

SINCE
1998

solaire






A Lagnuvo Initiative



Solar Modules MONO PERC 10BB 540W - 550W

Monofacial

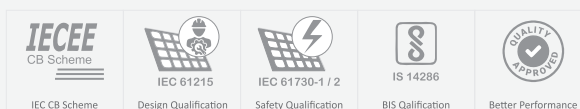
PRODUCT | KEY FEATURES

-  AR Coated Tempered Glass
Anti-Reflective Module Surface
-  Excellent Module Efficiency with
Mono PERC cells through 100%
Automation
-  Positive Power Tolerance with
Current Binning to Prevent
Mismatch Losses
-  Pre and Post EL Checking
With High Resolution Camera
-  IP68 Junction Box
for Long Term Endurance
-  100% High Voltage Testing to
Ensure Safety
-  MBB Half-Cell Technology
provides Better Performance
under Partial Shading



THE INDUSTRY'S BENCHMARK

Solaire stands at the forefront of innovative and sustainable solar energy solutions, distinguishing itself through excellence in high-efficiency photovoltaic (PV) module and inverter manufacturing. Our solar modules are engineered to deliver unparalleled power output and enduring reliability, affirming our commitment to quality and performance.

PRODUCT CERTIFICATES



MADE IN INDIA

-  30 YEARS Linear Performance warranty*
-  12 YEARS Product warranty on materials and workmanship

TECHNICAL DATA

PERFORMANCE UNDER STANDARD TEST CONDITIONS (STC) (irradiance of 1000 W/m², spectrum AM 1.5G and cell temperature of 25°C.)

| Model Number | LS540WC | LS545WC | LS550WC | LS555WC |
|---------------------------------|--------------|--------------|--------------|--------------|
| Nominal Maximum Power (Pmax) | 540 W | 545 W | 550 W | 555 W |
| Power Tolerance | 0 to +4.99 W | 0 to +4.99 W | 0 to +4.99 W | 0 to +4.99 W |
| Optimum Operating Voltage (Vmp) | 41.86 V | 42.01 V | 42.14 V | 42.28 V |
| Optimum Operating Current (Imp) | 12.91 A | 12.98 A | 13.07 A | 13.13 A |
| Open Circuit Voltage (Voc) | 49.78 V | 49.91 V | 50.06 V | 50.20 V |
| Short Circuit Current (Isc) | 13.53 A | 13.59 A | 13.65 A | 13.71 A |
| Module Efficiency | 20.94 % | 21.13 % | 21.32 % | 21.52 % |
| Fill Factor | 80.24 % | 80.39 % | 80.54 % | 80.69 % |

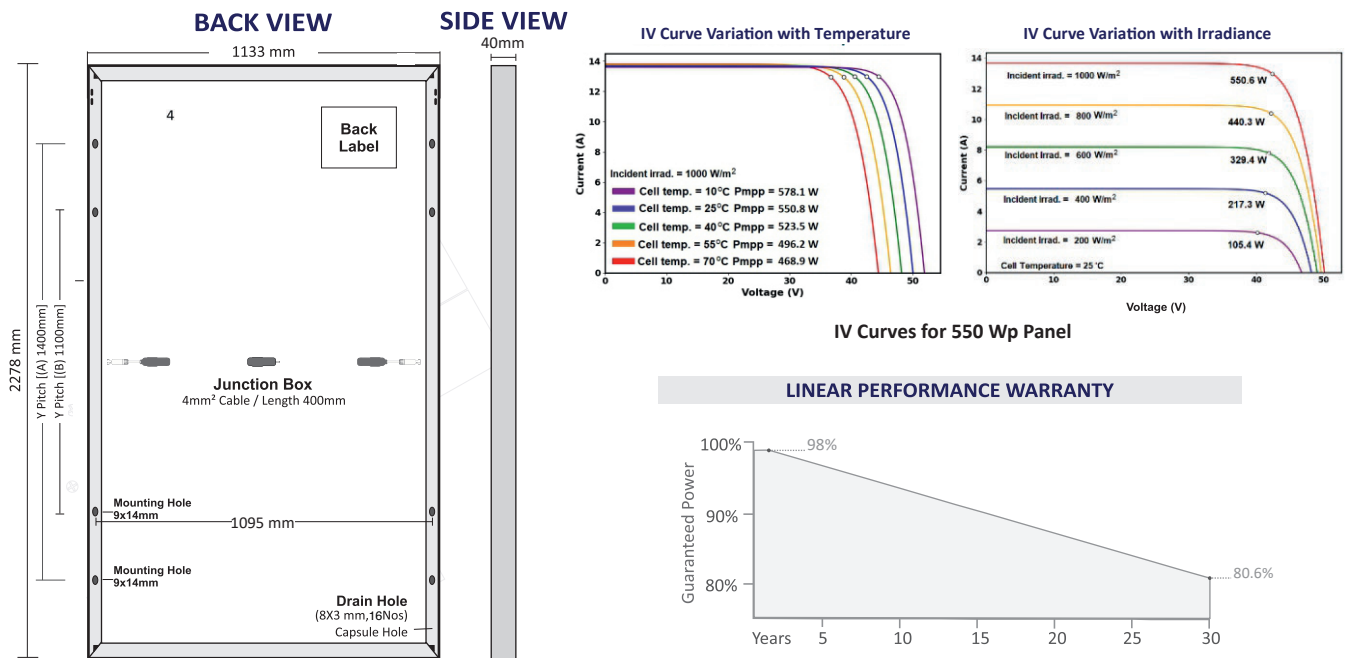
Note: Power Measurement uncertainty: < ±3%

PERFORMANCE UNDER NOCT (NOCT = 45.25°C irradiance of 800 W/m², ambient temperature of 20°C and Wind speed 1 m/s)

| | | | | |
|---------------------------------|---------|---------|---------|---------|
| Maximum Power (Pmax) | 400 W | 403 W | 407 W | 411 W |
| Optimum Operating Voltage (Vmp) | 38.54 V | 38.68 V | 38.80 V | 38.93 V |
| Optimum Operating Current (Imp) | 10.37 A | 10.43 A | 10.49 A | 10.55 A |
| Open Circuit Voltage (Voc) | 46.82 V | 46.94 V | 47.09 V | 47.21 V |
| Short Circuit Current (Isc) | 10.96 A | 11.01 A | 11.06 A | 11.11 A |

Mechanical Specifications

| | |
|----------------------------------------|--------------------------------------------------------------------------------|
| Dimensions (L x W x T in mm) | 2278 x 1133 x 40 |
| Weight(kg) | 28.6 |
| Cell type / No Of Cell | 144 Half-cut Mono PERC Solar cells |
| Frame | Anodized Aluminum Alloy (6005, Temper T6, silver colour) |
| Front Cover | ARC coated Low Iron Tempered Glass (3.2 mm thick) |
| Encapsulate | Ethylene Vinly Acetate (EVA) Sheet - PID resistant and UV resistant |
| Back Cover | Corona treated PVDF Fluoro-polymer Backsheet (white colour) |
| Junction Box | Split Junction Box (3 nos. with individual Bypass Diode) – Weatherproof (IP68) |
| Bypass Diode | 40 A, 45 V, 200 °C max. junction temperature |
| Cable | 4 sq. mm, 400 mm length (Customised cable length available on request) |
| Connectors | MC4 compatible (MC4 original available on request) |
| Application Class Rating | Class A |
| Safety Class Rating | Class II |
| Mechanical Load Test (as per IEC & UL) | 5400 Pa-Front; 2400 Pa-Back |
| Mounting Holes Pitch (Y)-mm | [A] 1400, [B] 1100 |
| Mounting Holes Pitch (X)-mm | 1095 |



*All dimensions are in mm with +/- 2mm tolerance.

*graphics shown herein above are reference purpose only. Please consult Solaire Technical Team for any further clarification

| MAXIMUM OPERATING CONDITIONS | TEMPERATURE COEFFICIENTS | STACKING STANDARD | 19FT | 32FT | 40FT |
|---------------------------------------|------------------------------|-----------------------------|----------------|----------------|----------------|
| Operating Temperature: -40°C to +85°C | Current α(Isc) : 0.0297%/°C | No. of Modules | 192 | 384 | 528 |
| Maximum System Voltage: 1500V | Voltage β(Voc) : -0.2470%/°C | No of Pallets | 8 | 16 | 22 |
| Maximum Series Fuse Rating: 25A | Power γ(Pmax) : -0.3303%/°C | Modules per Pallet / Weight | 24 Nos/ 730 Kg | 24 Nos/ 730 Kg | 24 Nos/ 730 Kg |
| | | Pallet dimensions | 2320*1000*1275 | 2320*1000*1275 | 2320*1000*1275 |

Caution: Please read safety and installation instructions before using the product. **Warranty:** Linear performance warranty for 30 years, with degradation up to 2% in 1st year and 0.6 %/year from year 2 to year 30. Please read Solaire warranty documents thoroughly. **Disclaimer:** Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. Solaire reserves the right to make any adjustment to the information described here. Dataset contained in this specification do not form a representative of a single module data. @T&C Apply