



SpolarPV
Easy Invest, More Returns



22.83 %

Module efficiency

445 W

Highest power output



Product warranty



Linear power warranty

SPV445-TM10-108

420-445Watt



High Efficiency and Lower Temperature Coefficient

Higher power conversion efficiency and lower temperature coefficient benefited from advanced Tunnel Oxide Passivating Contacts (TOPCon) technology.



Anti-reflection

Less than 20% reflectivity with minimum glare.



Good Mechanical Load Performance

Certified to withstand: wind load (2400 Pa), snow load and hail strike(5400 Pa) .



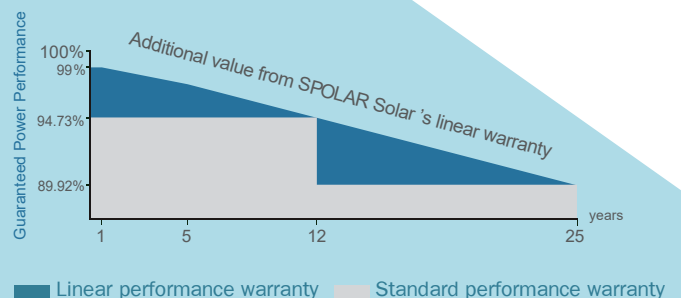
Low Light Performance Resilience

Advanced glass and cell surface texture designs ensure excellent performance in low light environment.



Durability Against Extreme Environmental Conditions

Good performance of Anti-PID, Ammonia and Salt mist certified by 2 PFG 2387/01.18, IEC61716 and IEC61701.



ISO9001:2016 ISO14001:2016
OHSAS18001:2011 certified factory.
IEC61215 IEC61730 certified products.

Electrical Characteristics at Standard Test Conditions (STC)

| Module Type | SPV420-TM10-108 | SPV425-TM10-108 | SPV430-TM10-108 | SPV435-TM10-108 | SPV440-TM10-108 | SPV445-TM10-108 |
|---------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Maximum Power - Pmax (W) | 420 | 425 | 430 | 435 | 440 | 445 |
| Maximum Power Voltage - Vmp (V) | 32.06 | 32.26 | 32.44 | 32.66 | 32.85 | 33.12 |
| Maximum Power Current - Imp (A) | 13.10 | 13.18 | 13.25 | 13.32 | 13.40 | 13.44 |
| Open-circuit Voltage - Voc (V) | 37.86 | 38.08 | 38.26 | 38.46 | 38.66 | 40.15 |
| Short-circuit Current - Isc (A) | 14.03 | 14.10 | 14.17 | 14.23 | 14.30 | 14.37 |
| Module Efficiency STC (%) | 21.54 % | 21.80 % | 22.05 % | 22.31 % | 22.57 % | 22.83 % |

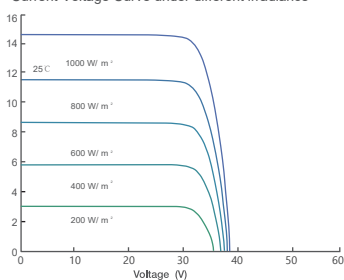
Electrical Characteristics at Normal Operating Cell Temperature (NOCT)

| Module Type | SPV420-TM10-108 | SPV425-TM10-108 | SPV430-TM10-108 | SPV435-TM10-108 | SPV440-TM10-108 | SPV445-TM10-108 |
|----------------------------------|-----------------|-----------------|------------------------------------|-----------------|-----------------|-----------------|
| Maximum Power - Pmax (W) | 320 | 323 | 327 | 331 | 335 | 339 |
| Maximum Power Voltage - Vmp (V) | 29.72 | 29.91 | 30.10 | 30.30 | 30.52 | 30.78 |
| Maximum Power Current - Imp (A) | 10.75 | 10.80 | 10.86 | 10.92 | 10.98 | 11.01 |
| Open-circuit Voltage - Voc (V) | 35.82 | 36.01 | 36.21 | 36.41 | 36.62 | 37.31 |
| Short-circuit Current - Isc (A) | 11.30 | 11.36 | 11.41 | 11.47 | 11.53 | 11.57 |
| Power Tolerance | 0 ~ +3W | | Operating Temperature (°C) | | -40 °C ~ +85 °C | |
| Temperature Coefficients of Pmax | -0.30% / °C | | Maximum System Voltage | | 1500 V | |
| Temperature Coefficients of Voc | -0.275% / °C | | Maximum Series Fuse Rating | | 25 A | |
| Temperature Coefficients of Isc | 0.045% / °C | | Nominal Operating Cell Temperature | | 45 ± 2 °C | |

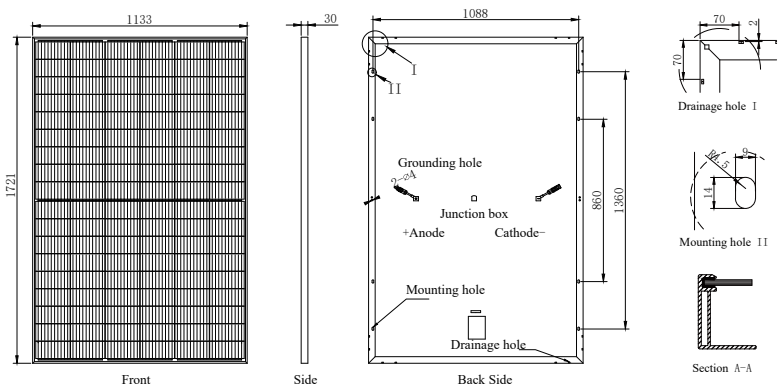
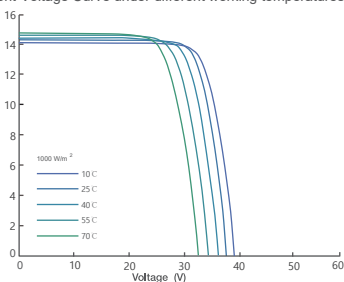
Mechanical Characteristics

| | |
|-------------------------|--|
| Cell Type | Mono-crystalline TOPCon 182x91 mm |
| No. of Cells | 108 (6x18) |
| Dimensions | 1721x1133x30 mm |
| Weight | 21.5 kg |
| Glass | 3.2mm, High Transmission, Low Iron, Tempered Glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68, MC4 Compatible, 3 Bypass Diode |
| Output Cables | 1x4.0 mm ² , Length: 300 mm or Customized Length |
| Packaging Configuration | 74pcs/stack, 962pcs/40'HQContainer (Two pallets=One stack) |

Current-Voltage Curve under different irradiance



Current-Voltage Curve under different working temperatures



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