ROVON POWER / SOLAR MODULE

Rove N1

RN1 72BD

575-595W

N-Type TOPCon Bifacial
Dual Glass Solar Module

23.00%
MAX. MODULE EFFICIENCY

144
HALF-CELLS

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



FRONT REAR

Product performance

Bifacial power generation

Rear-side illumination contributes additional output. See the 5%, 15% and 25% gain values on page 2.

N-type cell technology

N-type TOPCon cells with passivating contact technology.

Double-glass reliability

Front and rear glass construction with an anodized aluminum alloy frame.

Low-light response

Designed for improved output under low-irradiance conditions.

Temperature performance

Pmax temperature coefficient: -0.28%/°C.

Quality & Certification

PRODUCT TEST STANDARDS

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

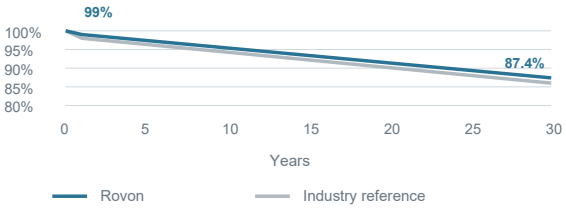
MANAGEMENT SYSTEM STANDARDS

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

Warranty

15 YEARS
Materials

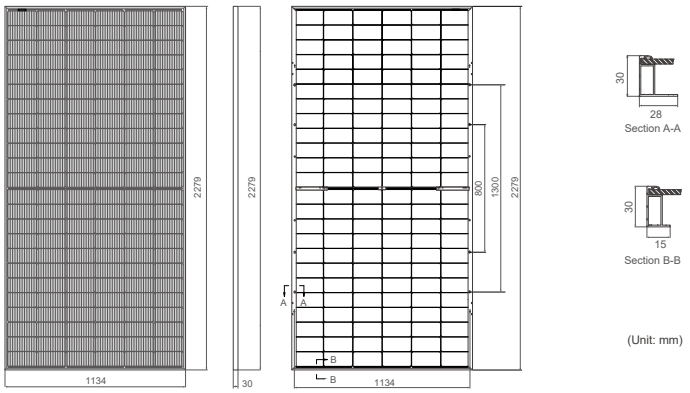
30 YEARS
Power output



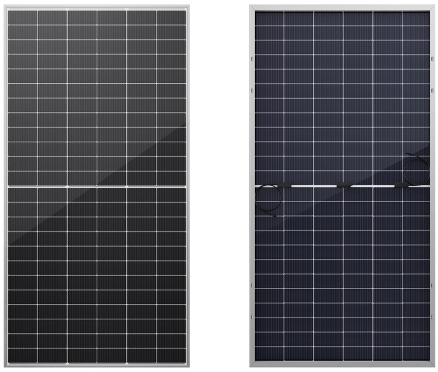
ROVE N1 / RN1 72BD 575-595W

Technical specifications

Drawings



Front / Rear



Mechanical characteristics

PARAMETER	VALUE
Solar cells	TNC (N-type monocrystalline cell)
No. of cells	144 (6 × 24)
Dimensions	2278 ±2 × 1134 ±2 × 30 mm
Weight	31.5 kg
Front / Rear glass	2.0 mm high-transmittance, AR semi-tempered glass / 2.0 mm semi-tempered glass
Frame	Anodized aluminum alloy frame
Junction box	IP68, 3 diodes
Output cables	4 mm²
Cable length	+400 mm / -200 mm; customizable
Wind / snow load	2400 Pa / 5400 Pa
Packaging	36 pcs / pallet; 720 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

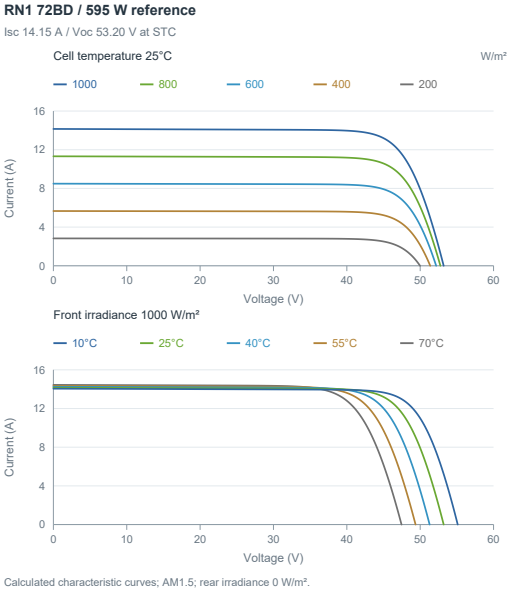
Temperature characteristics

PARAMETER	VALUE
NMOT	45 ±2°C
Pmax coefficient	-0.28%/°C
Voc coefficient	-0.24%/°C
Isc coefficient	+0.046%/°C

Electrical parameters / STC

POWER CLASS	575	580	585	590	595
Pmax (W)	575	580	585	590	595
Vmpp (V)	43.76	43.93	44.10	44.27	44.41
Impp (A)	13.14	13.21	13.27	13.33	13.40
Voc (V)	52.10	52.30	52.50	52.70	53.20
Isc (A)	13.80	13.85	13.90	13.95	14.15
Efficiency (%)	22.30	22.50	22.60	22.80	23.00

I–V curves



Calculated characteristic curves; AM1.5; rear irradiance 0 W/m².

Bifacial output / rear-side gain

GAIN	PARAMETER	575	580	585	590	595
5%	Pmax (W)	603.8	609.0	614.3	619.5	624.8
	Efficiency (%)	23.40	23.60	23.80	24.00	24.20
15%	Pmax (W)	661.3	667.0	672.8	678.5	684.3
	Efficiency (%)	25.60	25.80	26.00	26.30	26.50
25%	Pmax (W)	718.8	725.0	731.3	737.5	743.8
	Efficiency (%)	27.80	28.10	28.30	28.50	28.80

1. STC: irradiance 1000 W/m²; AM 1.5; cell temperature 25°C according to EN 60904-3.
2. Pm tolerance: 0 to +5 W; power measurement uncertainty: ±3%. Voc, Isc, Vm and Im deviation: ±3%.