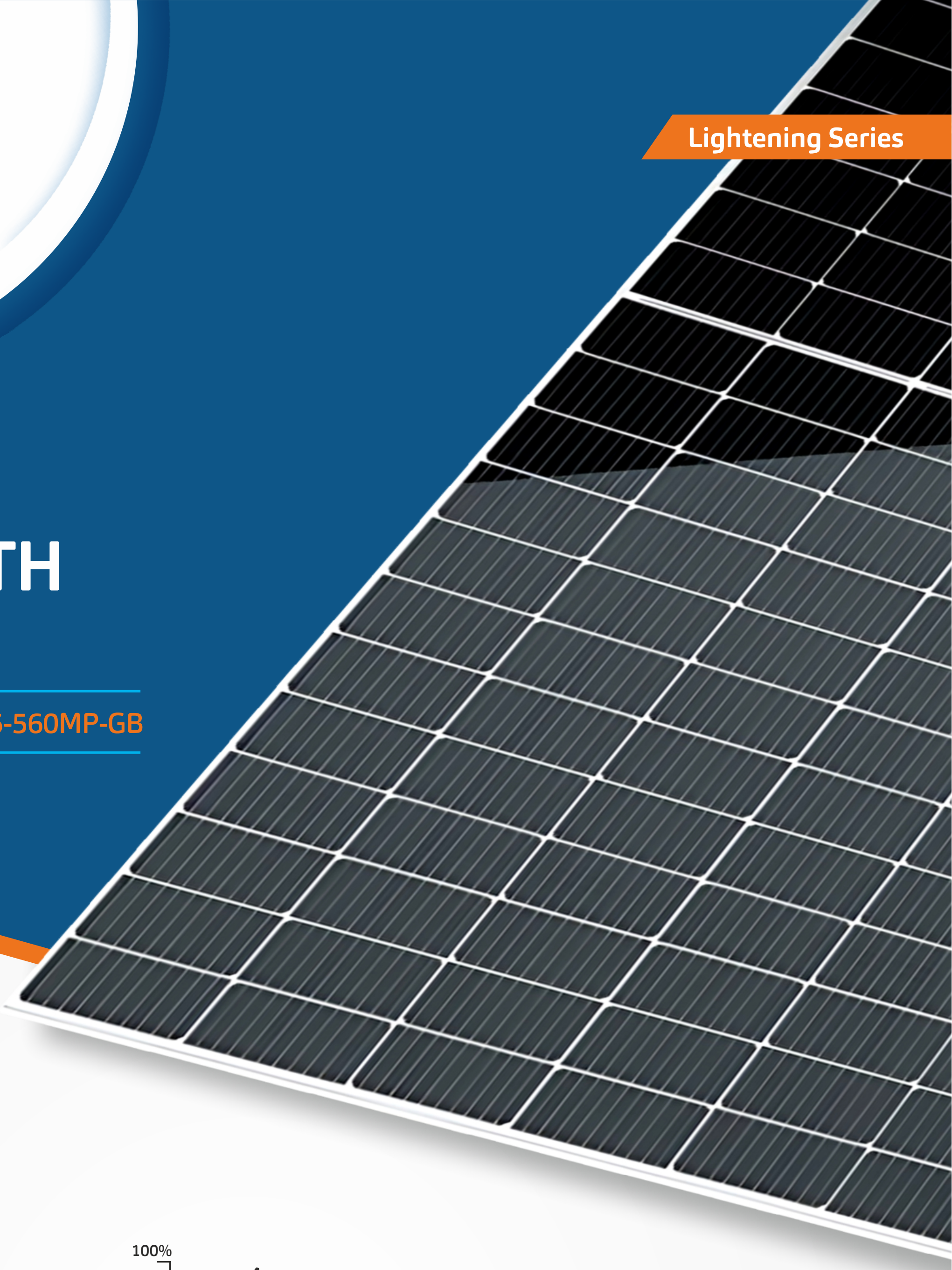
Lightening Series

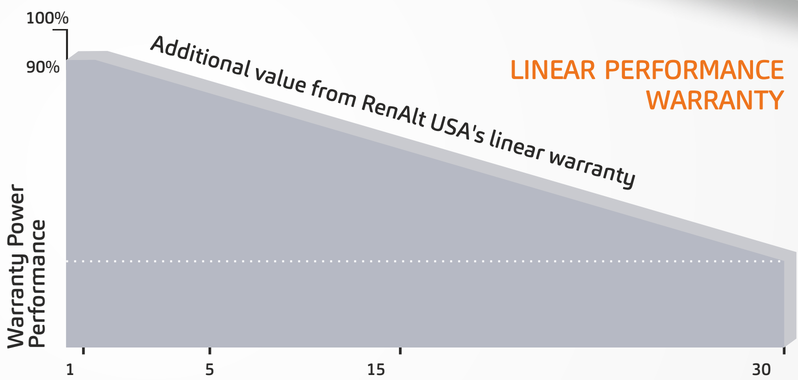
BIFACIAL MODULE WITH DUAL GLASS

PRODUCT: RENUS-M1072BH-535-560MP-GB



535-560Wp	Module Power Output
0~ +5Wp	Positive Power Tolerance
21.6%	Highest Module Efficiency
10	Busbars Half-cut Cell

LINEAR PERFORMANCE WARRANTY



MULTI BUSBAR TECHNOLOGY
Better light trapping and current collection to improve module power output and reliability

HIGHER POWER OUTPUT
Bifaciability generally allows 5-25% more power output, bringing significantly lower LCOE and higher IRR

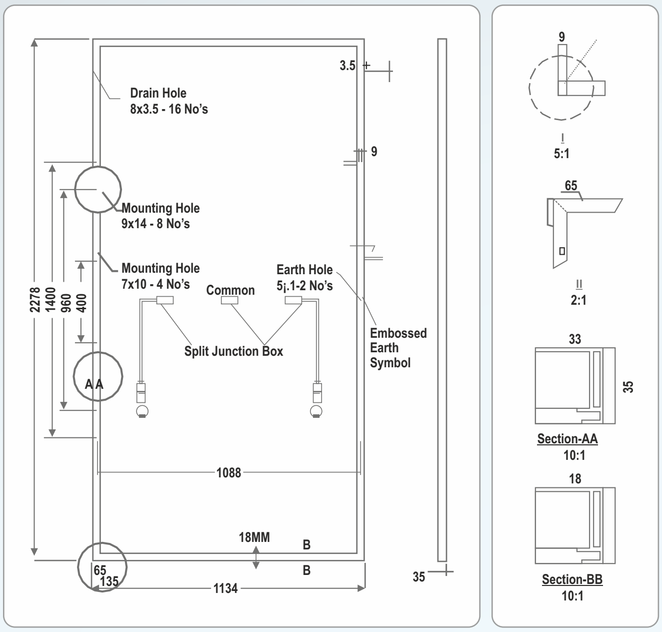
ENHANCED MECHANICAL LOAD
Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal)

PID RESISTANCE
Excellent Anti-PID performance guarantee via optimized mass-production process and materials control

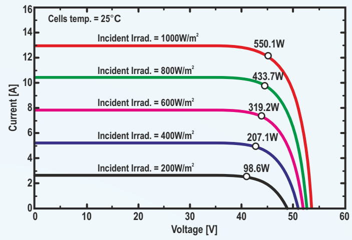
12 YEARS WARRANTY POWER PERFORMANCE

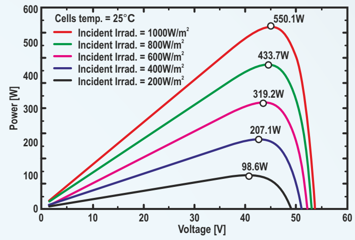
30 YEARS LINEAR POWER OUTPUT WARRANTY

Engineering Drawing



Mechanical Characteristics	
Cell Type	Mono cell (182x91mm)
No. of cells	144 (72*2) half-cut pcs
No. of Bus bars	10 Bus bars
Dimensions	2278×1134×35mm
Weight	~31.8 kg
Front Glass	2mm, High Transmission Semi Tempered Heat Strengthened
Rear Cover	2mm Semi Tempered Heat Strengthen
Frame	Anodized Aluminum Alloy
Frame Profile	35 x 33mm (Long) and 35x18mm (Short)
Junction Box	3 Split, IP68, 3 diodes
Connector	MC4 compatible
Length of cable	4.0mm², 400mm length
Fire Type(Rating)	UL Type 1 / IEC Class C





Electrical Characteristics – STC (Standard Test Conditions) Irradiance 1000W/m2, Cell Temperature 25°C, AM 1.5					Testing uncertainty for Pmax: ±3%	
Module Type	RENUS-M1072BH-535MP-GB	RENUS-M1072BH-540MP-GB	RENUS-M1072BH-545MP-GB	RENUS-M1072BH-550MP-GB	RENUS-M1072BH-555MP-GB	RENUS-M1072BH-560MP-GB
Maximum Power (Pmax) in Wp	535	540	545	550	555	560
Maximum Power Voltage (Vmp)	41.11	41.21	41.30	41.41	41.41	41.43
Maximum Power Current (Imp)	13.03	13.11	13.21	13.29	13.40	13.52
Open-circuit Voltage (Voc)	49.51	49.68	49.76	49.82	49.88	49.91
Short-circuit Current (Isc)	13.82	13.94	13.99	14.08	14.12	14.21
Module Efficiency STC(%)	20.7	20.9	21.1	21.3	21.5	21.6

Operating Parameters		Temperature Ratings	
Operating temperature	-40℃~+85℃	Temperature coefficients of Pmax	-0.35%/℃
Maximum system voltage	1500VDC (IEC) ; 1500VDC (UL)	Temperature coefficients of Voc	-0.27/℃
Maximum series fuse rating	30 A	Temperature coefficients of Isc	0.046%/℃
Power tolerance	(0~+5Wp)	Nominal operating cell temperature (NOCT)	45±3℃

Electrical Characteristics – NOCT Conditions (NOCT - Irradiance 800 W/m2, AM 1.5, Ambient temperature 25°C and wind speed 1m/s)					Testing uncertainty for Pmax: ±3%)	
Module Type	RENUS-M1072BH-535MP-GB	RENUS-M1072BH-540MP-GB	RENUS-M1072BH-545MP-GB	RENUS-M1072BH-550MP-GB	RENUS-M1072BH-555MP-GB	RENUS-M1072BH-560MP-GB
Peak Power (Pmax/W)	394	397	401	405	408	412
MPP Voltage (Vmp/V)	46.26	46.42	49.49	46.61	46.61	46.63
MPP Current (Imp/A)	11.02	11.11	11.15	11.26	11.26	11.33
Open Circuit Voltage (Voc/V)	38.15	38.24	38.32	38.40	38.41	38,44
Short Circuit Current (Isc/A)	10.32	10.39	10.46	10.53	10.62	10.72
Module Efficiency(%)	15.23	15.38	15.52	15.66	15.76	15.95

Bifacial Gain (70% ±10%)	535	540	545	550	555	560
10%	588.5	594.0	599.5	605.0	610.5	616.0
20%	642.0	648.0	654.0	660.0	666.0	672.0
30%	695.5	702.0	708.5	715.0	721.0	728.0

- Bifacial gains depend on the power plant design and albedo of installation site.
- Power Bifaciality = Pmax [Rear] / Pmax [Front] and Pmax [Front] are tested under STC
- Test uncertainty for Pmax ±3%

Packaging Details
Packaging – Modules per pallet – 31 pcs; Pallets per containers – 20 pcs; Total No. of modules in container – 620 Modules for 40' HC container
Packaging – Modules per Pallet – 31 pcs; Pallet per containers – 5 pcs; Total No. of Modules in container – 155 Modules for 20' GP container

Complete System and Product Certifications
IEC 61215, IEC 61730, UL61730, UL 61215
IEC 62941: Quality system for PV module manufacturing
IEC 62804 / IEC 62716 / IEC 61701 / IEC 61853-1 / IEC 61853-2