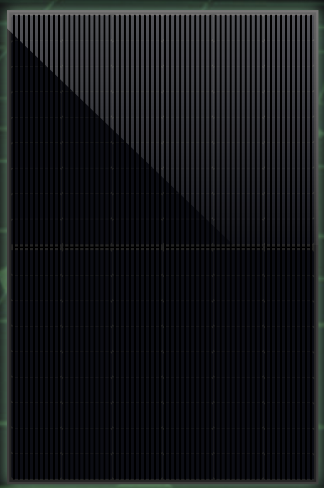


VDS POWER

VDS-S108/M10N-BG

435-460W

182 mm Half Cell, 108 Cells

TOPCon Bifacial Solar Module, Full Black

Status: 01/2026

23.5%	460W	15 YEARS	30 YEARS
Module Efficiency	Highest Power Output	Product Warranty	Linear Power Warranty

1.00% First year power degradation **0.40%** Annual degradation

PRODUCT ADVANTAGES

High module conversion efficiency
Module efficiency up to 23.5% achieved through advanced cell technology and manufacturing process

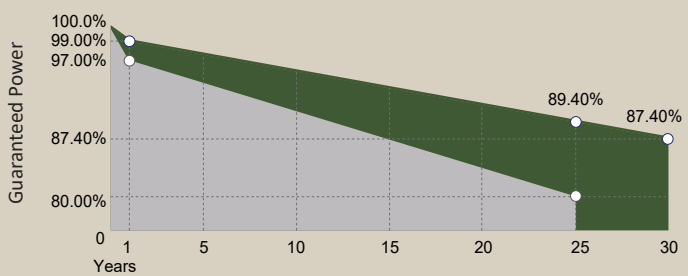
Lower operating temperature
Lower operating temperature and temperature coefficient increase the power output

Excellent weak light performance
More power output in weak light condition ,such as cloudy, morning and sunset

Extended wind and snow load tests
Module certified to withstand extreme wind(2400 Pascal) and snow loads(5400 Pascal)

IP68 junction box
High waterproof & dustproof level

PERFORMANCE WARRANTY



Certifications of Product and Manufacturer

Jiangsu VDS Renewable Technology Co., Ltd.
No.1, Longmen Road, Wujin Hi-tech Industrial Zone,Changzhou,Jiangsu, China
www.vds-power.com

VDS-S108/M10N-BG

ELECTRICAL DATA (STC)

Peak Power Watts-PMAX (Wp)*	435	440	445	450	455	460
Maximum Power Voltage-VMP (V)	32.7	32.9	33.1	33.3	33.5	33.7
Maximum Power Current-IMP (A)	13.31	13.38	13.44	13.51	13.58	13.65
Open Circuit Voltage-VOC (V)	39.3	39.5	39.7	39.9	40.1	40.3
Short Circuit Current-ISC (A)	14.10	14.19	14.27	14.36	14.45	14.54
Module Efficiency ηm (%)	22.3	22.5	22.8	23.0	23.3	23.5
Power Tolerance-PMAX (W)	0~+5					

STC: Irradiance 1000W/m², moudule temperature 25°C, AM=1.5; *Measuring tolerance: ±3%

ELECTRICAL DATA(BNPI)

Peak Power-PMAX (Wp)*	480	485	490	495	500	505
Maximum Power Voltage-VMP (V)	32.7	32.9	33.1	33.3	33.5	33.7
Maximum Power Current-IMP (A)	14.68	14.74	14.80	14.86	14.93	14.99
Open Circuit Voltage-VOC (V)	39.3	39.5	39.7	39.9	40.1	40.3
Short Circuit Current-ISC (A)	15.60	15.68	15.76	15.84	15.92	16.00

BNPI: Irradiance 1000W/m², module temperature 25°C

ELECTRICAL DATA (NMOT)

Maximum Power-PMAX (Wp)*	333	337	341	345	349	353
Maximum Power Voltage-VMP (V)	30.8	31.0	31.2	31.4	31.6	31.8
Maximum Power Current-IMP (A)	10.82	10.88	10.93	10.99	11.04	11.10
Open Circuit Voltage-VOC (V)	37.2	37.4	37.6	37.8	38.0	38.2
Short Circuit Current-ISC (A)	11.41	11.48	11.55	11.62	11.70	11.77

NMOT: Irradiance 800W/m², module temperature 20°C, AM=1.5, wind speed 1m/s

MECHANICAL DATA

Solar Cells	N-Type TOPCon Monocrystalline silicon
Cell Orientation	108 cells (6 x 18)
Module Dimensions	1724x1134x30 mm
Weight	25.1 kg
Front Glass	2.0 mm tempered glass
Encapsulant Material	POE/EVA
Back Glass	2.0 mm semi-tempered glass
Frame	30 mm Anodized Aluminium Alloy (Silver/Black Frame optional)
Junction Box	IP 68 rated
Cables	Photovoltaic Technology Cable 4.0 mm² Cable length 350 mm or customized length

*Please refer to regional datasheet for specied connector.

TEMPERATURE RATINGS

NMOT (Nominal Module Operating Temperature)	42°C (±2°C)
Temperature Coefficient of PMAX	-0.29%/°C
Temperature Coefficient of VOC	-0.25%/°C
Temperature Coefficient of ISC	0.046%/°C

(Do not connect Fuse in Combiner Box with two or more strings in parallel connection)

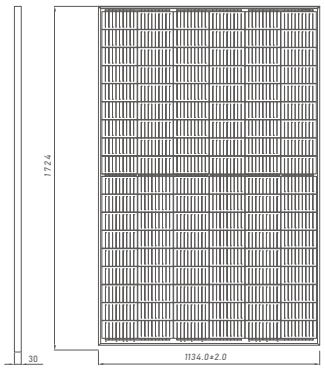
MAXIMUM RATINGS

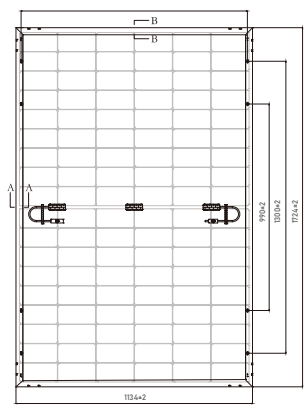
Operational Temperature	-40~+85°C
Maximum System Voltage	1500V DC (IEC)
Max Series Fuse Rating	25 A

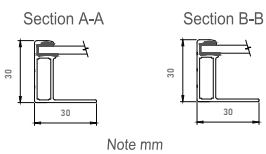
PACKAGING CONFIGURATION

Modules per box	36 pieces
Modules per 40'container	936 pieces

DIMENSIONS OF PV MODULE (mm)



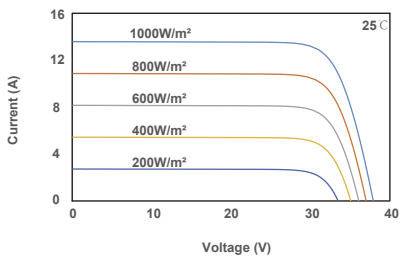


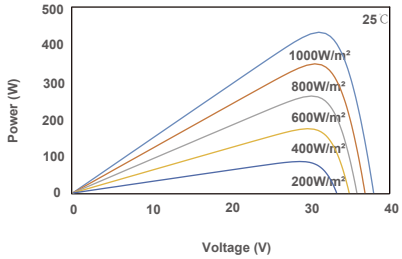


Note mm

I-V CURVE

Current-Voltage & Power-Voltage Curve (430)





COMPANY PROFILE

Our management team has been focusing on the European market for more than 10 years. We have satisfied customers in Germany , Spain , Italy , Bulgaria and many other European countries Through direct access to production we control the quality of photovoltaic modules by monitoring and documenting the manufacturing processes from material procurement to final testing. With a warehouse in Rotterdam , we ensure fast delivery within the EU. This enables us to respond quickly to the needs of different purchase quantities We attach great importance to a reliable partnership and cooperation with our customers We value reliability commitment , safety and transparency.