# Atlas N

## N-Type 182MM Bifacial Double Glass Module

## 515-540W

Pmax:
**540W**

Power range:
**515-540W**

Efficiency:
**22.7%**

Warranty:
**30 years**

Annual degradation:
**0.40%**

### 30% Bifacial Power Gain

Delivers an impressive 30% increase in power generation with an 80±5% bifacial rate, harnessing energy from both sides

### High Efficiency 22.7%

Achieves a leading efficiency rate of 22.7%, maximizing solar power conversion

### Advanced Cell Technology

Significant reductions in Light-Induced Degradation (LID) and Light and Elevated Temperature Induced Degradation (LETID), maintaining peak performance

### Customized Configuration

Provides versatility with 5 size options to meet residential, commercial, or industrial solar energy needs

Product Certification

## Reliably Built.

Imperial Star is a solar manufacturer committed to empowering PV excellence in America. With a rich, 10-year manufacturing legacy, Imperial Star delivers 6 GW of PV module capacity through its integrated and dependable supply chain by 2024.

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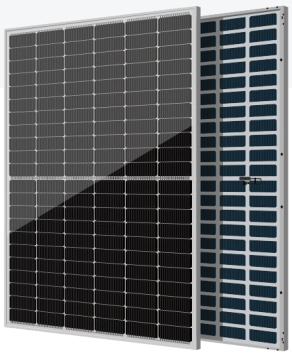
PV MODULE DATASHEET
ISN7-UHSB132-540/M



**540W** Maximum Power Output

**22.7%** Module Efficiency

**30 Year** Power Output Warranty

**12 Year** Product Warranty

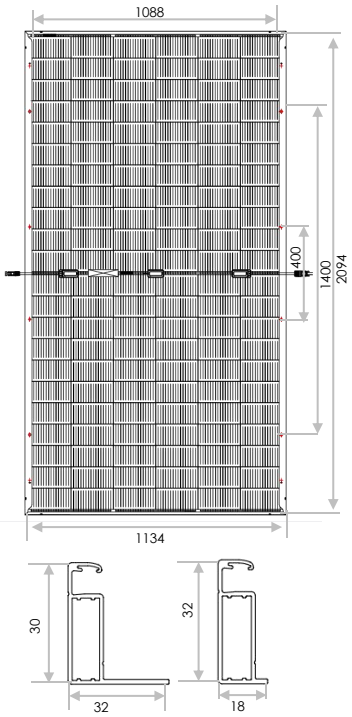
| Item | | ISN7-UHSB132-515/M | | ISN7-UHSB132-520/M | | ISN7-UHSB132-525/M | | ISN7-UHSB132-530/M | | ISN7-UHSB132-535/M | | ISN7-UHSB132-540/M | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | STC | NOTC | STC | NOTC | STC | NOTC | STC | NOTC | STC | NOTC | STC | NOTC |
| Max. Power (Pmax) | W | 515 | 385 | 520 | 389 | 525 | 392 | 530 | 396 | 535 | 400 | 540 | 404 |
| Opt. Operating Current (Imp) | A | 13.28 | 10.64 | 13.34 | 10.69 | 13.40 | 10.73 | 13.46 | 10.78 | 13.52 | 10.83 | 13.58 | 10.88 |
| Opt. Operating Voltage (Vmp) | V | 38.8 | 36.2 | 39.0 | 36.4 | 39.2 | 36.6 | 39.4 | 36.8 | 39.6 | 36.9 | 39.8 | 37.1 |
| Short Circuit Current (Isc) | A | 14.04 | 11.32 | 14.10 | 11.37 | 14.16 | 11.42 | 14.22 | 11.47 | 14.28 | 11.52 | 14.34 | 11.57 |
| Open Circuit Voltage (Voc) | V | 46.5 | 43.7 | 46.7 | 43.9 | 46.9 | 44.1 | 47.1 | 44.3 | 47.3 | 44.5 | 47.5 | 44.7 |
| Module Efficiency | | 21.7% | | 21.9% | | 22.1% | | 22.3% | | 22.5% | | 22.7% | |
| Module Power Tolerance | | 0~+3% | | | | | | | | | | | |
| Operating Temperature | | -40°C~+85°C | | | | | | | | | | | |
| Max. System Voltage | | 1500VDC (IEC) | | | | | | | | | | | |
| Max. Nominal Fuse Current | | 30A | | | | | | | | | | | |
| Application Level | | A | | | | | | | | | | | |
| STC | | Irradiance 1000W/m², Module temperature 25°C, AM 1.5 | | | | | | | | | | | |
| NOTC | | Irradiance 800W/m², Module temperature 20°C, AM 1.5, Wind speed 1m/s | | | | | | | | | | | |

| Temperature Characteristics | |
|---|---|
| Nominal Operating Cell Temperature | 45±2°C |
| Temperature Coefficient (Pmax) | -0.3%/°C |
| Temperature Coefficient (Voc) | -0.27%/°C |
| Temperature Coefficient (Isc) | +0.045%/°C |

| Mechanical Data | |
|---|---|
| Dimensions | 2094×1134×30mm |
| Weight | 29±1.0 kg |
| Module composition | 132 (6*22) |
| Front glass thickness | 2.0 mm+2.0mm, High Transmission, AR Coated Heat Strengthened Glass |
| Frame material | Aluminum,silver anodized |
| J-Box | IP68, 3 diodes |
| Cable | 4 mm², 350 mm |
| Connector | MC Compatible / MC4-EV02 (optional) |

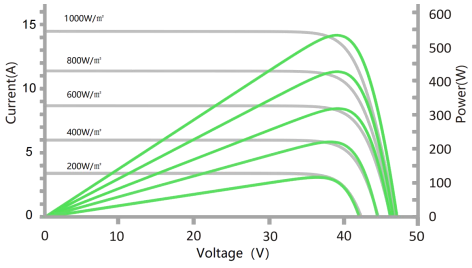
| Packaging Specifications | |
|---|---|
| Container | 40HQ |
| Module quantity per pallet | 36 |
| Pallet quantity per container | 22 |
| Module quantity per container | 792 |

Engineering Drawing




- Anti-reflection coating and self-cleaning glass
- Special cutting and soldering technology leads to low hotspot risk
- Selected encapsulating material and stringent production process control ensure the product is highly PID resistant and snail-trail free
- Optimized system performance due to module level current sorting
- Highly transparent self-cleaning glass brings additional yield and easy maintenance

I-V Curves Of PVModule

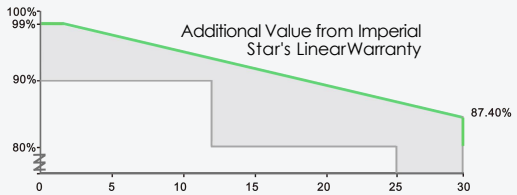



Performance under low irradiation

Industry-leading performance under low irradiance conditions. The module efficiency of irradiance 200/m² is above 96.5% of the irradiance 1000W/m² module efficiency.

| Product Certification | |
|---|---|
| ISO 9001: Quality management system certification | CEC |
| ISO 14001: Environmental management system certificate | TUV |
| ISO 45001: International standards for occupational health and safety | CE |
| IEC 61215: Standards for durability | UL |
| IEC 61730: Standards for safety operation | |

## Warranty




**12** Year Product Warranty

**30** Year Linear Power Warranty

Specifications subject to technical changes - Updated 9.6.24



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