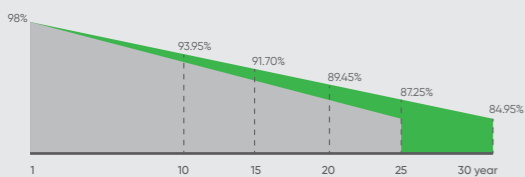


SunMaster 5L

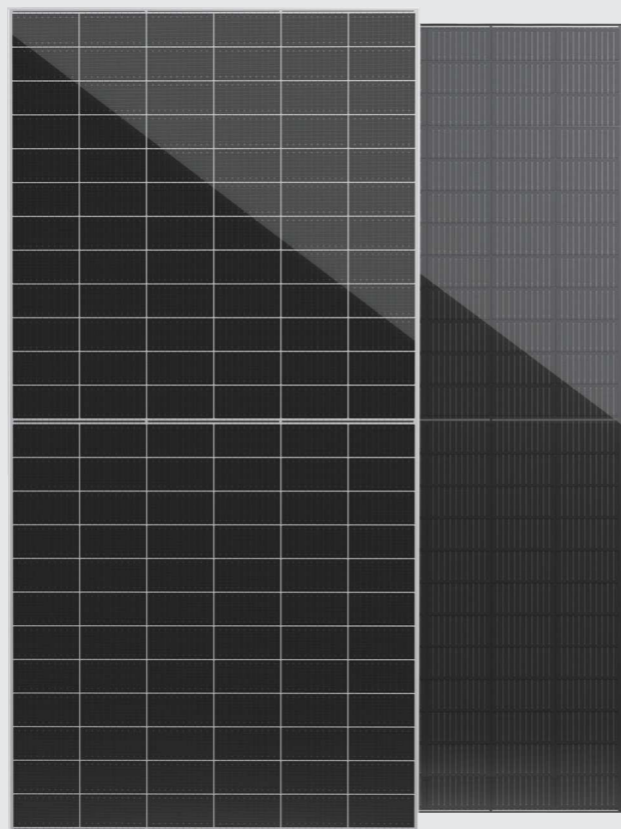
SM525-550W(144)

182mm Cells Mono
PERC with MBB & Half-cut
Technology

Quality Guarantee



▶ Sunmaster solar linear power output guarantee
▶ Standard linear power output guarantee



Standard

All Black

525-550W

-0.55%
power attenuation

30years
Power warranty

Comprehensive Products and System Certificates



IEC 61215 / IEC 61730 / CE / INMETRO

ISO 9001-

2015/Quality management system

ISO 14001-

2015/Standards for environmental management system

ISO 45001-

2018/International standards for occupational health & safety

Key Features

- Optimal Process Design**
166mm+9BB+Half-cut, higher power output
- Select Grade A Crystalline Silicon Solar Cells**
Grade A crystalline silicon solar cells make high-power output with cost-effective
- Stable Generation Performance**
Power attenuation: first year ≤2%, 0.55% per year from 2-25
- Process Upgraded**
PID Resistant
Lower risk of hot spot and stronger anti-PID ability
- Higher Power Gains and Lower Losses**
Excellent low irradiance performance and low shadow loss
- Strong Environmental Adaptability and Great Durability**
Certified by Dust-Sand, Salt-Mist, Ammonia etc. weather resistance tests and enhanced mechanical load: wind load (2400 Pa) and snow load (5400 Pa)

Mechanical Characteristic

| | |
|-------------------|---|
| Cell type | Monocrystalline PERC 182*91mm |
| Number of cells | 144(6x24) |
| Module dimensions | 2279x1134x35mm (89.72x44.65x1.38inches) |
| Weight | 26kg (57.72lbs) |
| Front cover | 3.2mm(0.13inches) tempered glass with AR coating |
| Frame | Anodized aluminum alloy |
| Junction box | ≥IP68 & UL |
| Cable | 4mm ² (0.006inches ²), Portrait: 300mm (11.8inches); Landscape: 1300mm (51.18inches) |
| Connector | MC4 or MC4 compatible |

Temperature Characteristics

| | |
|---|------------|
| Nominal Operating Cell Temperature (NOCT) | 43°C±2°C |
| Temperature Coefficients of Pmax | -0.36% /°C |
| Temperature Coefficients of Voc | -0.28% /°C |
| Temperature Coefficients of Isc | 0.05% /°C |

Packaging

| | |
|-----------------------------------|--------------|
| Standard packaging | 31pcs/pallet |
| Module quantity per 20' container | 155pcs |
| Module quantity per 40' container | 620pcs(HQ) |

Electrical Characteristics at STC

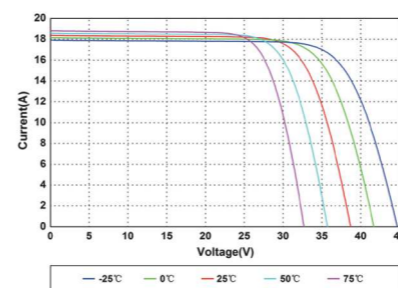
| | | | | | | |
|--|---|--------|--------|--------|--------|--------|
| Maximum Power (Pmax) | 525W | 530W | 535W | 540W | 545W | 550W |
| Open Circuit Voltage (Voc) | 49.0V | 49.2V | 49.4V | 49.6V | 49.8V | 50.0V |
| Short Circuit Current (Isc) | 13.74A | 13.78A | 13.82A | 13.86A | 13.90A | 13.94A |
| Voltage at Maximum Power (Vmp) | 40.8V | 41.0V | 41.2V | 41.4V | 41.6V | 41.8V |
| Current at Maximum Power (Imp) | 12.88A | 12.93A | 12.99A | 13.05A | 13.11A | 13.16A |
| Module Efficiency(%) | 20.31 | 20.51 | 20.7 | 20.89 | 21.09 | 21.28 |
| Operating Temperature | -40°C to +85°C | | | | | |
| Maximum System Voltage | 1000V DC/1500V DC | | | | | |
| Fire Resistance Rating | Type 1(in accordance with UL1703)/Class C(IEC61730) | | | | | |
| Maximum Series Fuse Rating | 25A | | | | | |
| STC Irradiance 1000W/m ² , Cell temperature 25°C, AM1.5; Tolerance of Pmax ±3%; Measurement Tolerance ±3% | | | | | | |

Electrical Characteristics at NOCT

| | | | | | | |
|--------------------------------|--------|--------|--------|--------|--------|--------|
| Maximum Power (Pmax) | 391W | 395W | 399W | 403W | 407W | 411W |
| Open Circuit Voltage (Voc) | 45.1V | 45.3V | 45.5V | 45.7V | 45.9V | 46.1V |
| Short Circuit Current (Isc) | 11.13A | 11.16A | 11.19A | 11.22A | 11.25A | 11.28A |
| Voltage at Maximum Power (Vmp) | 37.1V | 37.3V | 37.5V | 37.7V | 37.9V | 38.1V |
| Current at Maximum Power (Imp) | 10.54A | 10.59A | 10.64A | 10.69A | 10.74A | 10.79A |

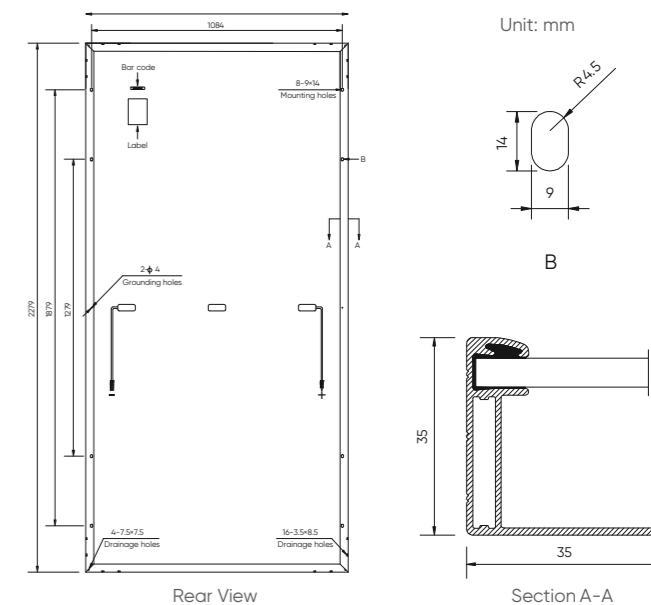
NOCT: Irradiance 800W/m², Ambient temperature 20°C, Wind Speed 1m/s

IV Curves

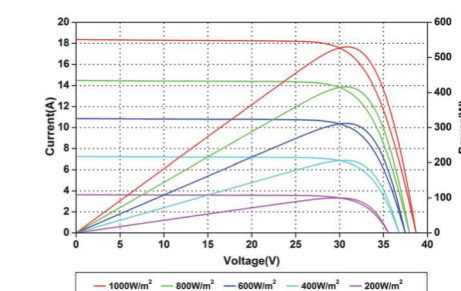


Current-Voltage and Power-Voltage Curves at Different Irradiances

Engineering Drawings



Specifications in this datasheet are subject to change without prior notice.



Current-Voltage Curves at Different Temperatures