Solar Energie Ritech

555W MBB

Mono Crystalline

Half-cell Bifacial Module

RT144M-HB-540~555W

M10 SERIES

Ritech Solar redefined the high-efficiency module series by integrating 182mm silicon wafers with multi-busbar and half-cut cell technologies. Ritech Solar panel combined creative technology effectively and extremely improved the module efficiency and power output.

KEY FEATURES

- New circuit design,lower internal current,less mismatch to get more power
- Less power loss by minimizing the shading impact Significantly lower the risk of hot spot
- Competitive low light performance
- 3 times EL test to ensure best quality
- Ideal choice for utility and commercial scale projects by reduced BoS and improved ROI
- PVEL — Outstanding reliability proven by PVEL for stringent environment condition:
  - Sand, acid, salt and hail stones
  - 2400 Pa wind load and 5400 Pa snow load
  - Anti-PID

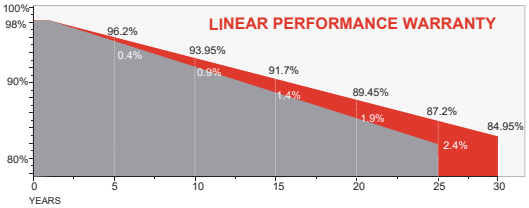
QUALITY SYSTEM

ISO9001 / ISO14001 / ISO45001

PRODUCT CERTIFICATION

TÜV | CE | PV CYCLE | CLEAN ENERGY COUNCIL MEMBER

WARRANTY



12 YEARS Guarantee on product material and workmanship

25 YEARS Linear power output warranty

RITECH SOLAR CO., LTD

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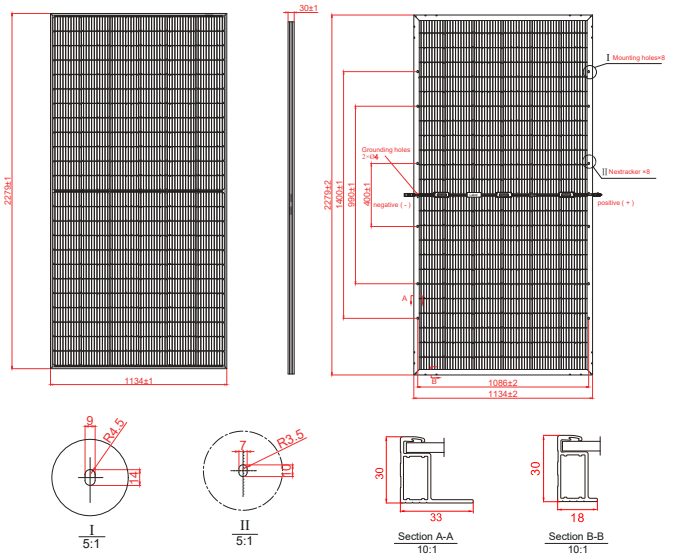
Mechanical Specifications

External Dimension	2279 x 1134 x 30 mm
Weight	32.0 kg
Solar Cells	PERC Mono crystalline(144pcs)
Front / Back Glass	2.0mm AR coating semi-tempered glass, low iron
Frame	Anodized aluminium alloy
Junction Box	IP68, 3 diodes
Output Cables	4.0mm², 300mm(+)/300mm(-) or Customized Length

Technical drawing



Packing Configuration

Container	20'GP	40'HQ
Pieces per Pallet	36	36
Pallets per Container	4	20
Pieces per Container	144	720

Electrical Characteristics

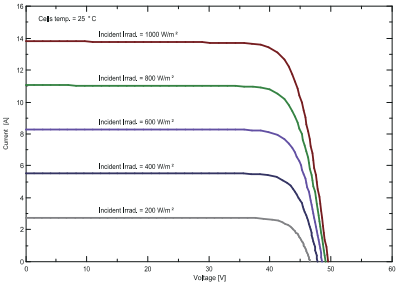
Module Type	RT144M-HB-540			RT144M-HB-545			RT144M-HB-550			RT144M-HB-555		
	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC	Front STC	Front NOCT	Back STC
Maximum Power -P_{mp} (W)	540	406	378	545	409	382	550	414	385	555	418	389
Open Circuit Voltage -V_{oc} (V)	49.50	46.18	49.48	49.60	46.32	49.58	49.70	46.40	49.68	49.80	46.50	49.78
Short Circuit Current -I_{sc} (A)	13.81	11.16	9.74	13.90	11.23	9.80	14.00	11.32	9.87	14.10	11.41	9.94
Maximum Power Voltage -V_{mp} (V)	41.55	38.39	41.61	41.80	38.41	41.86	42.05	38.58	42.10	42.31	38.68	42.34
Maximum Power Current -I_{mp} (A)	13.00	10.59	9.09	13.04	10.65	9.13	13.08	10.73	9.15	13.12	10.81	9.19
Module Efficiency STC-η_m (%)	20.90			21.10			21.29			21.48		
Power Tolerance（W）	(0, +4.99)											
Pmax Temperature Coefficient	-0.34 %/°C											
Voc Temperature Coefficient	-0.26 %/°C											
Isc Temperature Coefficient	+0.05 %/°C											

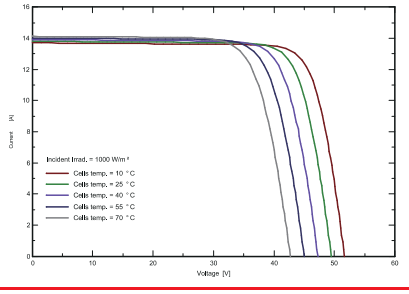
STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5
Power measurement tolerance: +/-3%

Rear Side Power Gain(RT144M-HB-540)

Power Gain	10%	15%	20%	25%	30%
Maximum Power -P_{mp} (W)	594	621	648	675	702
Open Circuit Voltage -V_{oc} (V)	49.50	49.50	49.50	49.50	49.50
Short Circuit Current -I_{sc} (A)	15.19	15.88	16.57	17.26	17.95
Maximum Power Voltage -V_{mp} (V)	41.55	41.55	41.55	41.55	41.55
Maximum Power Current -I_{mp} (A)	14.30	14.95	15.60	16.25	16.90

I-V Curve





Application Conditions

Maximum System Voltage	1500V DC
Maximum Series Fuse Rating	25 A
Operating Temperature	-40~+85 °C
Nominal Operating Cell Temperature	45±2 °C
Bifaciality	70%±10%
Mechanical Load	Front side 5400 Pa / Back side 2400 Pa

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