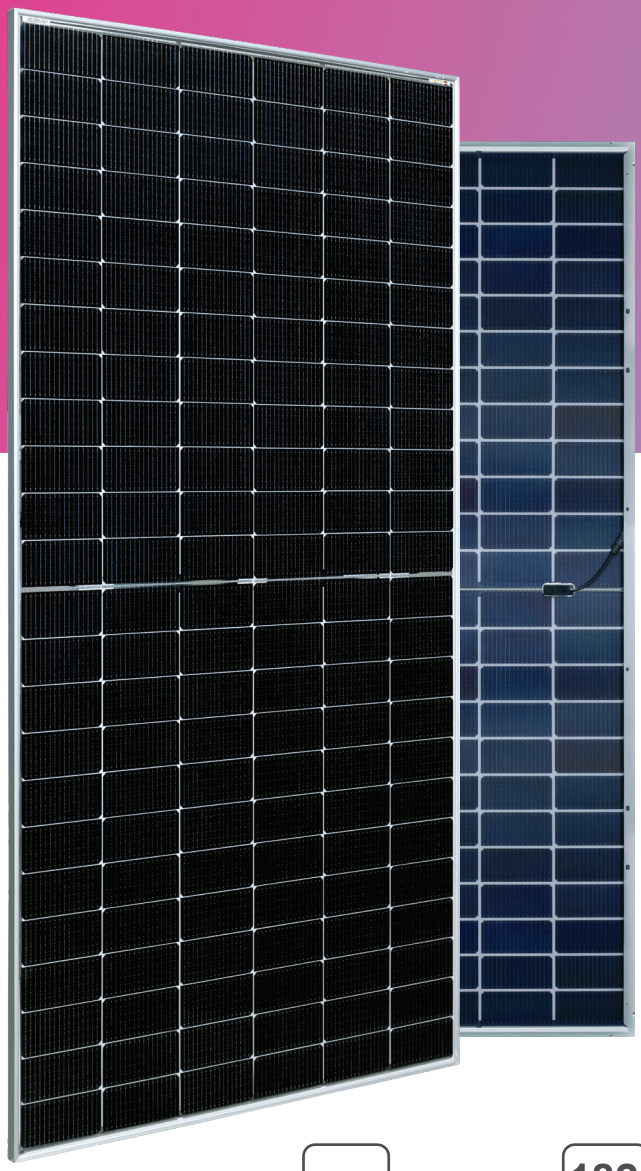
قُدرة
Qudra

Qudra-144BDS Series 555W-575W



555W-575W
N-TYPE TOPCON TECHNOLOGY PV MODULES
HALF-CUT CELLS BIFACIAL DOUBLE-GLASS

30 years
Performance Guarantee

15 years
Product Warranty

- **144** HALF CELLS
- **182** mm CELL SIZE
- LID RESISTANT
- PID RESISTANT
- SALT CORROSION RESISTANT
- NH_3 AMMONIA RESISTANT
- SAND RESISTANT
- HIGHLY STABLE AND TOUGH

IEC 61215
IEC 61730
Regular Production Surveillance
Type Tested and Monitored

IEC 62716 (Ammonia corrosion)
IEC 61701 (Salt mist corrosion)
IEC 60068 (Sand and dust)
IEC 62804 (PID resistance)

Qudra Renewable Energy Solutions, Ramallah, Palestine

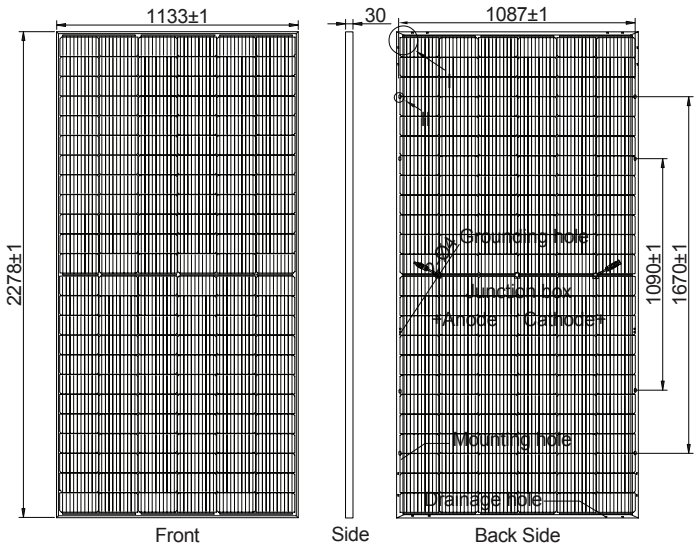
قُدرة
Qudra

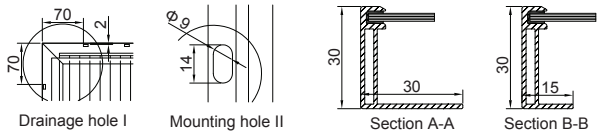
N-TYPE TOPCON TECHNOLOGY PV MODULES
HALF - CUT CELLS . BIFACIAL . DOUBLE-GLASS

Qudra-144BDS Series 555W-575W

Mechanical and design specification

Cell type	N-type TOPCon Technology, Half-cut cells, 182 mm
No. of cells	144
Bifaciality	80±5%
Glass	2.0 mm, high transmission, AR coated, tempered
Encapsulation	POE
Back cover	2.0 mm white glazed glass, tempered
Junction box	IP 68 rated
Frame	30 mm anodized Aluminium alloy
Cable	1 x 4 mm², 350 mm length or customized
Connectors	MC 4 / MC 4 compatible
Dimension	2278 mm x 1133 mm x 30 mm
Weight	32.5 kg
Hail resistance	Max. Ø 25 mm at 23 m/s
Wind load	2400 Pa/ 244 kg/ m²
Mechanical load	5400 Pa/ 550 kg/ m²
Fire Rating	Class A (according to UL 790)



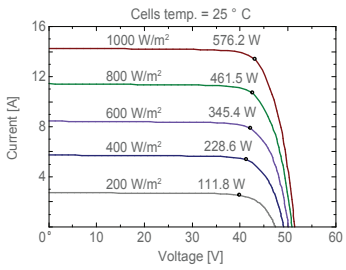


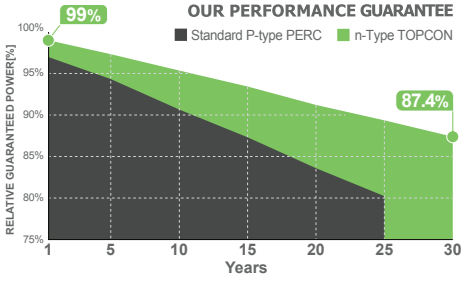
Packaging information

Packaging configuration	72 pcs / double pallets
Loading capacity	720 pcs / 40 HQ
Size / Pallet	2310 mm x 1140 mm x 2490 mm
Weight	2464 kg / double pallets

Temperature ratings

Operating temperature	(°C)	-40 to +85
Temp.coefficient of P_{max}	(%/°C)	-0.31
Temp.coefficient of V_{oc}	(%/°C)	-0.26
Temp.coefficient of I_{sc}	(%/°C)	0.046
Nom. operating temp. NOCT	(°C)	42 ± 2





Electrical specifications (STC*):

Nominal Max. Power	P_{max} (Wp)	555	560	565	570	575
Maximum operating voltage	V_{MPP} (V)	42.24	42.40	42.56	42.72	42.88
Maximum operating current	I_{MPP} (A)	13.14	13.21	13.28	13.34	13.41
Open-circuit voltage	V_{oc} (V)	50.07	50.23	50.39	50.55	50.68
Short-circuit current	I_{sc} (A)	14.07	14.14	14.20	14.26	14.33
Module efficiency	η (%)	21.50	21.70	21.89	22.08	22.28
Power tolerance	(W)			0~+5		
Maximum system Voltage	(V)			1500		
Maximum series fuse rating	(A)			25		

*STC: Standard test conditions (Irradiance 1000 W/m², Cell temperature 25°C and air mass of AM1.5)

Electrical specifications (NMOT*):

Nominal Max. Power	P_{max} (Wp)	422.8	426.0	430.1	434.0	437.4
Maximum operating voltage	V_{MPP} (V)	39.20	39.30	39.50	39.70	39.80
Maximum operating current	I_{MPP} (A)	10.79	10.84	10.89	10.94	10.99
Open-circuit voltage	V_{oc} (V)	47.40	47.50	47.70	47.80	48.00
Short-circuit current	I_{sc} (A)	11.35	11.40	11.45	11.50	11.55

*NMOT: Normal Module Operating Temperature (Irradiance 800 W/m², Ambient temperature 20°C, air mass of AM1.5 and wind speed of 1 m/s)

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