

Venus Series

182 TOPCON 580-600W

N-type Half-Cell Bifacial Module (72 Model)

• QUALITY SYSTEM

ISO9001 / ISO14001 / ISO45001
IEC:61215-2021 / IEC:61730-2023

• PRODUCT CERTIFICATION



• N-TOPCON MODULE ADVANTAGE

Multi-main gate technology

Superior load capacity

High module conversion efficiency

Excellent low-light performance

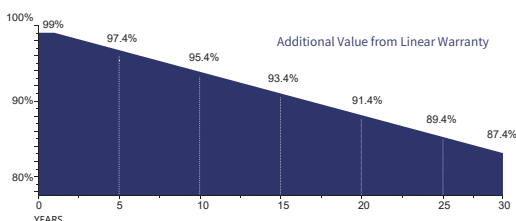
Low attenuation long warranty

Low BOS and KWH cost

Reduce heat spot effect

Higher bifacially

• WARRANTY



INSURANCE



Guarantee on product material and workmanship



Linear power output warranty

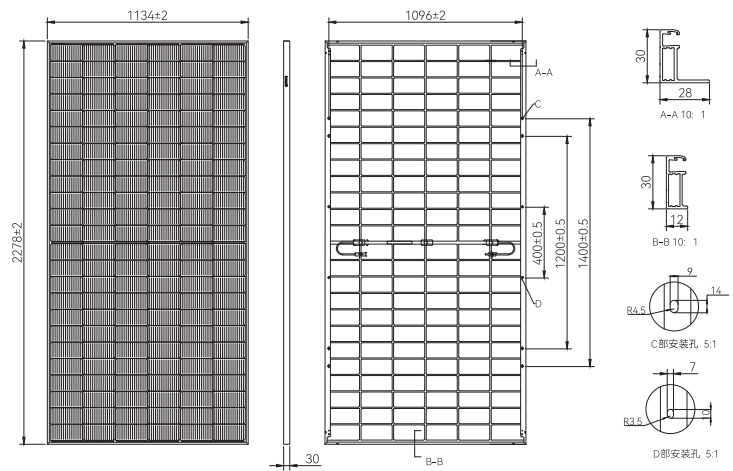
Mechanical Specifications

External Dimension	2278 ±2 x 1134±2 x 30 mm
Weight	31.5 kg
Solar Cells	N-TOPCon 182 x 91mm (144 pcs)
Front / Back Glass	2.0mm AR coating semi-tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0mm ² , 250mm(+)/350mm(-) or Customized Length

Packing Configuration

Container	40' HQ
Pieces per Pallet	36
Pallets per Container	20
Pieces per Container	720

Technical drawing



Electrical Characteristics

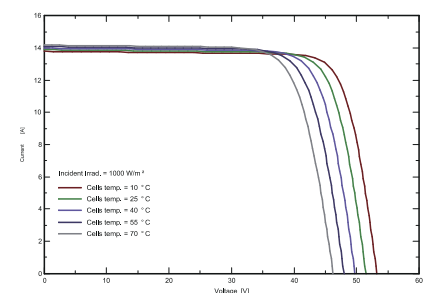
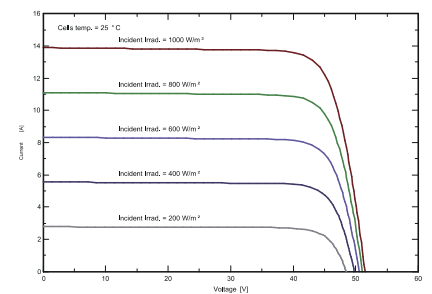
	MK-OET-BDN-580		MK-OET-BDN-585		MK-OET-BDN-590		MK-OET-BDN-595		MK-OET-BDN-600	
	Front STC	Front NOCT	Front STC	Front NOCT	Front STC	Front NOCT	Front STC	Front NOCT	Front STC	Front NOCT
Maximum Power -P _{mp} (W)	580	436.2	585	439.9	590	443.7	595	447.4	600	451.2
Open Circuit Voltage -V _{oc} (V)	52.30	49.69	52.50	49.88	52.70	50.07	53.20	50.54	53.40	50.73
Short Circuit Current -I _{sc} (A)	13.85	11.18	13.90	11.22	13.95	11.26	14.15	11.42	14.20	11.46
Maximum Power Voltage -V _{mp} (V)	43.93	40.89	44.10	41.08	44.27	41.24	44.41	41.35	44.55	41.48
Maximum Power Current -I _{mp} (A)	13.21	10.67	13.27	10.71	13.33	10.76	13.40	10.82	13.47	10.88
Module Efficiency STC-η _m (%)	22.5		22.6		22.8		23.0		23.2	
Power Tolerance (W)	(0, +3%)									
Pmax Temperature Coefficient	-0.28 %/°C									
Voc Temperature Coefficient	-0.24%/°C									
Isc Temperature Coefficient	+0.046%/°C									

STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5
Power measurement tolerance: +/-3%

Rear Side Power Gain(MK-OET-BDN-580)

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P _{mp} (W)	633	661	690	719	748
Open Circuit Voltage -V _{oc} (V)	51.50	51.10	51.10	51.10	51.10
Short Circuit Current -I _{sc} (A)	15.74	16.46	17.17	17.89	18.60
Maximum Power Voltage -V _{mp} (V)	42.90	42.90	42.90	42.90	42.90
Maximum Power Current -I _{mp} (A)	14.75	15.42	16.09	16.76	17.43

I-V Curve



Application Conditions

Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	30 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