

solar panel

MSP-144-NB
N-type **Bifacial**
Topcon Technology

Cell Size: 182*91mm
Power Range: 550-580W

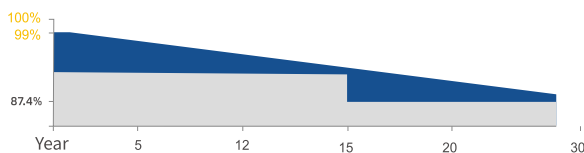


QUALIFICATIONS AND CERTIFICATES



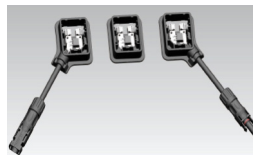
• IEC61215 / • IEC61730

WARRANTY



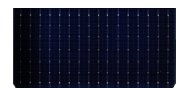
15 YEARS Guarantee on product material and workmanship

30 YEARS Linear Power output warranty

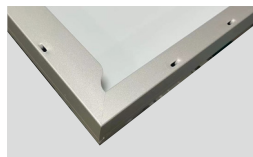


JUNCTION BOX

Waterproof protection grade: IP68
Safety Level: Class II
Maximum System Voltage: 1500V
outstanding waterproof level -
Effectively resist harsh environments



16BB



Frame

Strong mechanical load
resistance up to 5400Pa
Anodic oxidation layer resistant to
chemical corrosion available
in silver and black



SMBB Technology

Better light trapping and current collection to improve module power output and reliability.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).

Model Type	MSP-550W-NB	MSP-555W-NB	MSP-560W-NB	MSP-565W-NB	MSP-570W-NB	MSP-575W-NB	MSP-580W-NB
Peak Power(Pmax)	550.00	555.00	560.00	565.00	570.00	575.00	580.00
Maximum Power Voltage(Vmp)	41.50	41.64	41.77	41.92	42.07	42.22	42.37
Maximum Power Current(Imp)	13.26	13.33	13.41	13.48	13.55	13.62	13.69
Open Circuit Voltage(Voc)	50.21±3%	50.34±3%	50.47±3%	50.60±3%	50.74±3%	50.88±3%	51.02±3%
Short Circuit Current(Isc)	14.00±3%	14.07±3%	14.15±3%	14.23±3%	14.31±3%	14.39±3%	14.47±3%
Module Efficiency(%)	21.29	21.48	21.68	21.87	22.07	22.26	22.45

*STC:irradiance 1000W/m², AM1.5, and cell temperature of 25°C

ELECTRICAL DATA(NMOT)

Model Type	MSP-550W-NB	MSP-555W-NB	MSP-560W-NB	MSP-565W-NB	MSP-570W-NB	MSP-575W-NB	MSP-580W-NB
Peak Power(Pmax)	413.00	417.00	421.00	425.00	429.00	433.00	437.00
Maximum Power Voltage(Vmp)	38.99	39.12	39.25	39.38	39.51	39.64	39.77
Maximum Power Current(Imp)	10.61	10.67	10.73	10.79	10.85	10.91	10.97
Open Circuit Voltage(Voc)	47.70±3%	47.82±3%	47.94±3%	48.06±3%	48.20±3%	48.32±3%	48.46±3%
Short Circuit Current(Isc)	11.30±3%	11.36±3%	11.42±3%	11.49±3%	11.55±3%	11.61±3%	11.68±3%

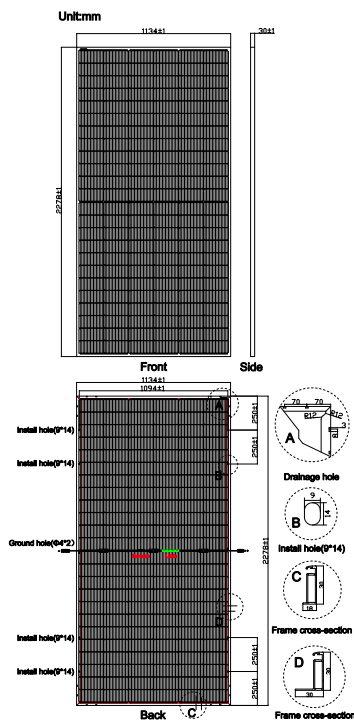
*NMOT: irradiance 800 W/m², AM 1.5, ambient temperature 20°C, wind speed 1 m/s

ELECTRICAL DATA(BNPI)

Model Type	MSP-550W-NB	MSP-555W-NB	MSP-560W-NB	MSP-565W-NB	MSP-570W-NB	MSP-575W-NB	MSP-580W-NB
Peak Power(Pmax)	609.00	615.00	620.00	626.00	632.00	637.00	643.00
Maximum Power Voltage(Vmp)	41.50	41.64	41.77	41.92	42.07	42.22	42.37
Maximum Power Current(Imp)	14.69	14.77	14.86	14.94	15.01	15.09	15.18
Open Circuit Voltage(Voc)	50.21±3%	50.34±3%	50.47±3%	50.60±3%	50.74±3%	50.88±3%	51.02±3%
Short Circuit Current(Isc)	15.51±3%	15.59±3%	15.68±3%	15.77±3%	15.86±3%	15.94±3%	16.03±3%

*BNPI:back irradiance 135W/m², AM1.5, and cell temperature of 25°C

PV DRAWINGS



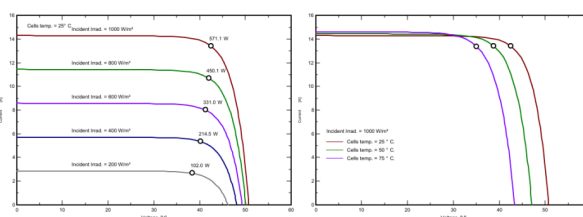
TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1500 V
Maximum Series Fuse Rating (A)	30 A
Power Tolerance	0~+3 W
Pmax Temperature Coefficients (W/°C)	-0.300 %/°C
Voc Temperature Coefficients (V/°C)	-0.250 %/°C
Isc Temperature Coefficients (A/°C)	+0.046 %/°C
NMOT Nominal Module Operating Temperature (°C)	45±2 °C
Operating and Storage Temperature (°C)	-40~+85 °C

MECHANICAL CHARACTERISTICS

Cell Type	182*91 N Type Bifacial Mono
No. of Cells	144 (12*12)
Dimensions	2278*1134*30mm
Weight	32.20kg
Front Glass	2.0mm AR coating tempered glass
Back Glass	2.0mm Glazed Glass
Frame	Anodized Aluminium Alloy
Junction box	IP68 3diodes
Output cables	4mm ² cable 35cm (Including MC4 connector)
MaxWind Load/Snow Load	2400Pa/5400Pa

IV CURVE (570W)



PACKING WAY

20FT container	5 Packages/185pcs
40HQ container	20 Packages/740pcs