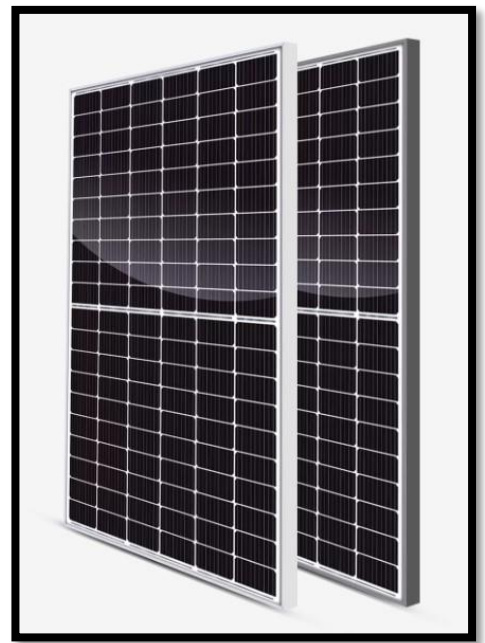




AFR- 540-560W

144 Half Cell
Monofacial Module



MORE POWER



- Up to 560W front power and 21.7% module efficiency with half-cut and MBB (Multi Busbar) technology bringing more BOS savings
- Lower resistance of half-cut and good reflection effect of MBB ensure high power



- Better light trapping and current collection to improve module power output and reliability



- Optimized electrical design and lower operating current for reduced hot spot loss and better temperature coefficient

MORE RELIABLE



- Minimizes micro-crack impacts



- Ensured PID resistance through cell process and module material control



- Durability against extreme environmental conditions
- Resistant to salt, acid and ammonia



- Enhanced mechanical load
Certified to withstand:
wind load (2400 Pascal) and
snow load (5400 Pascal)

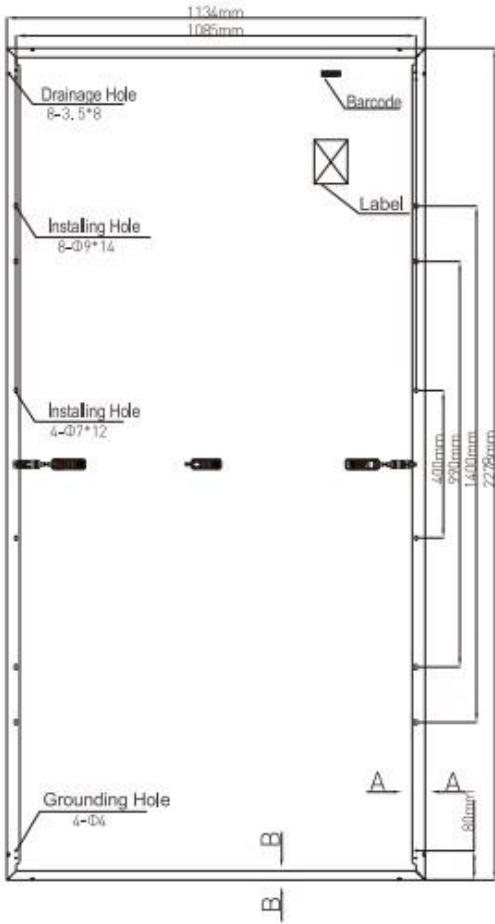
21.7%

Max Module
Efficiency

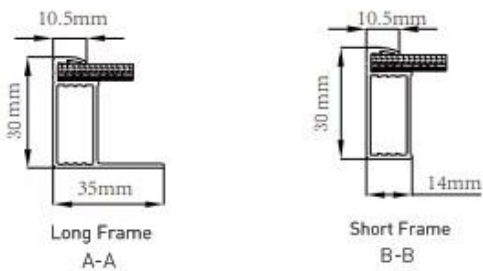
0 ~+5W

Positive Power
Tolerance

Engineering Drawing (mm)



Framing Cross Section (mm)



System and product certification

IEC61215/ IEC61730/ IEC61701/ IEC62716
 ISO9001: Quality Management System
 ISO14001: Environmental Management System
 OHSAS18001: Occupational Health and Safety System

36 pieces per pallet
 720 pieces per 40' container

Electrical Characteristics (STC)

PV Module Model	AFR-540W	AFR-545W	AFR-550W	AFR-555W	AFR-560W
Maximum Power- Pmax (W)	540	545	550	555	560
Open Circuit Voltage- Voc (V)	49.75	49.98	50.22	50.45	50.68
Short Circuit Current- Isc (A)	13.63	13.66	13.70	13.73	13.76
Voltage at Pmax- Vmp(V)	42.06	42.35	42.64	42.93	43.22
Current at Pmax- Imp (A)	12.84	12.87	12.90	12.93	12.96
Module Efficiency- ηm(%)	20.9	21.1	21.3	21.5	21.7
Power Output Tolerance (W)					0~+5

Electrical Characteristics (NMOT)

Maximum Power- Pmax(W)	408.6	412.4	416.2	420.0	423.8
Open Circuit Voltage- Voc(V)	46.96	47.18	47.40	47.62	47.85
Short Circuit Current- Isc(A)	10.92	10.94	10.97	10.99	11.02
Voltage at Pmax- Vmp(V)	39.01	39.28	39.55	39.82	40.09
Current at Pmax- Imp(A)	10.47	10.50	10.52	10.55	10.57

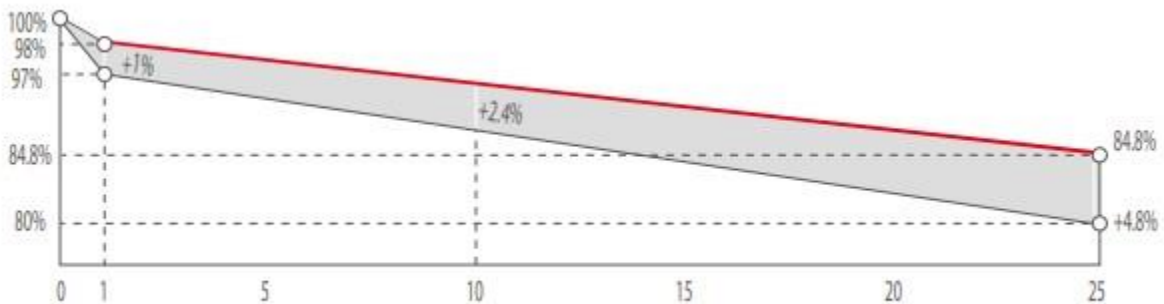
Temperature Characteristics

Pmax Temperature Coefficient	-0.36%/C
Voc Temperature Coefficient	-0.28%/C
Isc Temperature Coefficient	+0.05%/C
Operating Temperature	-40~+85C
Nominal Module Operating Temperature (NMOT)	43±2C

Mechanical Specifications

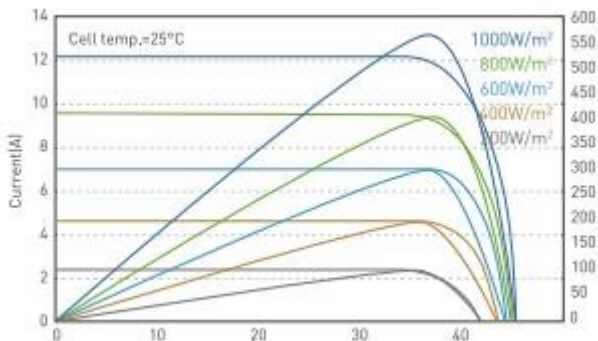
External Dimensions	2278x1134x30mm
Weight	28.3kg
Solar Cells	182mm monocrystalline 144(6x24)pcs
Front Glass	High Transparency solar glass 3.2mm
Frame	Black/Silver Anodized aluminum alloy
Junction Box	IP68 rated
Output Cables	Length can be customized/4.0mm ² , cable length: 280mm(+)/280mm(-)
Connector	MC4 Compatible
Wind/Snow Load	2400Pa/5400Pa
Maximum System Voltage	1500V DC
Max Series Fuse Rating	25A

Industry-leading Warranty



- First year power degradation: 2%
- Annual degradation: 0.55%
- Product warranty: 12 years
- Linear warranty: 25 years

I-V/P-V Curve at Different Irradiation (555W)



I-V Curve at Different Temperature (555W)

