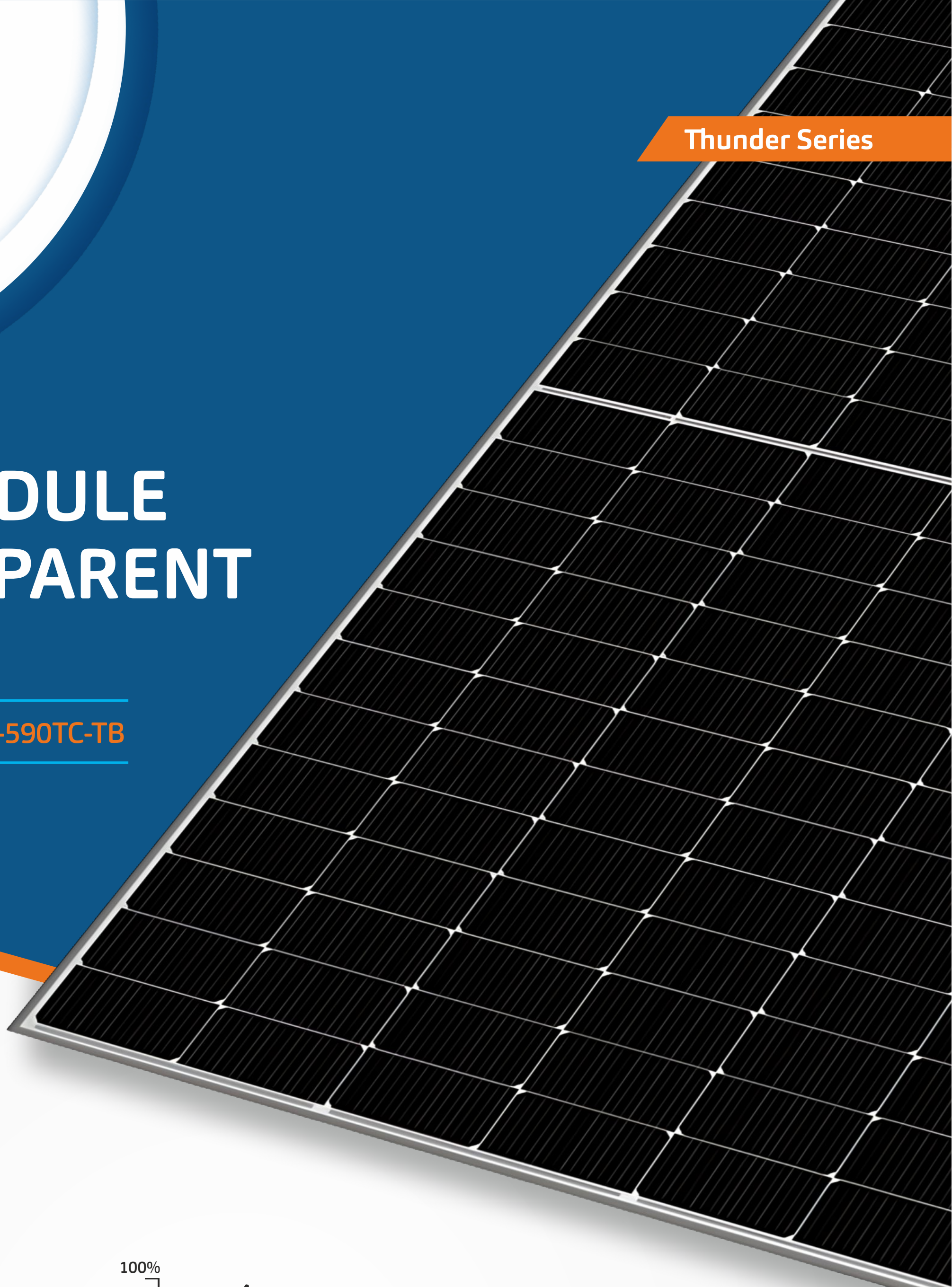
RENALT USA

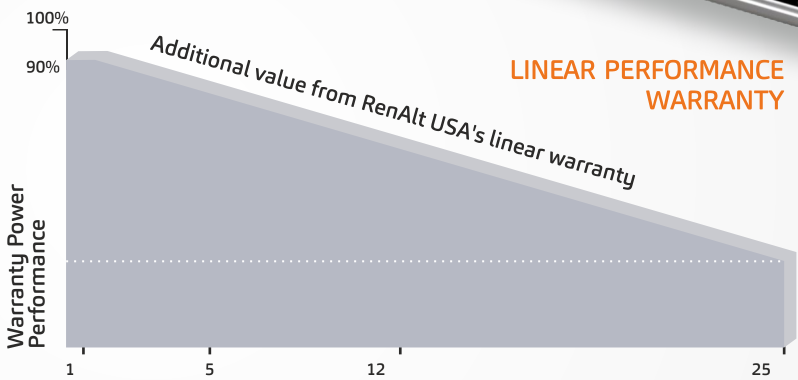
Thunder Series

BIFACIAL MODULE WITH TRANSPARENT BACKSHEET

PRODUCT: RENUS-M1072BH-565-590TC-TB



565-590Wp	Module Power Output
0~+5Wp	Positive Power Tolerance
22.8%	Highest Module Efficiency
16	Busbars Half-cut Cell



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)

LIGHT-WEIGHT DESIGN
Light-weight design using transparent back sheet for easy installation and low BOS cost

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

DATASHEET IS SUBJECT TO CHANGE AT ANY TIME WITHOUT APPROVAL

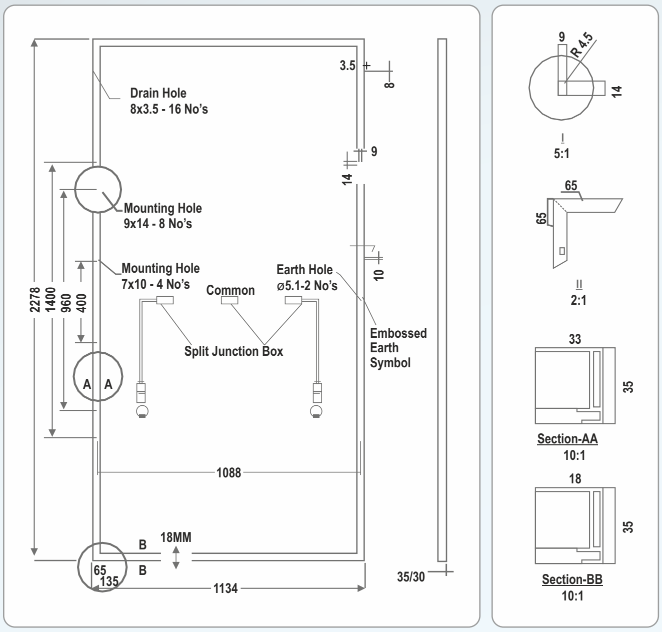
The specifications and key features in this datasheet may deviate slightly from our actual products due to ongoing innovation and product improvement. RenAlt USA LLC reserves the right to adjust this datasheet at any time without prior written notice.

12 YEARS WARRANTY POWER PERFORMANCE

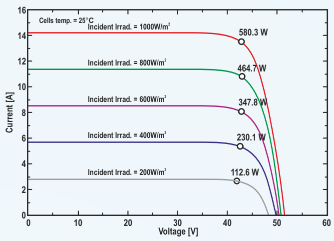
25 YEARS LINEAR POWER OUTPUT WARRANTY

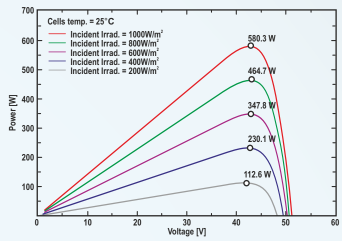
RENALT USA

Engineering Drawing



Mechanical Characteristics	
Cell Type	Mono cell (182x91mm)
No. of cells	144 (72*2) pcs
No. of Bus bars	16 Bus bars
Dimensions	2278×1134×35mm
Weight	28.0 kg
Front Glass	3.2mm, AR coated tempered glass
Frame	Anodized Aluminum Alloy
Frame Profile	35 x 33mm (Long) and 35x18mm (Short)
Junction Box	IP68, 3 diodes
Connector	MC4 compatible
Length of cable	4.0mm^2, 400mm, or can be customized
Fire Type(Rating)	UL Type 1 / IEC Class C





Electrical Characteristics – STC (Standard Test Conditions) Irradiance 1000W/m2, Cell Temperature 25℃, AM 1.5		Testing uncertainty for Pmax: ±3%	
Module Type	RENUS-M1072BH-570TC-TB	RENUS-M1072BH-575TC-TB	RENUS-M1072BH-580TC-TB
Maximum Power (Pmax) in Wp	570	575	580
Maximum Power Voltage (Vmp)	42.29	43.11	43.22
Maximum Power Current (Imp)	13.48	13.34	13.42
Open-circuit Voltage (Voc)	51.07	51.3	51.41
Short-circuit Current (Isc)	14.25	14.14	14.22
Module Efficiency STC(%)	22.07	22.26	22.45

Operating Parameters		Temperature Ratings	
Operating temperature	-40℃~+85℃	Temperature coefficients of Pmax	-0.29%/℃
Maximum system voltage	1500VDC (IEC) ; 1500VDC (UL)	Temperature coefficients of Voc	-0.23/℃
Maximum series fuse rating	30A	Temperature coefficients of Isc	0.04%/C
Power tolerance	±3%	Nominal operating cell temperature (NOCT)	45±3℃

Electrical Characteristics – NOCT Conditions (NOCT - Irradiance 800 W/m2, AM 1.5, Ambient temperature20℃ and wind speed 1m/s) Testing uncertainty for Pmax: ±3%)			
Module Type	RENUS-M1072BH-570MP-GB	RENUS-M1072BH-575MP-GB	RENUS-M1072BH-580MP-GB
Peak Power (Pmax/W)	430.30	433.9	437.6
MPP Voltage (Vmp/V)	39.70	40.2	40.3
MPP Current (Imp/A)	10.83	10.79	10.82
Open Circuit Voltage (Voc/V)	48.20	48.4	48.5
Short Circuit Current (Isc/A)	11.51	11.4	11.47
Module Efficiency(%)	16.66	16.80	16.94

Bifacial Gain (70% ±10%)	570	575	580
10%	627.0	632.5	638.0
20%	684.0	690.0	698.0
30%	741.0	747.5	754.0

-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