97    | 12.01 | 15.04    | 12.07 | 15.11    | 12.13 |
| Open Circuit Voltage in V  | Voc  | 49.26    | 46.86 | 49.47    | 47.06 | 49.67    | 47.25 | 49.87    | 47.44 |
| Short Circuit Current in A | Isc  | 15.77    | 12.62 | 15.83    | 12.66 | 15.89    | 12.71 | 15.95    | 12.76 |
| Module Efficiency          | %    | 22.60    |       | 22.79    |       | 22.97    |       | 23.16    |       |
| Power Tolerance            | Wp   | -0/+4.99 |       |          |       |          |       |          |       |

\*STC: Irradiance 1000 W/m<sup>2</sup>, cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m<sup>2</sup> according to EN 60904-1. Measurement uncertainty ± 3%

\*\*NOCT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1m/sec (NOCT - 45°C ± 2°C)

**BI-FACIAL OUTPUT - REARSIDE POWER GAIN**

| Model              |                      | JN-610GR | JN-615GR | JN-620GR | JN-625GR |
|--------------------|----------------------|----------|----------|----------|----------|
| 10%                | Power Output (W)     | 671      | 677      | 682      | 688      |
|                    | Module Efficiency(%) | 24.86    | 25.09    | 25.27    | 25.49    |
| 15%                | Power Output (W)     | 702      | 707      | 713      | 719      |
|                    | Module Efficiency(%) | 26.01    | 26.20    | 26.42    | 26.64    |
| 20%                | Power Output (W)     | 732      | 738      | 744      | 750      |
|                    | Module Efficiency(%) | 27.12    | 27.35    | 27.57    | 27.79    |
| 25%                | Power Output (W)     | 763      | 769      | 775      | 781      |
|                    | Module Efficiency(%) | 28.27    | 28.49    | 28.72    | 28.94    |
| Bifaciality Factor |                      | 80±5%    |          |          |          |

\*Bifaciality gain is dependent on various factors (Ground Reflectance, Tilt Angle, Location etc)

**MECHANICAL DATA**

|                          |                                                                                                                        |
|--------------------------|------------------------------------------------------------------------------------------------------------------------|
| Dimensions (L x W x H)   | mm: 2382 x 1133 x 35/30   in: 93.78 x 44.60 x 1.37/1.18                                                                |
| Weight                   | 33.5 kgs   73.85 lbs (±2%)                                                                                             |
| Junction Box             | Split JB, IP68 with 3 bypass diodes                                                                                    |
| Cable                    | Solar Cable 4.0 mm <sup>2</sup> / 0.006 in <sup>2</sup> , 400 mm / 15.75 in (Higher Cable option available on request) |
| Front Superstrate        | 2.0 mm / 0.079 in, High Transmission, AR coated                                                                        |
| Solar Cells              | N-Type TOPCon - G12R (Rectangular 132 pcs Half Cut)                                                                    |
| Cell Encapsulation       | PID & UV Resistant (Coextruded POE)                                                                                    |
| Back Substrate           | 2.0 mm / 0.079 in, Heat strenghtend Glass (Optional White Grid)                                                        |
| Frame                    | Anodized Aluminium Alloy                                                                                               |
| Mechanical Load Strength | 5400 Pa (Snow Load), 2400 Pa (Wind Load)                                                                               |

**TEMPERATURE RATINGS**

|                                              |           |
|----------------------------------------------|-----------|
| Temperature Coefficient of Voc ( $\beta$ )   | -0.25%/°C |
| Temperature coefficient of Isc ( $\alpha$ )  | 0.046%/°C |
| Temperature coefficient of Pmax ( $\gamma$ ) | -0.30%/°C |

**PERMISSIBLE OPERATING CONDITIONS**

|                         |                |
|-------------------------|----------------|
| Temperature Range       | -40°C to +85°C |
| Maximum System Voltage  | 1500 VDC       |
| Max. Series Fuse Rating | 35 A           |

**WARRANTY AND CERTIFICATIONS**

|                       |                                     |
|-----------------------|-------------------------------------|
| Product Warranty      | 12 Years Product Warranty           |
| Performance Guarantee | 30 Year Linear Performance Warranty |

**PACKAGING CONFIGURATION**

| Vehicle Type          | 32FT | 40FT |
|-----------------------|------|------|
| Modules Per Pallet    | 28   | 28   |
| Modules Per Container | 420  | 560  |

**Power-Voltage Curve**

