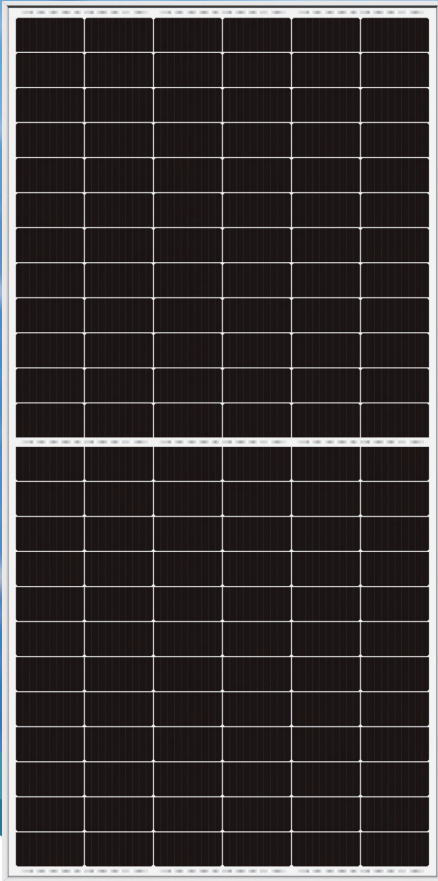




**SpolarPV**  
Easy Invest, More Returns



**22.85 %**

Module efficiency

**590 W**

Highest power output



Product warranty



Linear power warranty

# SPV590-TM10-144

## 565-590Watt



### 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) .



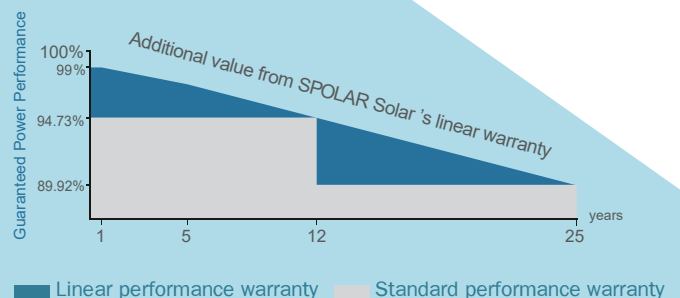
### Low Light Performance Resilience

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	SPV565-TM10-144	SPV570-TM10-144	SPV575-TM10-144	SPV580-TM10-144	SPV585-TM10-144	SPV590-TM10-144
Maximum Power - Pmax (W)	565	570	575	580	585	590
Maximum Power Voltage - Vmp (V)	42.55	42.71	42.87	43.03	43.17	43.38
Maximum Power Current - Imp (A)	13.29	13.35	13.42	13.50	13.55	13.60
Open-circuit Voltage - Voc (V)	50.39	50.55	50.68	50.86	51.02	52.27
Short-circuit Current - Isc (A)	14.20	14.26	14.33	14.40	14.47	14.53
Module Efficiency STC (%)	21.89 %	22.08 %	22.28 %	22.47 %	22.66 %	22.85 %

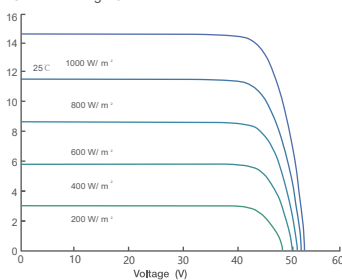
## Electrical Characteristics at Normal Operating Cell Temperature (NOCT)

Module Type	SPV565-TM10-144	SPV570-TM10-144	SPV575-TM10-144	SPV580-TM10-144	SPV585-TM10-144	SPV590-TM10-144
Maximum Power - Pmax (W)	430	434	437	440	444	447
Maximum Power Voltage - Vmp (V)	39.48	39.69	39.78	39.89	40.10	40.22
Maximum Power Current - Imp (A)	10.90	10.95	11.00	11.05	11.07	11.12
Open-circuit Voltage - Voc (V)	47.69	47.80	48.00	48.20	48.43	48.63
Short-circuit Current - Isc (A)	11.46	11.50	11.55	11.60	11.84	11.89
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	

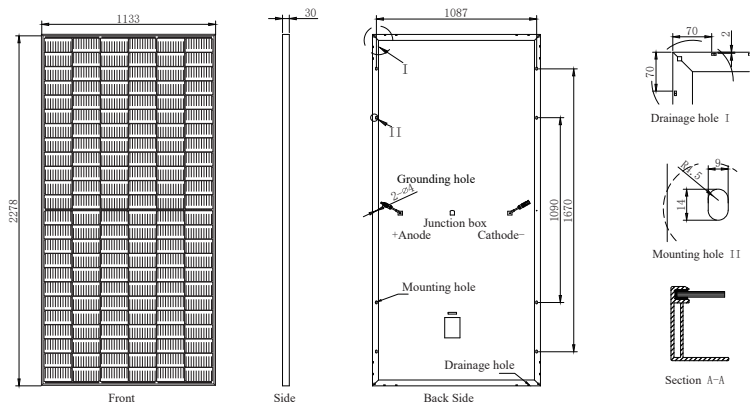
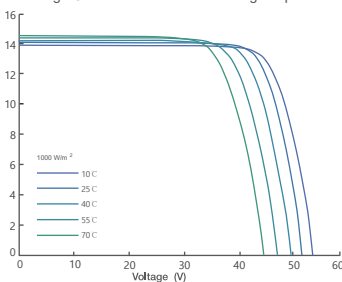
## Mechanical Characteristics

Cell Type	Mono-crystalline TOPCon 182x91 mm
No. of Cells	144 (6x24)
Dimensions	2278x1133x30 mm
Weight	26.5 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 <sup>2</sup> , Length: 300 mm or Customized Length
Packaging Configuration	72pcs/stack, 720pcs/40'HQContainer ( Two pallets=One stack )

Current-Voltage Curve under different irradiance



Current-Voltage Curve under different working temperatures



[www.spolarpv.com](http://www.spolarpv.com)