

# N-type TOPCon Mono

## 620-640W

AS620-640G12-132 Bifacial

Bifacial Half-Cell PV Module



**N-TYPE TOPCON** module could increase power generation by 3%+ per watt compared with PERC



**HIGHER** power output  
Bifacial module back-side power increase 5-25%



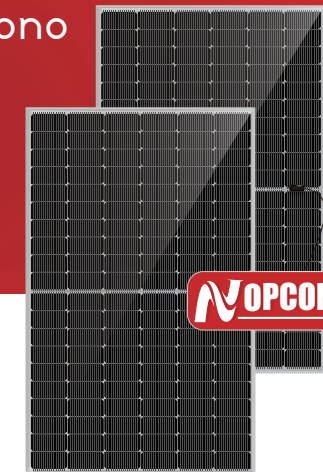
**COMPATIBLE** with mainstream trackers  
effective product for utility power plant



Lower degradation rate, **BETTER** shading tolerance  
First-year  $\leq 1\%$ , 2-30 year  $\leq 0.4\%$



**LOWER** Temp. COEFFICIENT  
More power generation under high-temperature



**TOPCON**

**30** Year

Warranty for Substrate  
Power Output

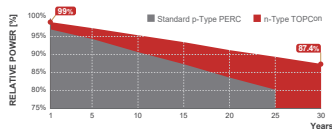
**15** Year

Warranty for Materials  
and Processing

**0.4** %

Annual degradation

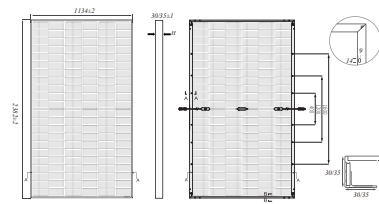
### LINEAR PERFORMANCE WARRANTY



## AS620-640G12-132 Bifacial Half-Cell PV Module

### MECHANICAL SPECIFICATION

|                          |                                                                        |
|--------------------------|------------------------------------------------------------------------|
| Cell                     | N-type TOPCon Mono                                                     |
| No. of cells             | 132(6x22)                                                              |
| Cable Length             | 300mm(+/-300mm)-                                                       |
| Cable Cross Section Size | 4mm <sup>2</sup> (IEC)                                                 |
| Junction Box             | IP68, 3 diodes                                                         |
| Connector                | MC4 Compatible                                                         |
| Weight                   | 33.7kg $\pm 3\%$                                                       |
| Cells Type               | Mono 182x105mm                                                         |
| Dimension(LxWxT)         | 2382x1134x30 mm (93.84x44.65x1.18 inch)                                |
| Packaging                | 36pcs/pallet, 720p cs/40HQ (30mm)<br>31pcs/pallet, 620p cs/40HQ (35mm) |



Remark: customized frame color and cable length available upon request

### ELECTRICAL CHARACTERISTICS

STC: AM1.5 1000W/m<sup>2</sup> 25 °C NOCT: AM1.5 800W/m<sup>2</sup> 20 °C 1m/s Test uncertainty for Pmax  $\pm 3\%$

| Module Type                     | AS620G12-132 | AS625G12-132 | AS630G12-132 | AS635G12-132 | AS640G12-132 |
|---------------------------------|--------------|--------------|--------------|--------------|--------------|
| Testing Condition               | STC          | STC          | STC          | STC          | STC          |
| Maximum Power(Pmax/W)           | 620          | 625          | 630          | 635          | 640          |
| Open Circuit Voltage(Voc/V)     | 48.50        | 48.70        | 48.90        | 49.10        | 49.30        |
| Short Circuit Current(Isc/A)    | 16.13        | 16.15        | 16.18        | 16.21        | 16.24        |
| Voltage at Maximum Power(Vmp/V) | 40.21        | 40.45        | 40.70        | 40.95        | 41.20        |
| Current at Maximum Power(Imp/A) | 15.42        | 15.45        | 15.48        | 15.51        | 15.54        |
| Module Efficiency(%)            | 23.00        | 23.10        | 23.30        | 23.50        | 23.69        |

### ELECTRICAL CHARACTERISTICS

### OPERATING PARAMETERS

|     |                           |       |       |       |       |       |                            |                                 |
|-----|---------------------------|-------|-------|-------|-------|-------|----------------------------|---------------------------------|
| 5%  | Maximum power (W)         | 651   | 656   | 662   | 667   | 672   | Maximum System Voltage     | 1500VDC                         |
|     | Module efficiency STC (%) | 24.1% | 24.3% | 24.5% | 24.7% | 24.9% | Operating Temperature      | -40 °C ~ +85 °C                 |
| 15% | Maximum power (Total)     | 713   | 719   | 725   | 730   | 736   | Maximum Series Fuse        | 35A                             |
|     | Module efficiency STC (%) | 26.4% | 26.6% | 26.8% | 27.0% | 27.2% | Maximum Static Load, Front | 5400Pa (112lb/ft <sup>2</sup> ) |
| 25% | Maximum power (Total)     | 775   | 781   | 788   | 794   | 800   | Maximum Static Load, Back  | 2400Pa (50lb/ft <sup>2</sup> )  |
|     | Module efficiency STC (%) | 28.7% | 28.9% | 29.1% | 29.4% | 29.6% | Safety Class               | Class II                        |

### OPERATING PARAMETERS

|                                          |                                |
|------------------------------------------|--------------------------------|
| Nominal Operating Cell Temperature(NOCT) | 43°C ( $\pm 2^\circ\text{C}$ ) |
| Temperature Coefficient of Isc           | - 0.30%/°C                     |
| Temperature Coefficient of Voc           | - 0.24%/°C                     |
| Temperature Coefficient of Pmax          | 0.04%/°C                       |

\*Specs are subject to change without further notification

### I-V CURVE(AS620-640G12-132)

