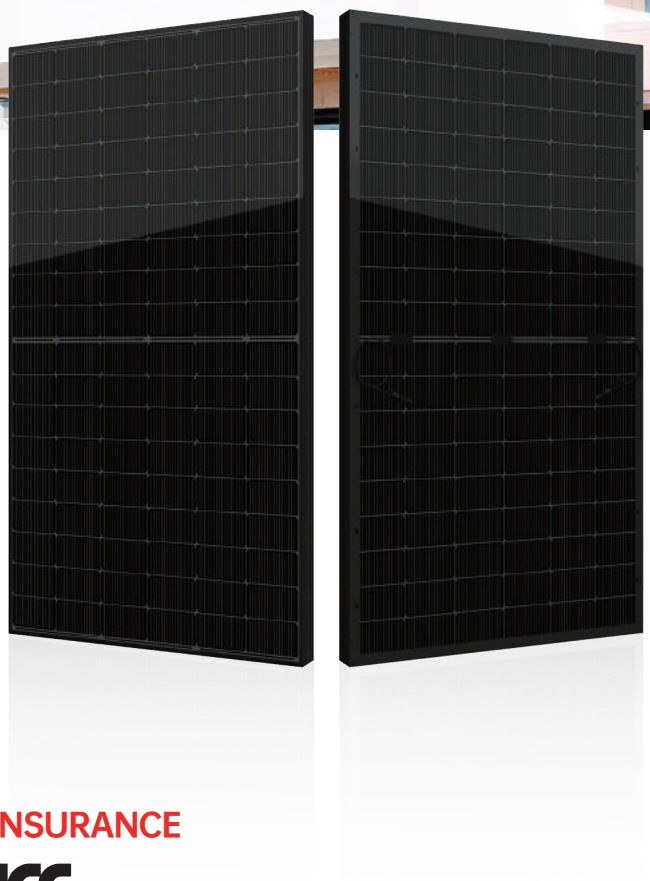
SERAPHIM®

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# Sable 425-450w

High efficiency bifacial modules



**TOPCon** | **182mm**

## TOPCon MODULE ADVANTAGE

- Multi-Busbar technology
- Superior load capacity
- High module efficiency
- Excellent low-light performance
- Lower annual attenuation Longer warranty
- Low BOS and LCOE
- Reduce hot spot effect
- Higher bifaciality

## INSURANCE

PICC

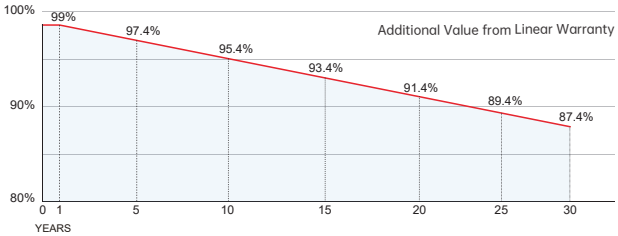
## QUALITY SYSTEM

ISO9001 / ISO14001 / ISO45001

## PRODUCT CERTIFICATION

TÜV | CE | PV CYCLE | CLEAN ENERGY COUNCIL MEMBER | CQC | ETL Intertek

## WARRANTY




15 YEARS Guarantee on product material and workmanship

30 YEARS Linear power output warranty


**SERAPHIM ENERGY GROUP CO., LTD.**

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Tel: +86-564-7736177 Email: info@seraphim-energy.com

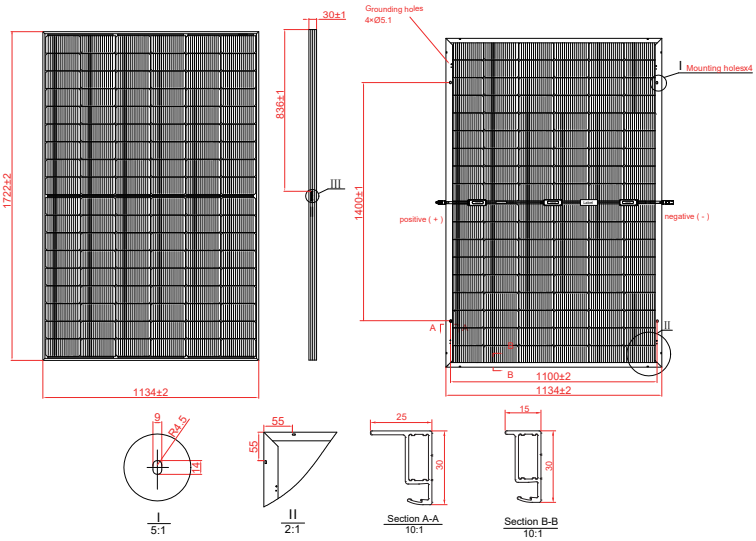
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## Mechanical Specifications

| | |
|---|---|
| External Dimension | 1722 x 1134 x 30 mm |
| Weight | 24.0 kg |
| Solar Cells | 182N-TOPCon (108pcs) |
| Front / Back Glass | 2.0mm AR coating semi-tempered glass, low iron |
| Frame | Black anodized aluminium alloy |
| Junction Box | IP68, 3 diodes |
| Output Cables | 4.0mm², 250mm(+)/350mm(-) or Customized Length |

## Technical drawing




## Packing Configuration

| Container | 20'GP | 40'HQ |
|---|---|---|
| Pieces per Pallet | 36 | 36 |
| Pallets per Container | 6 | 26 |
| Pieces per Container | 216 | 936 |

## Electrical Characteristics

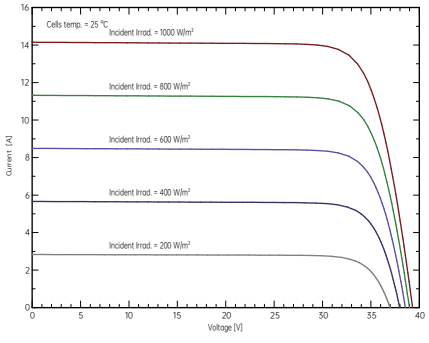
| Module Type | SRP-425-BTD-BG | | SRP-430-BTD-BG | | SRP-435-BTD-BG | | SRP-440-BTD-BG | | SRP-445-BTD-BG | | SRP-450-BTD-BG | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Front STC | Front BNPI | Front STC | Front BNPI | Front STC | Front BNPI | Front STC | Front BNPI | Front STC | Front BNPI | Front STC | Front BNPI |
| Maximum Power -$P_{mp}$(W) | 425 | 466 | 430 | 471 | 435 | 477 | 440 | 482 | 445 | 488 | 450 | 493 |
| Open Circuit Voltage -$V_{oc}$(V) | 38.70 | 38.78 | 38.90 | 38.98 | 39.10 | 39.18 | 39.30 | 39.38 | 39.50 | 39.58 | 39.70 | 39.78 |
| Short Circuit Current -$I_{sc}$(A) | 13.91 | 15.25 | 13.99 | 15.33 | 14.07 | 15.42 | 14.15 | 15.51 | 14.23 | 15.60 | 14.31 | 15.68 |
| Maximum Power Voltage -$V_{mp}$(V) | 32.10 | 32.18 | 32.30 | 32.38 | 32.50 | 32.58 | 32.70 | 32.78 | 32.90 | 32.98 | 33.10 | 33.18 |
| Maximum Power Current -$I_{mp}$(A) | 13.24 | 14.47 | 13.32 | 14.55 | 13.39 | 14.63 | 13.47 | 14.71 | 13.54 | 14.79 | 13.61 | 14.86 |
| Module Efficiency STC-$\eta_m$(%) | 21.76 | | 22.02 | | 22.28 | | 22.53 | | 22.79 | | 23.04 | |
| Power Tolerance (W) | (0, +4.99) | | | | | | | | | | | |

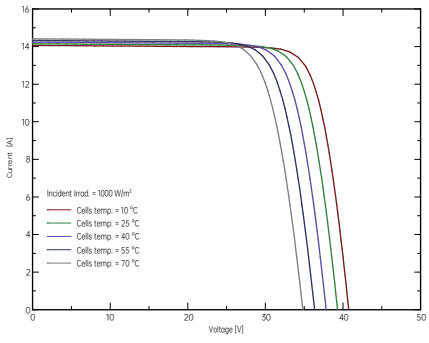
STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5 Power measurement tolerance: +/-3%;Voltage measurement tolerance: +/-3%;Current measurement tolerance: +/-4%
BNPI: front 1000 W/m² rear 135 W/m² Power measurement tolerance: +/-3%;Voltage measurement tolerance: +/-3%;Current measurement tolerance: +/-4%

## Rear Side Power Gain( SRP-440-BTD-BG )

| Power Gain | 10% | 15% | 20% | 25% | 30% |
|---|---|---|---|---|---|
| Maximum Power -$P_{mp}$ (W) | 484 | 506 | 528 | 550 | 572 |
| Open Circuit Voltage -$V_{oc}$(V) | 39.30 | 39.30 | 39.30 | 39.30 | 39.30 |
| Short Circuit Current -$I_{sc}$(A) | 15.57 | 16.27 | 16.98 | 17.69 | 18.40 |
| Maximum Power Voltage -$V_{mp}$(V) | 32.70 | 32.70 | 32.70 | 32.70 | 32.70 |
| Maximum Power Current -$I_{mp}$(A) | 14.82 | 15.49 | 16.16 | 16.84 | 17.51 |

## I-V Curve




## Temperature Ratings

| | |
|---|---|
| Pmax Temperature Coefficient | -0.29 %/°C |
| Voc Temperature Coefficient | -0.25 %/°C |
| Isc Temperature Coefficient | +0.046 %/°C |

## Application Conditions

| | |
|---|---|
| Maximum System Voltage | 1500V DC |
| Maximum Series Fuse Rating | 25 A |
| Operating Temperature | -40~+85 °C |
| Nominal Operating Cell Temperature | 45±2 °C |
| Bifaciality | 80%±5% |
| Mechanical Load | Front side 5400 Pa / Back side 2400 Pa |

Specifications are subject to change without further notification SRP-DS-EN- 2025T0811© Copyright 2025 Seraphim

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