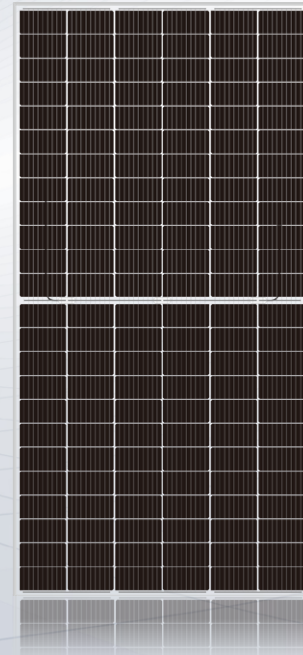




HI-KILO

435-455W

High Efficiency Half-Cell Mono PERC Module



Half-cut cell technology
New circuit design,
lower internal current,
lower Rs loss



Special circuit design
with much lower hot spot
temperature



Fire safety
(Class C, certified to TÜV
Rheinland and Rheinland
test standards)



Resistance to power
attenuation passed TÜV
Rheinland system voltage
endurance test

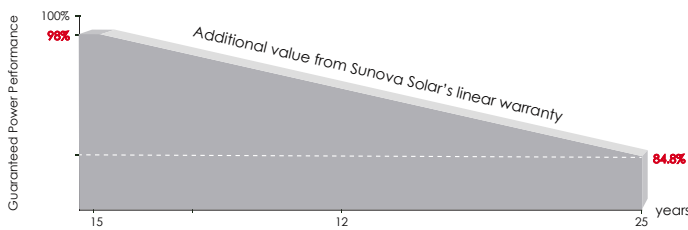


Resistance to salt-spray
corrosion
(IEC61701, certified to TÜV
Rheinland test standard)



100% double EL test
enabling remarkable
reduction of hidden crack
rate of modules

LINEAR PERFORMANCE WARRANTY



15 YEARS Product quality & process guarantee

25 YEARS Linear power guarantee

0.55 % Annual Degradation Over 25 years

COMPREHENSIVE CERTIFICATES



ISO 9001: Quality Management System

ISO 14001: Environmental Management System Standard

OHSAS 18001: International Occupational Health and
Safety Assessment System Standard

PRODUCT INSURANCE



SS-455-72MTF 144 cells

ELECTRIC CHARACTERISTICS

| Model of modules | SS-435-72MTF | | SS-440-72MTF | | SS-445-72MTF | | SS-450-72MTF | | SS-455-72MTF | |
|--------------------------------------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power — P_{mp} (W) | 435 | 324 | 440 | 327 | 445 | 331 | 450 | 335 | 455 | 339 |
| Open-circuit voltage — V_{oc} (V) | 48.85 | 45.83 | 49.01 | 45.97 | 49.16 | 46.11 | 49.31 | 46.23 | 49.46 | 46.37 |
| Short-circuit current — I_{sc} (A) | 11.25 | 9.09 | 11.29 | 9.11 | 11.33 | 9.15 | 11.35 | 9.17 | 11.39 | 9.19 |
| Maximum power voltage — V_{mp} (V) | 41.67 | 39.09 | 41.81 | 39.23 | 41.96 | 39.36 | 42.12 | 39.51 | 42.25 | 39.65 |
| Maximum power current — I_{mp} (A) | 10.44 | 8.29 | 10.53 | 8.34 | 10.61 | 8.41 | 10.69 | 8.48 | 10.78 | 8.55 |
| Module efficiency — η_m (%) | 20.01% | | 20.24% | | 20.47% | | 20.70% | | 20.93% | |

STC (Standard Testing Conditions): Irradiance 1000 W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², Ambient Temperature 20 °C, Spectra at AM1.5, Wind at 1m/s

DOUBLE-SIDED POWER GENERATION PARAMETERS (REAR GAIN)

| | | | | | | |
|-----|-----------------------|--------|--------|--------|--------|--------|
| 5% | Maximum power (Pmax) | 458 | 463 | 468 | 474 | 479 |
| | Module Efficiency (%) | 21.07% | 21.30% | 21.53% | 21.81% | 22.04% |
| 10% | Maximum power (Pmax) | 501 | 507 | 513 | 519 | 524 |
| | Module Efficiency (%) | 23.05% | 23.33% | 23.60% | 23.88% | 24.11% |
| 15% | Maximum power (Pmax) | 545 | 551 | 557 | 564 | 569 |
| | Module Efficiency (%) | 25.07% | 25.35% | 25.63% | 25.95% | 26.18% |

STRUCTURAL CHARACTERISTICS

| | |
|-----------------------|--|
| Module size (L*W*H) | 2094 x 1038 x 35 mm |
| Weight | 24.0 kg |
| Number of cells | 144 cells |
| Cell | PERC Monocrystalline 166x83 mm |
| Glass | 3.2 mm High Transmission, Antireflection Coating |
| Frame | Anodized aluminum alloy |
| Junction box | IP67, 3 bypass diodes |
| Output wire | 4.0 mm ² |
| Wire length | 300 mm or Customized Length |
| Connector | MC4 Compatible |
| Packing Specification | 31 pcs/Pallet; 704 pcs/40'HQ |

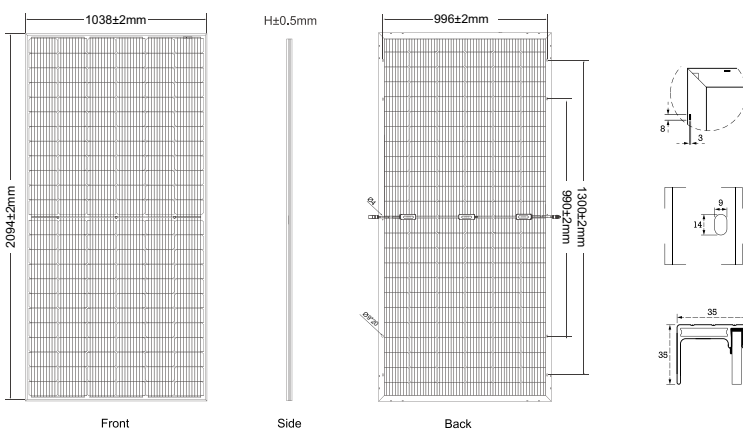
OPERATING PARAMETERS

| | |
|------------------------------------|-------------|
| Power tolerance (W) | (0,+5) |
| Maximum system voltage (V) | 1000 / 1500 |
| Maximum rated fuse current (A) | 25 |
| Current operating temperature (°C) | -40~+85 °C |
| Mechanical load | 5400 Pa |

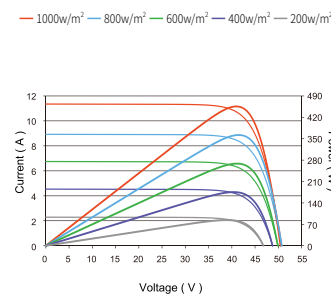
TEMPERFORMANCE RATINGS

| | |
|---------------------------------------|------------|
| Temperature coefficient (P_{max}) | -0.35%/°C |
| Temperature coefficient (V_{oc}) | -0.31 %/°C |
| Temperature coefficient (I_{sc}) | +0.05 %/°C |
| Nomial operating cell temperature | 45 ± 2 °C |

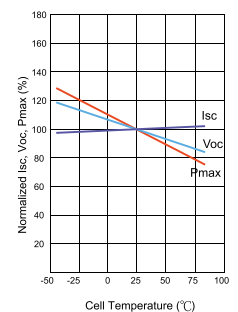
MODULE DIMENSIONS (mm)



Current-Voltage & Power-Voltage Curves (450W)



Temperature Dependence of I_{sc} , V_{oc} , P_{max}



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E-mail: info@sunova-solar.com

* Sunova Solar Technology Co., Ltd reserves the right to make any adjustment to the information described herein without further notice. Please contact our company to use the latest version for contract.