

Tier1

BloombergNEF



ISO14001

ISO9001

ISO45001



# M10 TOPCON MONO

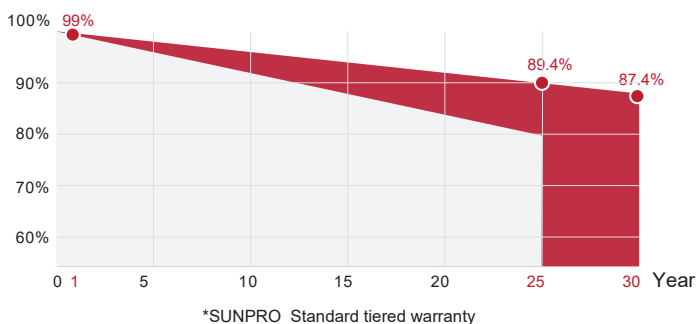
## SPDGxxx-N144M10

- Double glass (xxx=555~580W)
- Silver frame
- Black frame
- Full black



### 30 Yr quality guarantee | 30 Yr power warranty

■ SUNPRO TOPCon module (Additional value from 30-year warranty)  
 □ Common module



#### WARRANTY & GUARANTEE

30 years for all rooftop installations  
 Linear output power guarantee  
 25 years: 89.4% power output  
 30 years: 87.4% power output



#### WITHSTAND STRONG

Snow load 5400Pa  
 Wind load 2400Pa



#### R&D AND PRODUCTION

Advanced production line.  
 The leading solar cell cutting process and multi busbar design with SUNPRO Technology.



#### HIGH EFFICIENCY

N-type, Components have better reliability and lower LID/LETID attenuation. Efficiency can reach 22.44%. Excellent low light performance. Higher power output under the conditions of haze, overcast, etc.

## Electrical parameters at standard test conditions (STC:AM=1.5, 1000W/m<sup>2</sup>, Cells Temperature 25°C)

Typical type	555W	560W	565W	570W	575W	580W
Max power(Pmax)	555	560	565	570	575	580
Max power voltage(Vmp)	41.86	41.99	42.13	42.26	42.41	42.56
Max power current(Imp)	13.26	13.34	13.41	13.49	13.56	13.63
Open circuit voltage(Voc)	50.70	50.84	50.98	51.13	51.28	51.43
Short circuit current(Isc)	14.01	14.07	14.13	14.20	14.27	14.34
Module Efficiency(%)	21.48	21.67	21.86	22.06	22.25	22.44
Max system voltage	DC 1500V(TÜV) / 1500V(UL)					
Maximum Series Fuse Rating	25A					

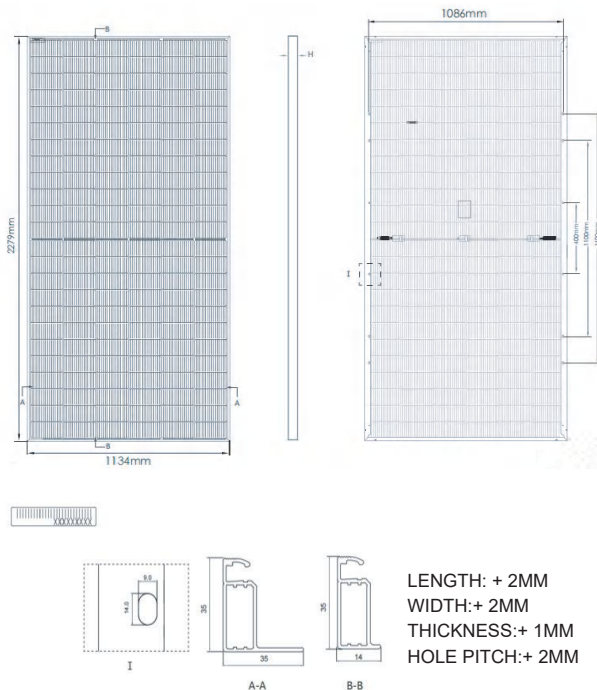
### Electrical Characteristics with 15% Rear Side Power Gain

Front power Pmax/W	555W	560W	565W	570W	575W	580W
Total power Pmax/W	638.25	644.0	649.75	655.5	661.25	667.0
Vmp/V(Total)	41.86	41.99	42.13	42.26	42.41	42.56
Imp/A(Total)	15.25	15.34	15.42	15.51	15.59	15.67
Voc/V(Total)	50.70	50.84	50.98	51.13	51.28	51.43
Isc/A(Total)	16.11	16.18	16.25	16.33	16.41	16.49

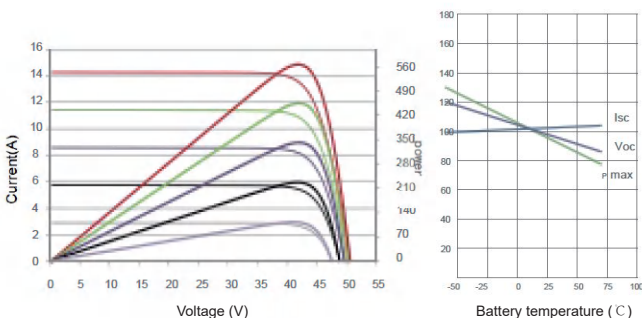
### Electrical parameters at NMOT test conditions (Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s)

Typical type	555W	560W	565W	570W	575W	580W
Max power(Pmax)	417.0	421.0	425.0	429.0	433.0	437.0
Max power voltage(Vmp)	39.30	39.50	39.70	39.70	39.90	40.10
Max power current(Imp)	10.62	10.67	10.72	10.79	10.85	10.90
Open circuit voltage(Voc)	47.70	47.90	48.10	48.20	48.40	48.50
Short circuit current(Isc)	11.29	11.34	11.39	11.44	11.50	11.56

### DIMENSIONS AND STRUCTURE



### I-V CHARACTERISTICS AT DIFFERENT IRRADIATION



### Mechanical Data

Dimensions	2279x1134x30mm
Weight	34kg
Glass	(F) 2.0 mm High Transmission, AR Coated Heat Strengthened Glass (B) 2.0 mm High Transmission, AR Coated Heat Strengthened Glass
Output cables	4mm <sup>2</sup> , symmetrical lengths 1300mm
Cell type	N type Mono-Crystalline, 16BB, 182x91mm
Number of cells	144cells ( Half-Cell )
Connectors	Taizhou Chuangda Electronic Co.,Ltd. Type: PV-TT02,1500V DC, 43A, -40 to 85° C, IP68(1m,1h)

### Temperature Characteristics

Temp.Coeff.of Isc(TK Isc)	0.046%/°C
Temp.Coeff.of Voc(TK Voc)	-0.25%/°C
Temp.Coeff.of Pmax(TK Pmax)	-0.30%/°C
Operating temperature	-40~+85°C
Normal operating cell temperature	45±2°C

### Packing Configuration

Container	40'GP
Pieces per pallet	62
Pallets per container	10
Pieces per container	620

### Tests, Certifications and Warranties

Standard tests	IEC 61215, IEC 61730, IEC 61701, IEC 62716, PPP 58042
System certs	ISO 9001, ISO14001, ISO45001
Certifications	TÜV, CE, WEEE, INMETRO, FIRE CERTIFICATE C1, UL
Extreme wind and snow loads testing	Withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)
Power tolerance	±3%
Junction box	IP 68
Warranties	30 years product warranty and 30 years 87.4% of power
Fire class rating	Class C