ROVON POWER / SOLAR MODULE

Rove N1

RN1 60BD

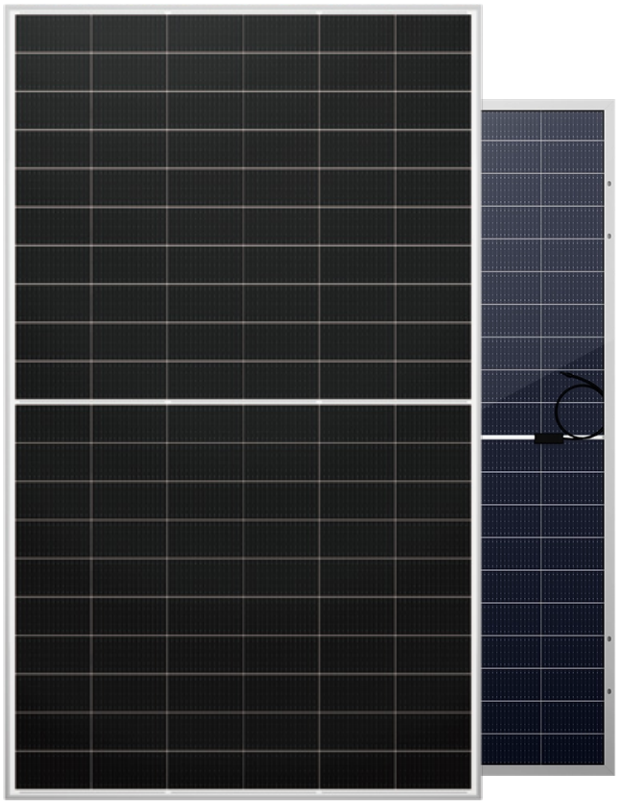
625-645W

N-Type TOPCon Bifacial
Dual Glass Solar Module

22.79%
MAX. MODULE EFFICIENCY

120
HALF-CELLS

2.0 mm front glass / 2.0 mm rear glass
1500 V DC maximum system voltage



FRONT REAR

Product performance

- **N-Type TOPCon technology**

  Tunnel oxide passivated contacts help reduce recombination losses and support high cell efficiency and module power.

- **Low temperature coefficient**

  -0.26%/°C Pmax coefficient supports stable output in hot climates.

- **SMBB and half-cut technology**

  Shorter current paths help reduce resistive loss and improve cell efficiency.

- **Up to 90% bifaciality**

  Symmetrical bifacial cells support additional rear-side energy generation.

- **PIB-based sealing**

  Improved water resistance and air impermeability help extend module life.

Quality & Certification

PRODUCT TEST STANDARDS

IEC 61215 / 61730 · IEC 62804 (PID)
IEC 61701 (salt) · IEC 62716 (ammonia)
IEC 60068-2-68 (sand)

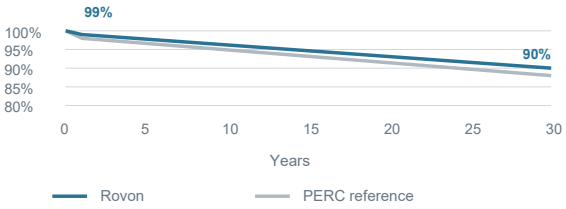
MANAGEMENT SYSTEM STANDARDS

ISO 9001:2015 · ISO 14001:2015
ISO 45001:2018 · ISO 50001:2011
IEC TS 62941-2016

Warranty

25 YEARS
Materials

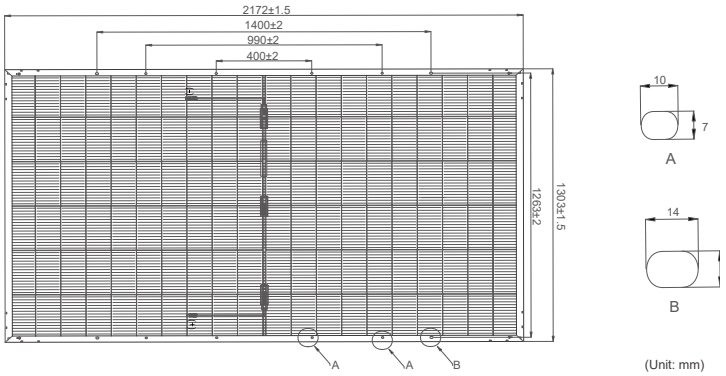
30 YEARS
Power output



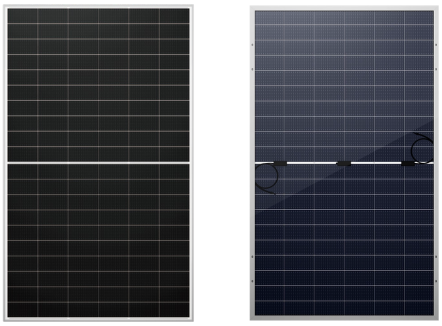
ROVE N1 / RN1 60BD 625-645W

Technical specifications

Drawings



Front / Rear



Mechanical characteristics

PARAMETER	VALUE
Solar cells	TOPCon Mono, 210 × 105 mm
No. of cells	120 (6 × 20)
Dimensions	2172 × 1303 × 35 mm
Weight	35.3 kg
Front / rear glass	Front: 2.0 mm anti-reflective solar glass / Rear: 2.0 mm solar glass
Frame	Anodized aluminium alloy
Junction box	IP68
Output cables	4 mm²; 300 mm; customizable; UV resistant
Connectors	MC4 original / MC4 compatible
Mechanical load test	5400 Pa
Packaging	31 pcs / box; 558 pcs / 40'HC

Operating characteristics

PARAMETER	VALUE
Module temperature	-40°C to +85°C
Max. system voltage	1500 V DC (IEC)
Max. series fuse	30 A
Power tolerance	0 to +5 W
Bifaciality	85 ±5%

Temperature characteristics

PARAMETER	VALUE
NOCT	44 ±2°C
Pmax coefficient	-0.26%/°C
Voc coefficient	-0.24%/°C
Isc coefficient	+0.04%/°C

Electrical parameters / STC

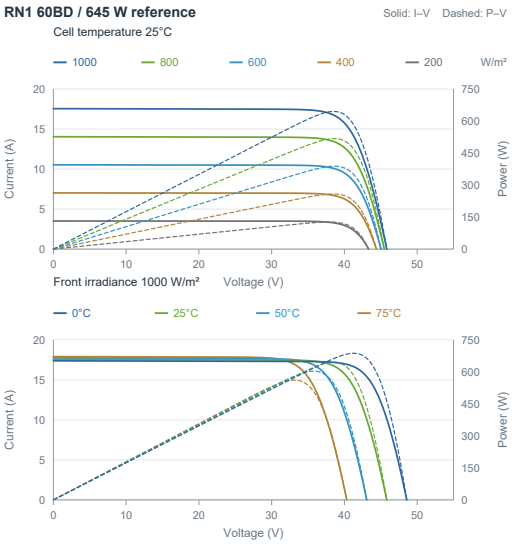
POWER CLASS	625	630	635	640	645
Pmax (W)	625	630	635	640	645
Vmpp (V)	37.86	38.03	38.19	38.35	38.51
Impp (A)	16.51	16.57	16.63	16.69	16.75
Voc (V)	45.13	45.30	45.48	45.65	45.82
Isc (A)	17.31	17.37	17.43	17.49	17.55
Efficiency (%)	22.08	22.26	22.44	22.61	22.79

Electrical parameters / BSTC

POWER CLASS	625	630	635	640	645
Pmax (W)	690	695	700	705	710
Vmpp (V)	37.86	38.03	38.19	38.35	38.51
Impp (A)	18.23	18.28	18.33	18.39	18.44
Voc (V)	45.13	45.30	45.48	45.65	45.82
Isc (A)	19.11	19.16	19.21	19.27	19.32

1. STC: irradiance 1000 W/m²; cell temperature 25°C; AM 1.5. Pmax tolerance: ±3%.
2. BSTC: front irradiance 1000 W/m²; rear irradiance 135 W/m²; AM 1.5; ambient temperature 25°C.

I–V / P–V curves



Calculated from datasheet parameters; AM1.5.
Rear irradiance 0 W/m²; temperature curves use table coefficients.