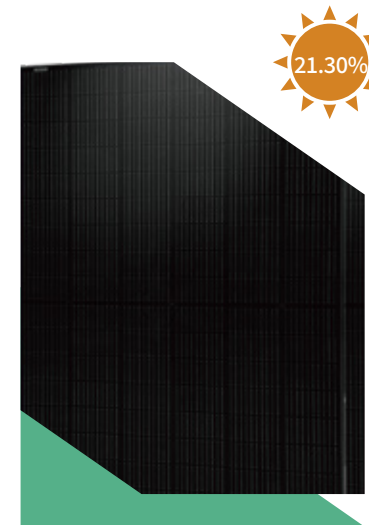


SOLAR PANEL



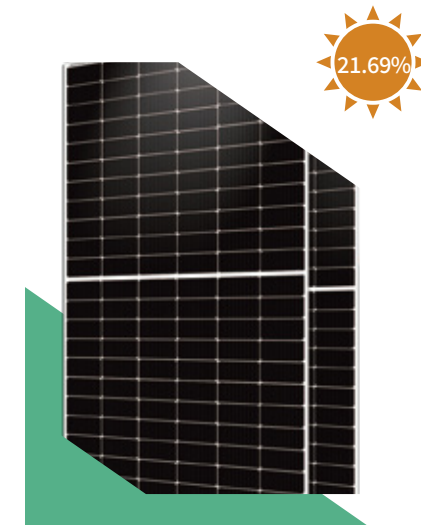
PRODUCT BRIEF INTRODUCTION



GC-108M(182)
400-415 Watt (FB)
HALF-CELL MONO PERC



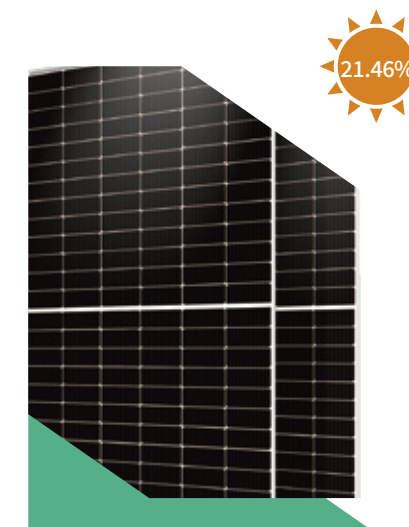
GC-144RN
430-450 Watt
MONO TOPCON



GC-132M(182)
495-515 Watt
HALF-CELL MONO PERC



GC-144M(182)
540-560 Watt
HALF-CELL MONO PERC



GC-156M(182)
580-600 Watt
HALF-CELL MONO PERC

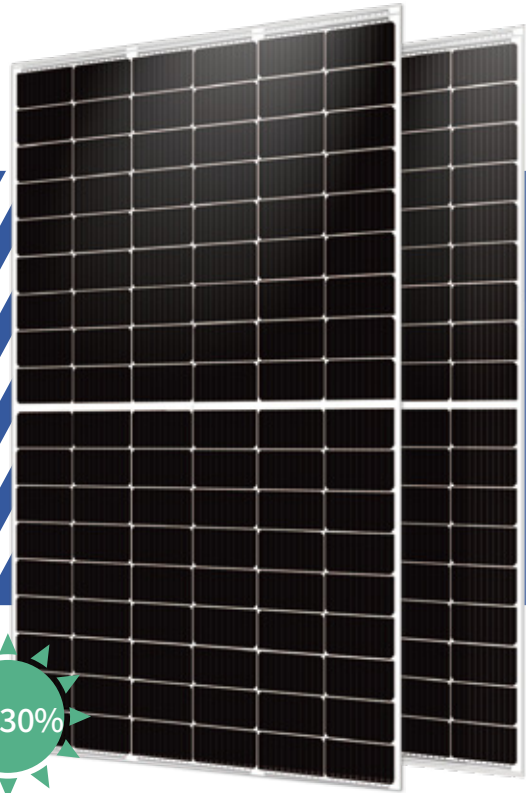


GC-132M(210)
650-670 Watt
HALF-CELL MONO PERC

GC-108M(182)

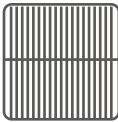
400-415 Watt

HALF-CELL MONO PERC



21.30%

Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



PID Resistant
Excellent PID tolerance at 96 hours (85 ° C /85%) and can also be improved to meet higher standards in particularly harsh environments;



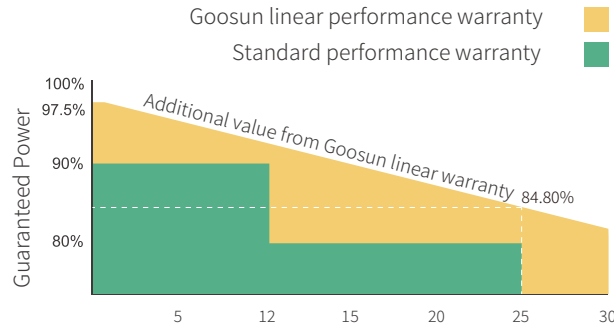
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 21.30%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| Module Type | GC-108M-400 | | GC-108M-405 | | GC-108M-410 | | GC-108M-415 | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 400 | 299.0 | 405 | 302.7 | 410 | 306.5 | 415 | 310.2 |
| Open circuit Voltage(Voc) | 36.90 | 34.70 | 37.15 | 34.93 | 37.40 | 35.17 | 37.65 | 35.40 |
| Short circuit current (Isc/A) | 13.72 | 11.09 | 13.78 | 11.14 | 13.84 | 11.19 | 13.91 | 11.24 |
| Voltage at maximum power (Vmpp) | 30.94 | 28.74 | 31.18 | 28.96 | 31.42 | 29.19 | 31.66 | 29.41 |
| current Maximum power(Impp) | 12.93 | 10.40 | 12.99 | 10.45 | 13.05 | 10.50 | 13.11 | 10.55 |
| Module efficiency (%) | 20.50% | | 20.70% | | 21.00% | | 21.30% | |
| Power Tolerance (W) | 0~+5 | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

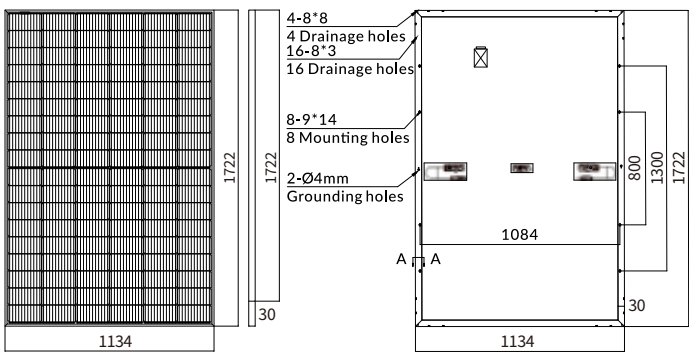
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | MONO |
| No. of Cells | 108 (6×18) |
| Dimension | 1722x1134x30mm |
| Weight | 21.5kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² , Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 36pcs |
| Per 40' HQ Container | 936 pcs |

Engineering Drawings



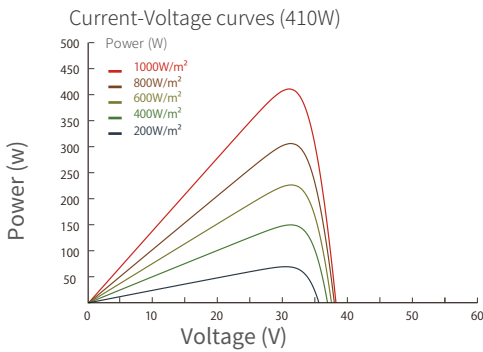
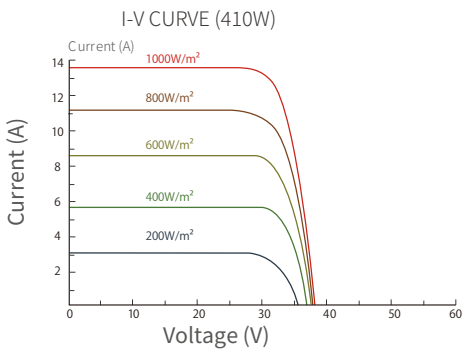
Temperature Characteristics

| | |
|-------------------------------|------------|
| NOCT Temperature | 44°C±2°C |
| Temprature Coefficient (Pmax) | -0.360%/°C |
| Temprature Coefficient (Voc) | -0.280%/°C |
| Temprature Coefficient (Isc) | 0.050%/°C |

Maximum Ratings

| | |
|------------------------------|-----------------|
| Maximum system voltage (IEC) | 1000 / 1500V DC |
| Snow / Wind | 5400Pa / 2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 25A |

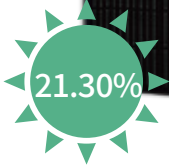
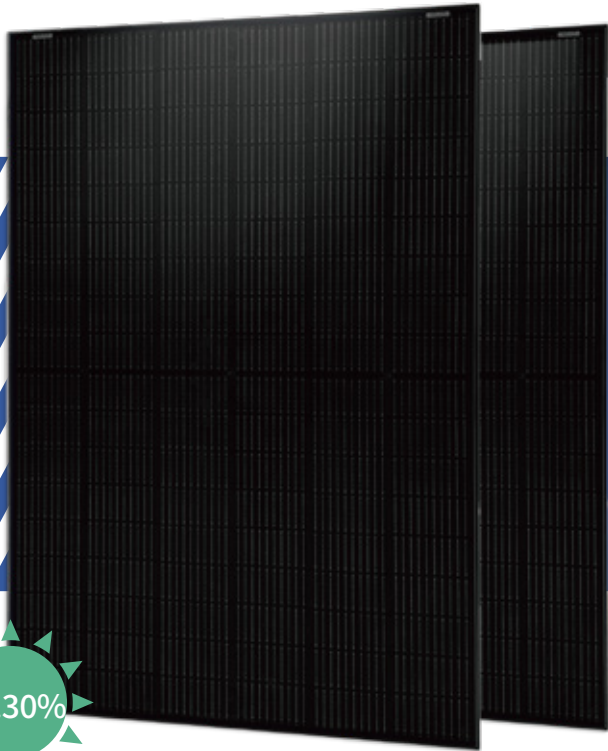
I-V Curve



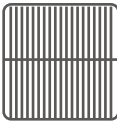
GC-108M(182)

400-415 Watt(FB)

HALF-CELL MONO PERC



Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



PID Resistant
Excellent PID tolerance at 96 hours (85 ° C /85%) and can also be improved to meet higher standards in particularly harsh environments;



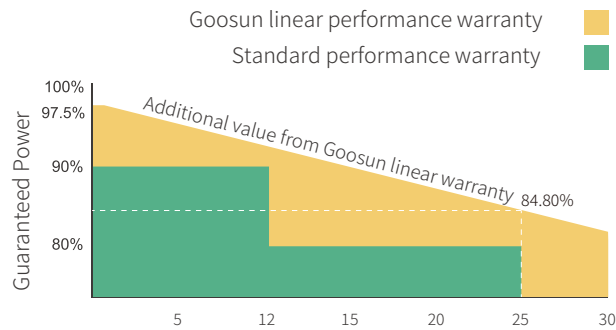
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 21.30%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| Module Type | GC-108M-400 | | GC-108M-405 | | GC-108M-410 | | GC-108M-415 | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 400 | 299.0 | 405 | 302.7 | 410 | 306.5 | 415 | 310.2 |
| Open circuit Voltage(Voc) | 36.90 | 34.70 | 37.15 | 34.93 | 37.40 | 35.17 | 37.65 | 35.40 |
| Short circuit current (Isc/A) | 13.72 | 11.09 | 13.78 | 11.14 | 13.84 | 11.19 | 13.91 | 11.24 |
| Voltage at maximum power (Vmpp) | 30.94 | 28.74 | 31.18 | 28.96 | 31.42 | 29.19 | 31.66 | 29.41 |
| current Maximum power(Impp) | 12.93 | 10.40 | 12.99 | 10.45 | 13.05 | 10.50 | 13.11 | 10.55 |
| Module efficiency (%) | 20.50% | | 20.70% | | 21.00% | | 21.30% | |
| Power Tolerance (W) | 0~+5 | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

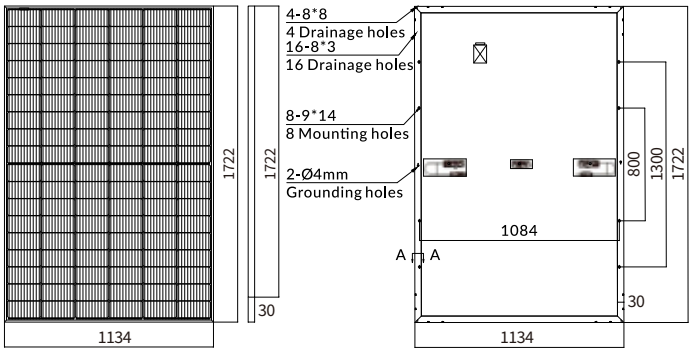
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | MONO |
| No. of Cells | 108 (6×18) |
| Dimension | 1722x1134x30mm |
| Weight | 21.5kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² , Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging

| | |
|----------------------|---------|
| Per Pallet | 36 pcs |
| Per 40' HQ Container | 936 pcs |

Engineering Drawings



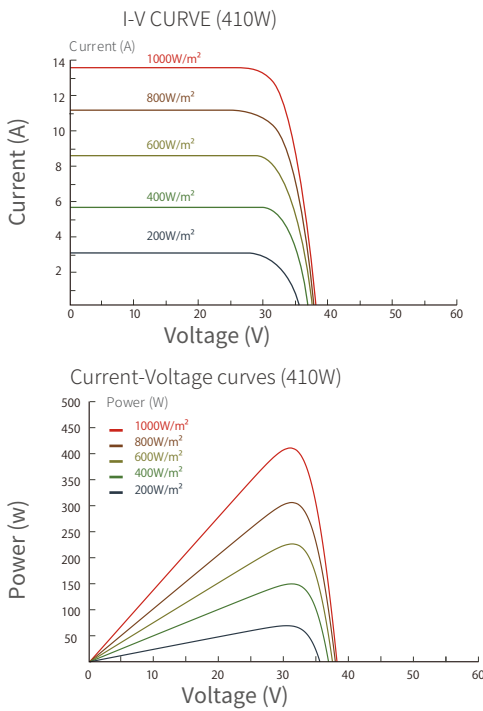
Temperature Characteristics

| | |
|-------------------------------|------------|
| NOCT Temperature | 44°C±2°C |
| Temprature Coefficient (Pmax) | -0.360%/°C |
| Temprature Coefficient (Voc) | -0.280%/°C |
| Temprature Coefficient (Isc) | 0.050%/°C |

Maximum Ratings

| | |
|------------------------------|-----------------|
| Maximum system voltage (IEC) | 1000 / 1500V DC |
| Snow / Wind | 5400Pa / 2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 25A |

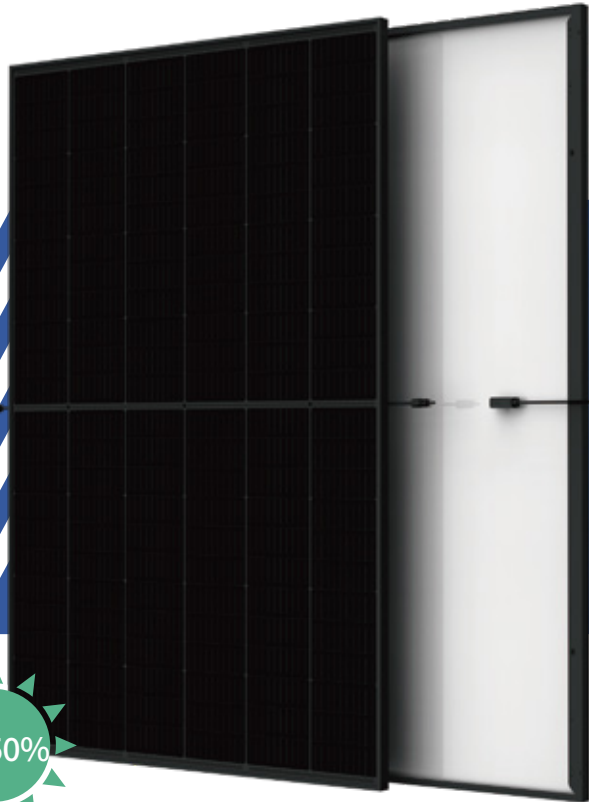
I-V Curve



GC-144RN

430-450 Watt

MONO TOPCON



Key Features



Low-light performance

Multi-bus, excellent electric performance under low light conditions;



Anti
PID

PID Resistant

Excellent PID tolerance at 96 hours (85 ° C /85%) and can also be improved to meet higher standards in particularly harsh environments;



Anti-Crack

Excellent micro-cracking resistance, more uniform internal stress;

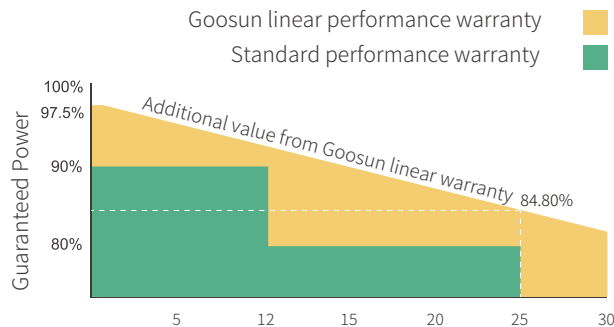


N-TOPCON

N-TOPCon CellTechnology

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| Module Type | GC-144RN-430 | | GC-144RN-435 | | GC-144RN-440 | | GC-144RN-445 | | GC-144RN-450 | |
|---------------------------------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 430 | 328 | 435 | 332 | 440 | 335 | 445 | 339 | 450 | 343 |
| Open circuit Voltage(Voc) | 51.40 | 48.70 | 51.80 | 49.10 | 52.20 | 49.40 | 52.60 | 49.80 | 52.90 | 50.10 |
| Short circuit current (Isc/A) | 10.59 | 8.53 | 10.64 | 8.57 | 10.67 | 8.60 | 10.71 | 8.63 | 10.74 | 8.65 |
| Voltage at maximum power (Vmpp) | 43.20 | 40.40 | 43.60 | 40.70 | 44.0 | 41.0 | 44.30 | 41.30 | 44.60 | 41.60 |
| current Maximum power(Impp) | 9.96 | 8.11 | 9.99 | 8.15 | 10.01 | 8.17 | 10.05 | 8.20 | 10.09 | 8.24 |
| Module efficiency (%) | 21.50% | | 21.80% | | 22.00% | | 22.30% | | 22.50% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

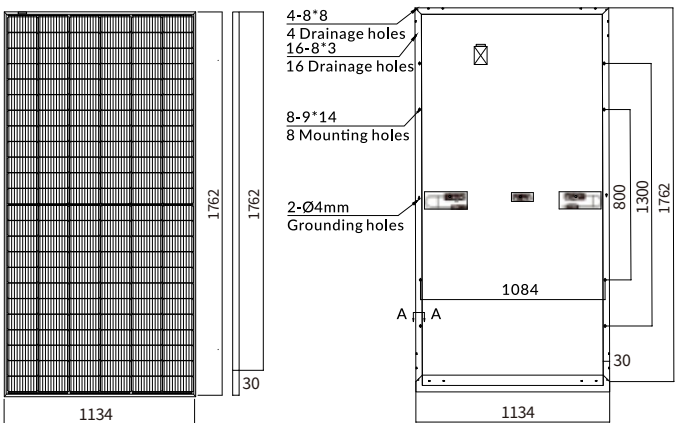
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | TOPCON |
| No. of Cells | 144(6*24) |
| Dimension | 1762*1134*30mm |
| Weight | 21.8kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² ,Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 36 pcs |
| Per 40' HQ Container | 936 pcs |

Engineering Drawings



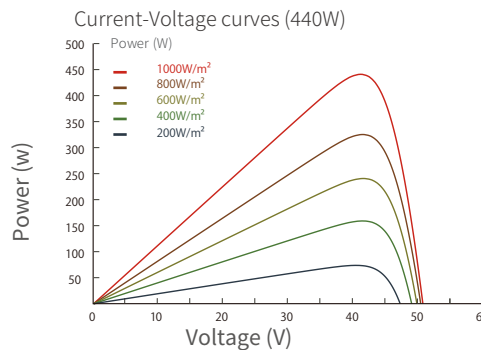
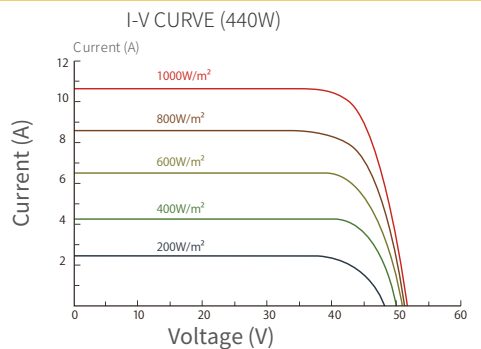
Temperature Characteristics

| | |
|------------------------------|------------|
| NOCT Temperature | 43°C±2°C |
| Temprature Coefficient(Pmax) | -0.300%/°C |
| Temprature Coefficient(Voc) | -0.240%/°C |
| Temprature Coefficient(Lsc) | 0.040%/°C |

Maximum Ratings

| | |
|----------------------------|----------------|
| Maximum system voltage | 1500V DC (IEC) |
| Snow / Wind | 5400Pa/2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 20A |

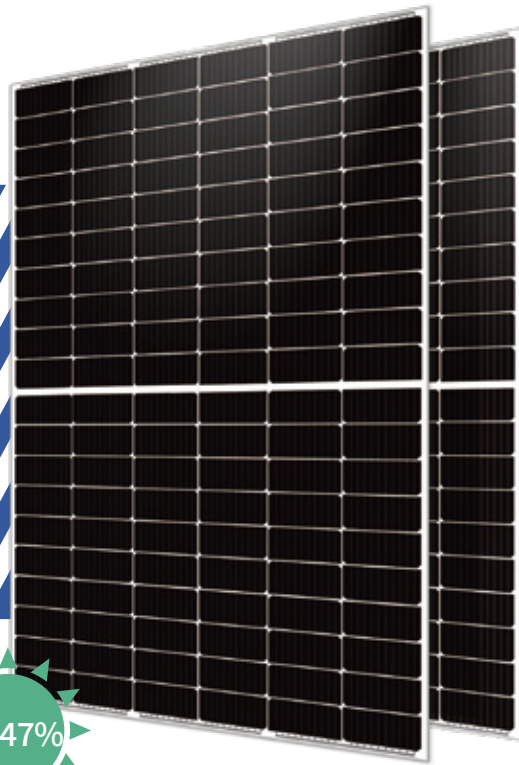
I-V Curve



GC-120M(182)

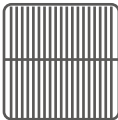
445-465 Watt

MONO PERC



21.47%

Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



Anti PID
PID Resistant
Excellent PID tolerance at 96 hours (85 ° C /85%) and can also be improved to meet higher standards in particularly harsh environments;



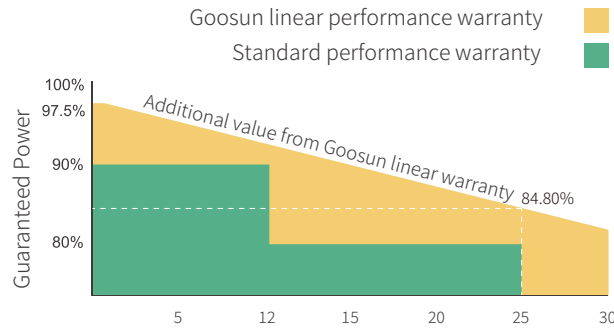
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 21.47%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| Module Type | GC-120M-445 | | GC-120M-450 | | GC-120M-455 | | GC-120M-460 | | GC-120M-465 | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 445 | 335 | 450 | 339 | 455 | 343 | 460 | 347 | 465 | 350 |
| Open circuit Voltage(Voc) | 42.12 | 39.83 | 42.31 | 40.09 | 42.49 | 40.35 | 42.68 | 40.62 | 42.86 | 40.88 |
| Short circuit current (Isc/A) | 13.65 | 10.91 | 13.72 | 10.95 | 13.79 | 10.99 | 13.86 | 11.03 | 13.93 | 11.07 |
| Voltage at maximum power (Vmpp) | 34.87 | 32.56 | 35.07 | 32.82 | 35.27 | 33.08 | 35.47 | 33.33 | 35.67 | 33.59 |
| current Maximum power(Impp) | 12.76 | 10.29 | 12.83 | 10.33 | 12.90 | 10.37 | 12.97 | 10.41 | 13.04 | 10.44 |
| Module efficiency (%) | 20.55% | | 20.78% | | 21.01% | | 21.24% | | 21.47% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

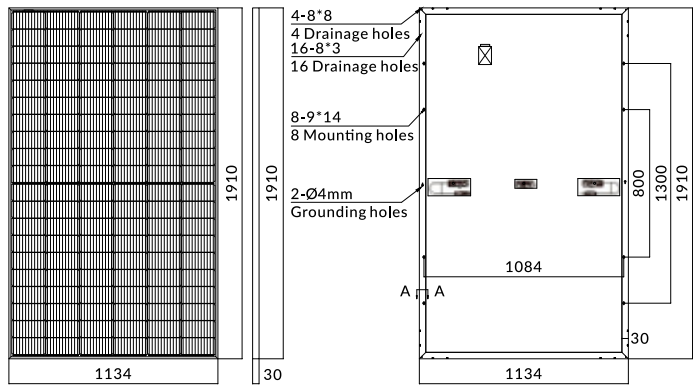
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | MONO |
| No. of Cells | 120(6*20) |
| Dimension | 1910*1134*30mm |
| Weight | 23.0kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² ,Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 36 pcs |
| Per 40' HQ Container | 864 pcs |

Engineering Drawings



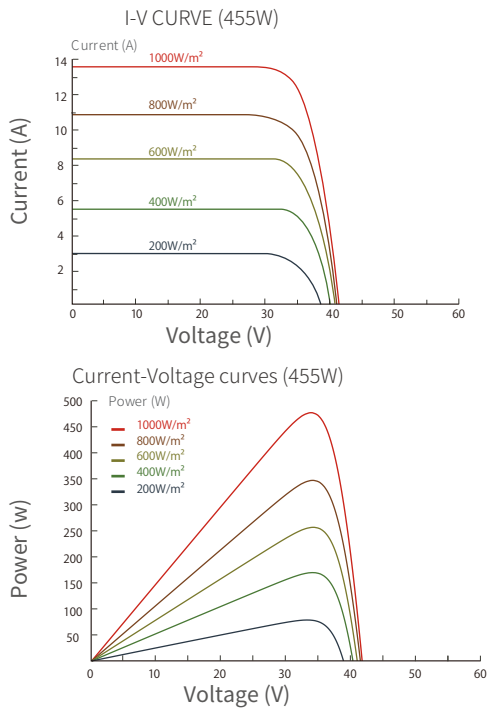
Temperature Characteristics

| | |
|------------------------------|------------|
| NOCT Temperature | 45°C±2°C |
| Temprature Coefficient(Pmax) | -0.360%/°C |
| Temprature Coefficient(Voc) | -0.280%/°C |
| Temprature Coefficient(Lsc) | 0.050%/°C |

Maximum Ratings

| | |
|----------------------------|----------------|
| Maximum system voltage | 1500V DC (IEC) |
| Snow / Wind | 5400Pa/2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 25A |

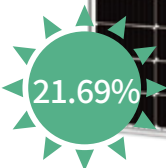
I-V Curve



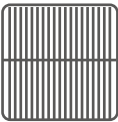
GC-132M(182)

495-515 Watt

HALF-CELL MONO PERC



Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



PID Resistant
Excellent PID tolerance at 96 hours (85 °C /85%) and can also be improved to meet higher standards in particularly harsh environments;



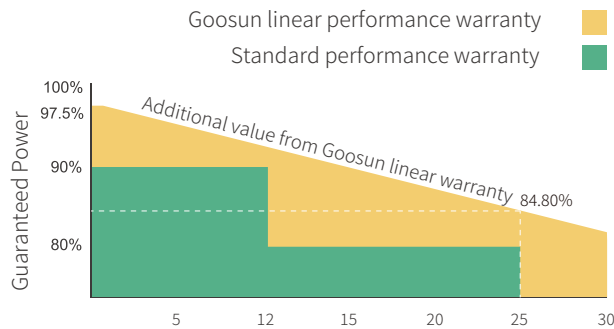
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 21.69%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



GC-132M(182)

Electrical Specifications

| Module Type | GC-132M-495 | | GC-132M-500 | | GC-132M-505 | | GC-132M-510 | | GC-132M-515 | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 495 | 373 | 500 | 377 | 505 | 380 | 510 | 384 | 515 | 388 |
| Open circuit Voltage(Voc) | 46.51 | 44.03 | 46.67 | 42.28 | 46.84 | 42.53 | 47.00 | 42.78 | 47.17 | 43.03 |
| Short circuit current (Isc/A) | 13.74 | 10.97 | 13.81 | 11.01 | 13.88 | 11.05 | 13.95 | 11.09 | 14.02 | 11.13 |
| Voltage at maximum power (Vmpp) | 38.52 | 36.04 | 38.70 | 36.28 | 38.88 | 36.52 | 39.06 | 36.76 | 39.24 | 37.00 |
| current Maximum power(Impp) | 12.85 | 10.35 | 12.92 | 10.39 | 12.99 | 10.43 | 13.06 | 10.47 | 13.13 | 10.51 |
| Module efficiency (%) | 20.21% | | 21.42% | | 21.27% | | 21.48% | | 21.69% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

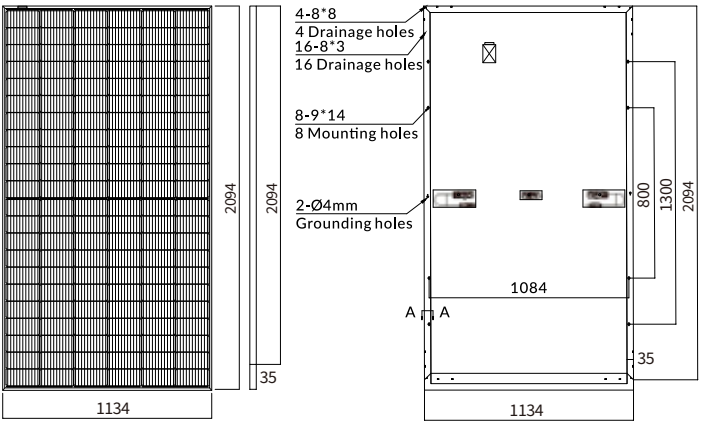
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | MONO |
| No. of Cells | 132 (6×22) |
| Dimension | 2094x1134x35mm |
| Weight | 25kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² , Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 31 pcs |
| Per 40' HQ Container | 682 pcs |

Engineering Drawings



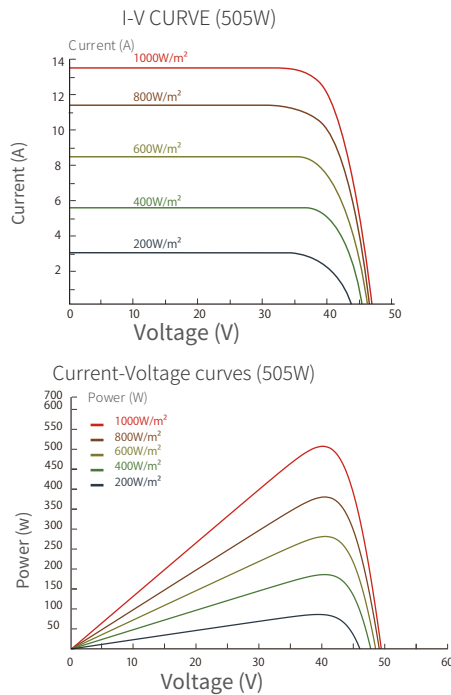
Temperature Characteristics

| | |
|-------------------------------|------------|
| NOCT Temperature | 44°C±2°C |
| Temprature Coefficient (Pmax) | -0.360%/°C |
| Temprature Coefficient (Voc) | -0.280%/°C |
| Temprature Coefficient (Isc) | 0.050%/°C |

Maximum Ratings

| | |
|------------------------------|-----------------|
| Maximum system voltage (IEC) | 1500V DC (IEC) |
| Snow / Wind | 5400Pa / 2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 25A |

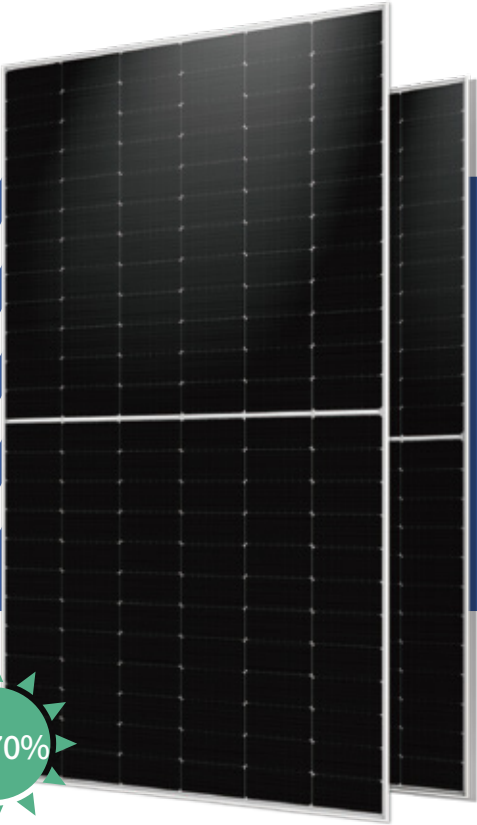
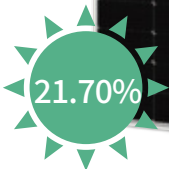
I-V Curve



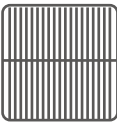
GC-144M(182)

540-560 Watt

HALF-CELL MONO PERC Double Glass



Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



PID Resistant
Excellent PID tolerance at 96 hours (85 ° C /85%) and can also be improved to meet higher standards in particularly harsh environments;



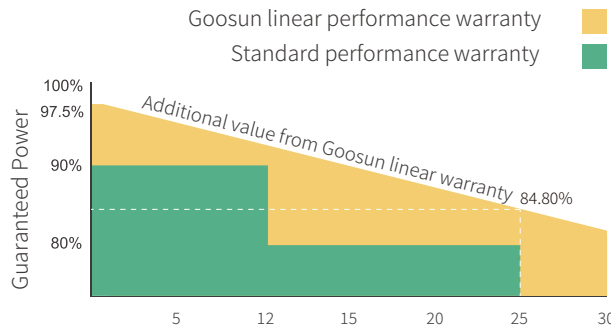
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 21.70%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| Module Type | GC-144M-540HBD | | GC-144M-545HBD | | GC-144M-550HBD | | GC-144M-555HBD | | GC-144M-560HBD | |
|---------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 540 | 403.6 | 545 | 407.4 | 550 | 411.1 | 555 | 414.8 | 560 | 418.3 |
| Open circuit Voltage(Voc) | 49.50 | 46.54 | 49.65 | 46.68 | 49.80 | 46.82 | 49.95 | 46.97 | 50.1 | 47.11 |
| Short circuit current (Isc/A) | 13.85 | 11.17 | 13.92 | 11.23 | 13.99 | 11.29 | 14.05 | 11.34 | 14.10 | 11.40 |
| Voltage at maximum power (Vmpp) | 41.65 | 38.86 | 41.80 | 39.00 | 41.95 | 39.14 | 42.10 | 39.28 | 42.25 | 39.42 |
| current Maximum power(Imp) | 12.97 | 10.39 | 13.04 | 10.45 | 13.12 | 10.51 | 13.19 | 10.56 | 13.27 | 10.62 |
| Module efficiency (%) | 20.90% | | 21.10% | | 21.30% | | 21.50% | | 21.70% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

Bifacial Output-rearside Power Gain

| | Pmax/W | Voc/V | Isc/A | Vmp/V | Imp/A | Pmax gain |
|--|--------|-------|-------|-------|-------|-----------|
| | 572 | 49.65 | 14.61 | 41.80 | 13.69 | 5% |
| | 600 | 49.65 | 15.31 | 41.80 | 14.34 | 10% |
| | 627 | 49.75 | 16.00 | 41.90 | 14.99 | 15% |
| | 654 | 49.75 | 16.70 | 41.90 | 15.65 | 20% |
| | 681 | 49.75 | 17.39 | 41.90 | 16.30 | 25% |

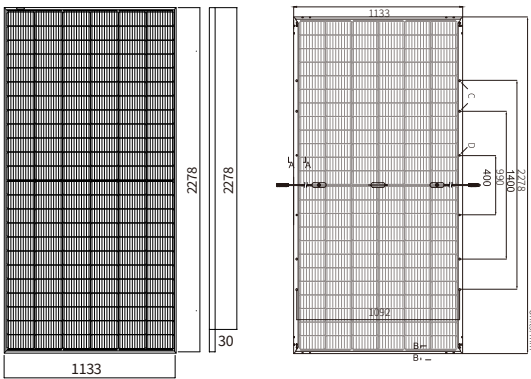
Mechanical Specifications

| | |
|----------------|---|
| Cell Type | MONO |
| No. of Cells | 144 (6×24) |
| Dimension | 2278x1133x30mm |
| Weight | 31.5kg |
| Front Glass | 2.0mm high permeability, AR coated thermally strengthened glass |
| Back Glass | 2.0mm semi-tempered glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm², Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 36 pcs |
| Per 40' HQ Container | 720 pcs |

Engineering Drawings



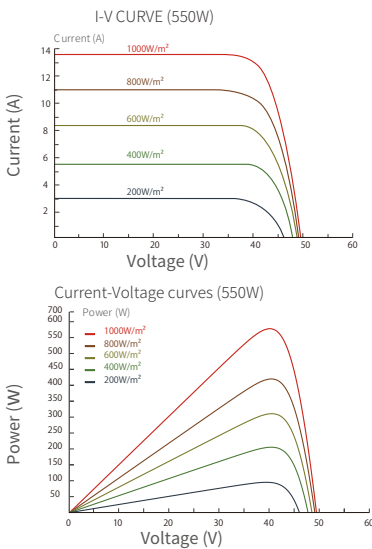
Temperature Characteristics

| | |
|-------------------------------|------------|
| NOCT Temperature | 45°C±2°C |
| Temprature Coefficient (Pmax) | -0.360%/°C |
| Temprature Coefficient (Voc) | -0.280%/°C |
| Temprature Coefficient (Isc) | 0.050%/°C |

Maximum Ratings

| | |
|------------------------------|-----------------|
| Maximum system voltage (IEC) | 1500V DC (IEC) |
| Snow / Wind | 5400Pa / 2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 30A |

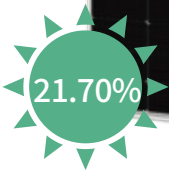
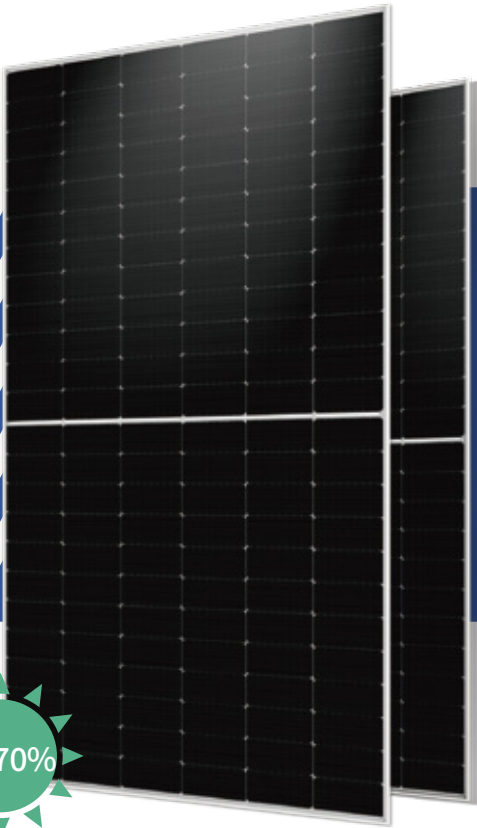
I-V Curve



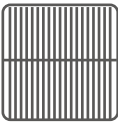
GC-144M(182)

540-560 Watt

HALF-CELL MONO PERC



Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



PID Resistant
Excellent PID tolerance at 96 hours (85 °C /85%) and can also be improved to meet higher standards in particularly harsh environments;



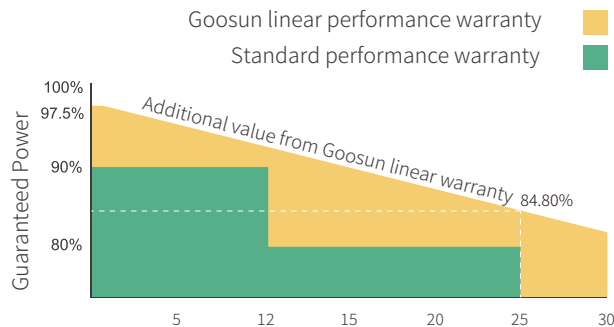
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 21.70%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| | | | | | | | | | | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Module Type | GC-144M-540 | | GC-144M-545 | | GC-144M-550 | | GC-144M-555 | | GC-144M-560 | |
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 540 | 403.9 | 545 | 407.7 | 550 | 411.1 | 555 | 414.8 | 560 | 418.6 |
| Open circuit Voltage(Voc) | 49.50 | 46.53 | 49.65 | 46.68 | 49.80 | 46.82 | 49.95 | 46.97 | 50.10 | 47.11 |
| Short circuit current (Isc/A) | 13.86 | 11.22 | 13.92 | 11.26 | 13.98 | 11.31 | 14.04 | 11.35 | 14.10 | 11.40 |
| Voltage at maximum power (Vmpp) | 41.65 | 38.69 | 41.8 | 38.83 | 41.95 | 38.97 | 42.10 | 39.11 | 42.25 | 39.25 |
| current Maximum power(Impp) | 12.98 | 10.44 | 13.05 | 10.50 | 13.12 | 10.56 | 13.19 | 10.61 | 13.26 | 10.67 |
| Module efficiency (%) | 20.92% | | 21.12% | | 21.30% | | 21.50% | | 21.70% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

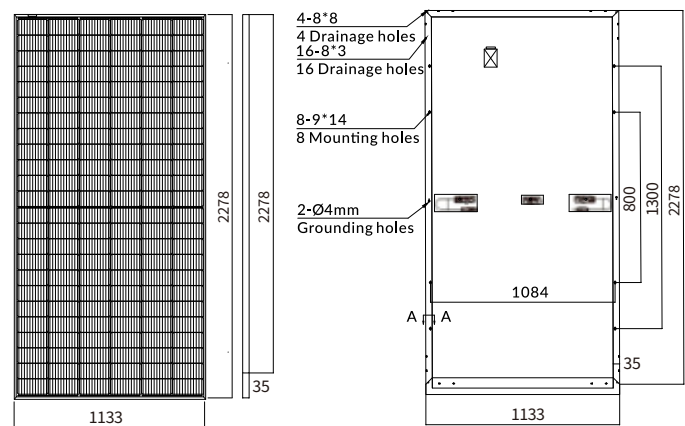
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | MONO |
| No. of Cells | 144 (6×24) |
| Dimension | 2278x1133x35mm |
| Weight | 27kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² , Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 31 pcs |
| Per 40' HQ Container | 620 pcs |

Engineering Drawings



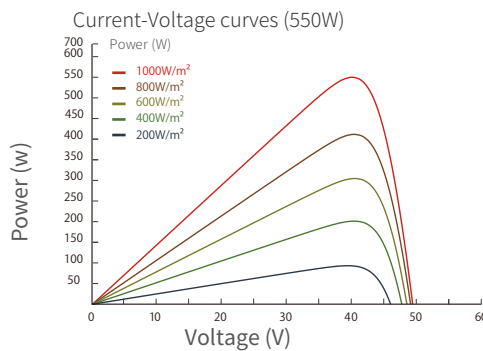
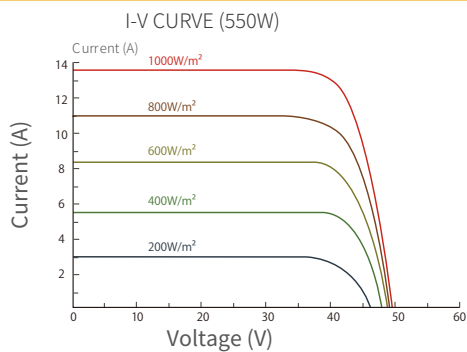
Temperature Characteristics

| | |
|-------------------------------|------------|
| NOCT Temperature | 44°C±2°C |
| Temprature Coefficient (Pmax) | -0.340%/°C |
| Temprature Coefficient (Voc) | -0.265%/°C |
| Temprature Coefficient (Isc) | 0.050%/°C |

Maximum Ratings

| | |
|------------------------------|-----------------|
| Maximum system voltage (IEC) | 1500V DC (IEC) |
| Snow / Wind | 5400Pa / 2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 25A |

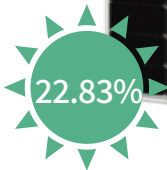
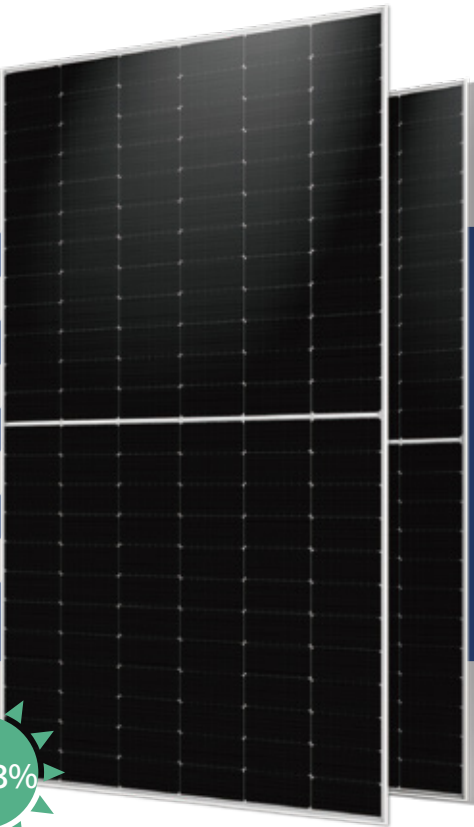
I-V Curve



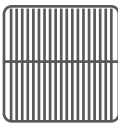
GC-144N(182)

570-590 Watt

HALF-CELL MONO TOPCON



Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



PID Resistant
Excellent PID tolerance at 96 hours (85 °C /85%) and can also be improved to meet higher standards in particularly harsh environments;



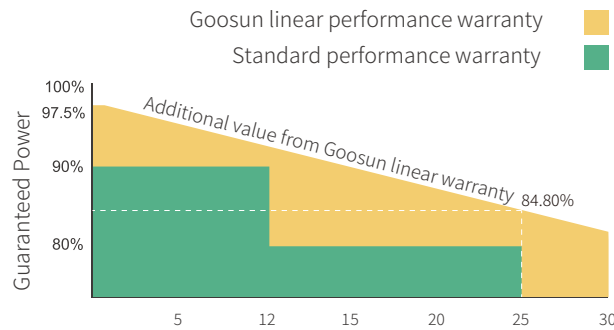
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 22.83%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| Module Type | GC-144N-570 | | GC-144N-575 | | GC-144N-580 | | GC-144N-585 | | GC-144N-590 | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 570 | 426 | 575 | 430 | 580 | 433 | 585 | 437 | 590 | 441 |
| Open circuit Voltage(Voc) | 51.91 | 48.74 | 52.06 | 48.88 | 52.21 | 49.02 | 52.36 | 49.16 | 52.51 | 49.30 |
| Short circuit current (Isc/A) | 14.07 | 11.36 | 14.14 | 11.42 | 14.20 | 11.47 | 14.27 | 11.52 | 14.33 | 11.57 |
| Voltage at maximum power (Vmpp) | 43.76 | 39.93 | 43.91 | 40.07 | 44.06 | 40.20 | 44.21 | 40.34 | 44.36 | 40.47 |
| current Maximum power(Impp) | 13.03 | 10.68 | 13.10 | 10.73 | 13.17 | 10.78 | 13.24 | 10.84 | 13.31 | 10.89 |
| Module efficiency (%) | 22.10% | | 22.30% | | 22.50% | | 22.60% | | 22.83% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

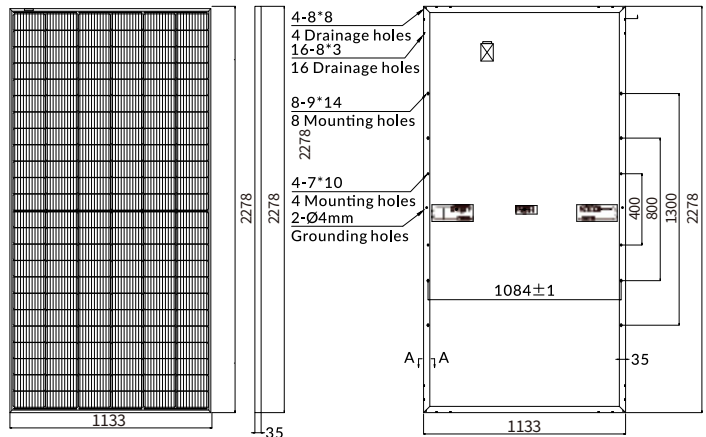
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | TOPCON |
| No. of Cells | 144(6*24) |
| Dimension | 2278*1133*35mm |
| Weight | 27.2kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized aluminum alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² ,Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 31 pcs |
| Per 40' HQ Container | 620 pcs |

Engineering Drawings



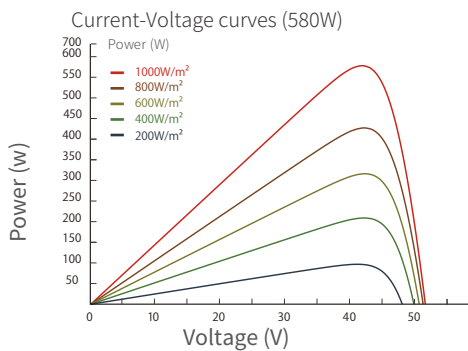
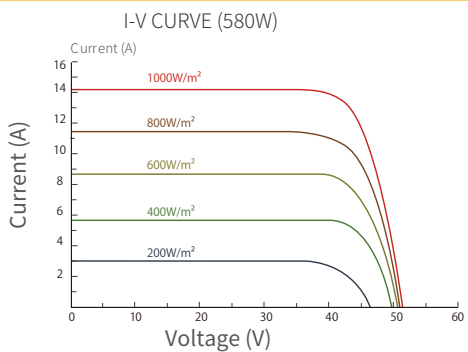
Temperature Characteristics

| | |
|------------------------------|------------|
| NOCT Temperature | 45°C±2°C |
| Temprature Coefficient(Pmax) | -0.290%/°C |
| Temprature Coefficient(Voc) | -0.230%/°C |
| Temprature Coefficient(Lsc) | 0.050%/°C |

Maximum Ratings

| | |
|----------------------------|----------------|
| Maximum system voltage | 1500V DC (IEC) |
| Snow / Wind | 5400Pa/2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 30A |

I-V Curve

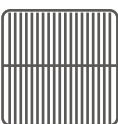


GC-144N(182)

570-590 Watt

TOPCON
HALF-CELL MONO Double Glass

Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



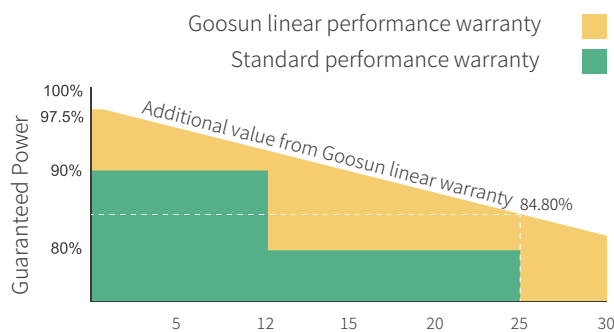
PID Resistant
Excellent PID tolerance at 96 hours (85 ° C /85%) and can also be improved to meet higher standards in particularly harsh environments;



Module efficiency up to 22.83%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



GC-144N(182)

Electrical Specifications

| Module Type | GC-144N-570HBD | | GC-144N-575HBD | | GC-144N-580HBD | | GC-144N-585HBD | | GC-144N-590HBD | |
|---------------------------------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|----------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 570 | 426 | 575 | 430 | 580 | 433 | 585 | 437 | 590 | 441 |
| Open circuit Voltage(Voc) | 51.91 | 48.74 | 52.06 | 48.88 | 52.21 | 49.02 | 52.36 | 49.16 | 52.51 | 49.30 |
| Short circuit current (Isc/A) | 14.07 | 11.36 | 14.14 | 11.42 | 14.20 | 11.47 | 14.27 | 11.52 | 14.33 | 11.57 |
| Voltage at maximum power (Vmpp) | 43.76 | 39.93 | 43.91 | 40.07 | 44.06 | 40.20 | 44.21 | 40.34 | 44.36 | 40.47 |
| current Maximum power(Impp) | 13.03 | 10.68 | 13.10 | 10.73 | 13.17 | 10.78 | 13.24 | 10.84 | 13.31 | 10.89 |
| Module efficiency (%) | 22.10% | | 22.30% | | 22.50% | | 22.60% | | 22.83% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

Bifacial Output-rearside Power Gain

| | Pmax/W | Voc/V | Isc/A | Vmp/V | Imp/A | Pmax gain |
|--|--------|-------|-------|-------|-------|-----------|
| | 604 | 51.30 | 14.84 | 43.11 | 14.00 | 5% |
| | 633 | 51.30 | 15.55 | 43.11 | 14.67 | 10% |
| | 661 | 51.40 | 16.26 | 43.21 | 15.34 | 15% |
| | 690 | 51.40 | 16.96 | 43.21 | 16.01 | 20% |
| | 719 | 51.40 | 17.67 | 43.21 | 16.67 | 25% |

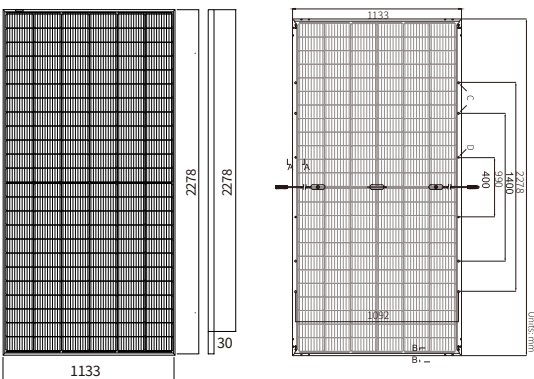
Mechanical Specifications

| | |
|----------------|---|
| Cell Type | TOPCON |
| No. of Cells | 144 (6×24) |
| Dimension | 2278x1133x30mm |
| Weight | 31.8kg |
| Front Glass | 2.0mm high permeability, AR coated thermally strengthened glass |
| Back Glass | 2.0mm semi-tempered glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² , Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 36 pcs |
| Per 40' HQ Container | 720 pcs |

Engineering Drawings



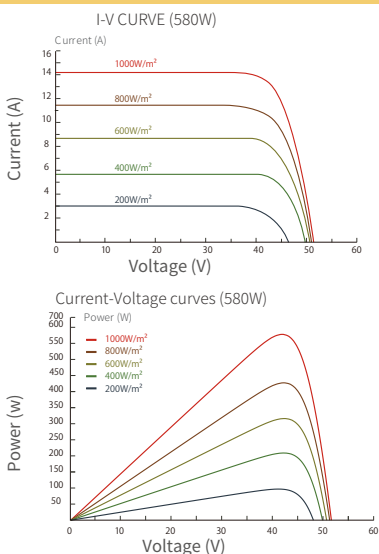
Temperature Characteristics

| | |
|-------------------------------|------------|
| NOCT Temperature | 45°C±2°C |
| Temprature Coefficient (Pmax) | -0.290%/°C |
| Temprature Coefficient (Voc) | -0.230%/°C |
| Temprature Coefficient (Isc) | 0.050%/°C |

Maximum Ratings

| | |
|------------------------------|-----------------|
| Maximum system voltage (IEC) | 1500V DC (IEC) |
| Snow / Wind | 5400Pa / 2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 30A |

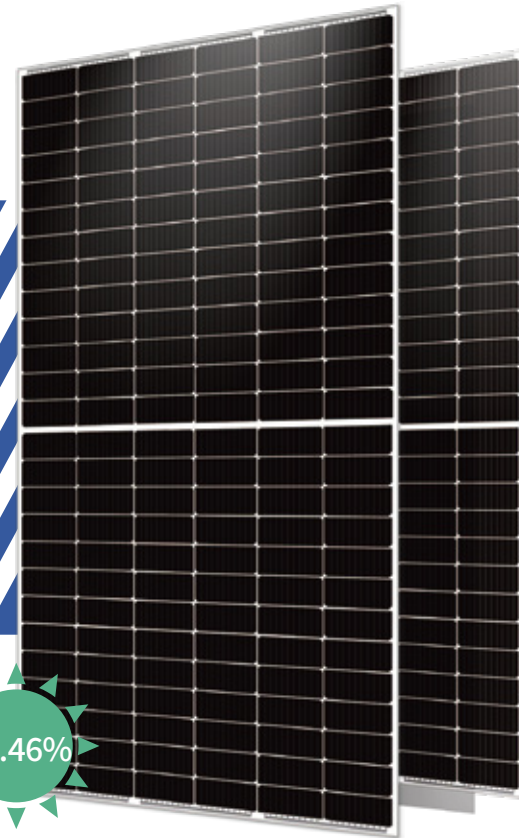
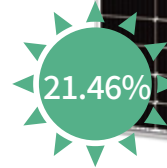
I-V Curve



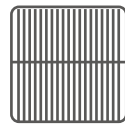
GC-156M(182)

580-600 Watt

HALF-CELL MONO PERC



Key Features



Multi Busbar Solar Cell

The special circuit design greatly reduces the hot spot temperature;



Anti-Crack

Excellent micro-cracking resistance, more uniform internal stress;



PID Resistant

Excellent PID tolerance at 96 hours (85 °C /85%) and can also be improved to meet higher standards in particularly harsh environments;

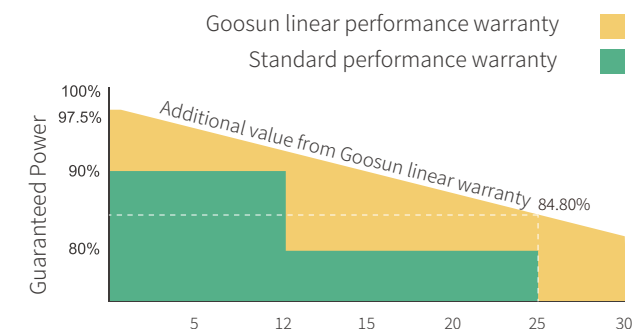


Module efficiency up to 21.46%

The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



Electrical Specifications

| Module Type | GC-156M-580 | | GC-156M-585 | | GC-156M-590 | | GC-156M-595 | | GC-156M-600 | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 580 | 441 | 585 | 445 | 590 | 449 | 595 | 453 | 600 | 457 |
| Open circuit Voltage(Voc) | 53.62 | 49.47 | 53.75 | 49.69 | 53.88 | 49.91 | 54.00 | 50.13 | 54.12 | 50.35 |
| Short circuit current (Isc/A) | 13.66 | 11.31 | 13.73 | 11.35 | 13.80 | 11.39 | 13.87 | 11.43 | 13.94 | 11.47 |
| Voltage at maximum power (Vmpp) | 45.45 | 41.25 | 45.60 | 41.47 | 45.74 | 41.69 | 45.88 | 41.91 | 46.01 | 42.12 |
| current Maximum power(Impp) | 12.76 | 10.69 | 12.83 | 10.73 | 12.90 | 10.77 | 12.97 | 10.81 | 13.04 | 10.85 |
| Module efficiency (%) | 20.75% | | 20.93% | | 21.11% | | 21.29% | | 21.46% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.

NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

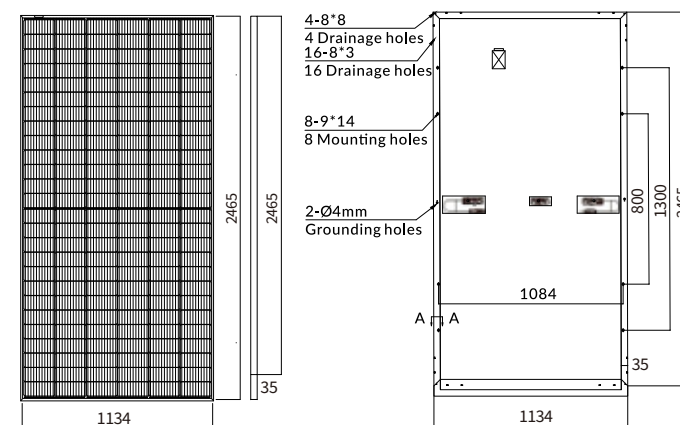
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | MONO |
| No. of Cells | 156(6*26) |
| Dimension | 2465*1134*35mm |
| Weight | 30.0kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² ,Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Per Pallet | 31 pcs |
| Per 40' HQ Container | 558 pcs |

Engineering Drawings



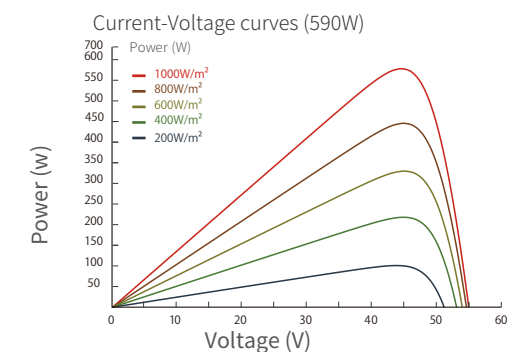
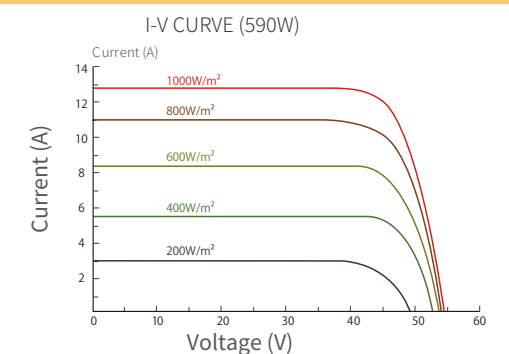
Temperature Characteristics

| | |
|------------------------------|------------|
| NOCT Temperature | 45°C±2°C |
| Temprature Coefficient(Pmax) | -0.360%/°C |
| Temprature Coefficient(Voc) | -0.280%/°C |
| Temprature Coefficient(Isc) | 0.050%/°C |

Maximum Ratings

| | |
|----------------------------|----------------|
| Maximum system voltage | 1500V DC (IEC) |
| Snow / Wind | 5400Pa/2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 25A |

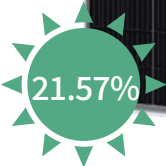
I-V Curve



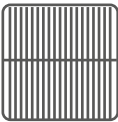
GC-132M(210)

650-670 Watt

HALF-CELL MONO PERC



Key Features



Multi Busbar Solar Cell
The special circuit design greatly reduces the hot spot temperature;



PID Resistant
Excellent PID tolerance at 96 hours (85 °C /85%) and can also be improved to meet higher standards in particularly harsh environments;



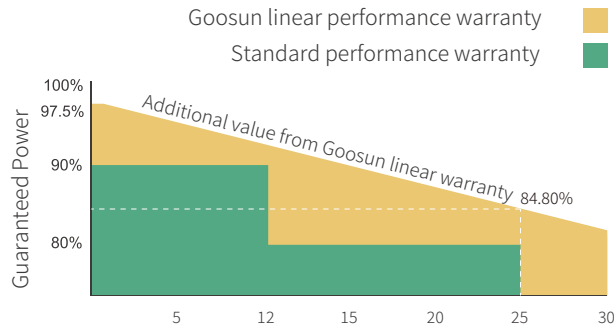
Anti-Crack
Excellent micro-cracking resistance, more uniform internal stress;



Module efficiency up to 21.57%
The half-cell structure brings low resistance characteristics, higher lifetime power generation capacity, and reduced annual power attenuation;

Linear Performance Warranty

12 Years Product Warranty • 30 Years Linear Power Warranty



Certifications

- IEC 61215, IEC 61730 , CE , CQC
- ISO9001: 2015: Quality management system
- ISO14001: 2015: Environmental management system
- ISO45001: 2018: Occupational health and safety management system



GC-132M(210)

Electrical Specifications

| Module Type | GC-132M-650 | | GC-132M-655 | | GC-132M-660 | | GC-132M-665 | | GC-132M-670 | |
|---------------------------------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|-------------|-------|
| Testing Condition | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT | STC | NOCT |
| Maximum power(Pmax) | 650 | 491 | 655 | 495 | 660 | 499 | 665 | 503 | 670 | 510 |
| Open circuit Voltage(Voc) | 45.58 | 41.1 | 45.78 | 42.48 | 45.98 | 42.67 | 46.18 | 42.86 | 46.38 | 43.04 |
| Short circuit current (Isc/A) | 18.16 | 14.89 | 18.21 | 14.93 | 18.26 | 14.97 | 18.31 | 15.01 | 18.36 | 15.06 |
| Voltage at maximum power (Vmpp) | 37.61 | 34.86 | 37.81 | 35.05 | 38.01 | 35.24 | 38.21 | 35.42 | 38.41 | 35.61 |
| current Maximum power(Imp) | 17.28 | 14.09 | 17.32 | 14.13 | 17.36 | 14.16 | 17.40 | 14.19 | 17.44 | 14.23 |
| Module efficiency (%) | 20.92% | | 21.09% | | 21.25% | | 21.41% | | 21.57% | |
| Power Tolerance (W) | 0~+5 | | | | | | | | | |

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5.
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

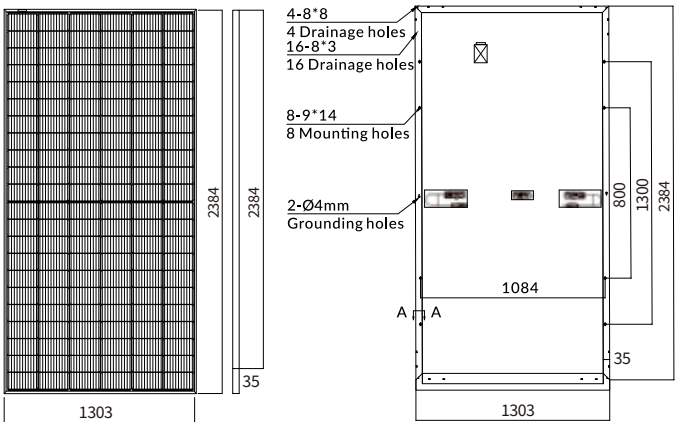
Mechanical Specifications

| | |
|----------------|--|
| Cell Type | MONO |
| No. of Cells | 132(6*22) |
| Dimension | 2384*1303*35mm |
| Weight | 34.0kg |
| Glass | 3.2mm, high permeability, AR coated thermally strengthened glass |
| Frame | Anodized Aluminium Alloy |
| Junction Box | IP68,3diodes |
| Output Cables | 4mm ² ,Length 300mm or customized |
| Connector type | MC4 compatible |

Packaging Configurations

| | |
|----------------------|---------|
| Pieces per pallet | 31 pcs |
| Per 40' HQ Container | 558 pcs |

Engineering Drawings



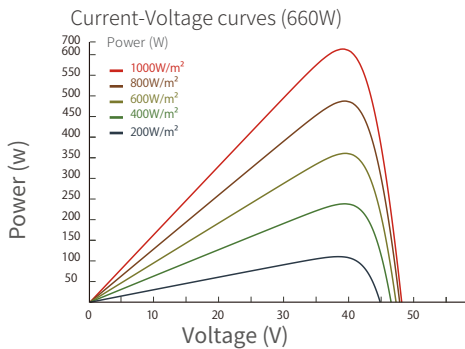
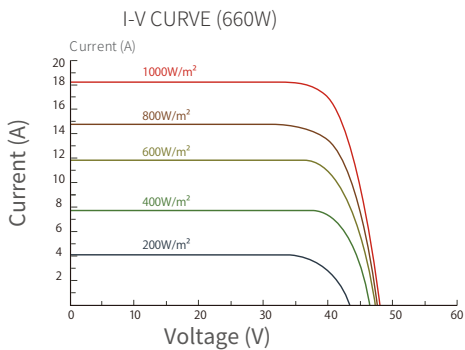
Temperature Characteristics

| | |
|------------------------------|------------|
| NOCT Temperature | 43°C±2°C |
| Temprature Coefficient(Pmax) | -0.340%/°C |
| Temprature Coefficient(Voc) | -0.250%/°C |
| Temprature Coefficient(Lsc) | 0.040%/°C |

Maximum Ratings

| | |
|----------------------------|----------------|
| Maximum system voltage | 1500V DC (IEC) |
| Snow / Wind | 5400Pa/2400Pa |
| Operating Temperature | -40°C~ +85°C |
| Maximum series fuse rating | 30A |

I-V Curve





- Residential storage System
- Industrial hybrid system
- On-grid
- Off-grid

SOLAR SYSTEM

太阳能系统

SOLAR SYSTEM



Residential energy storage solutions

Residential energy storage inverter (5-20kw)
+ Battery storage (Life P04 battery/lead-acid battery)

RESIDENTIAL STORAGE SYSTEM



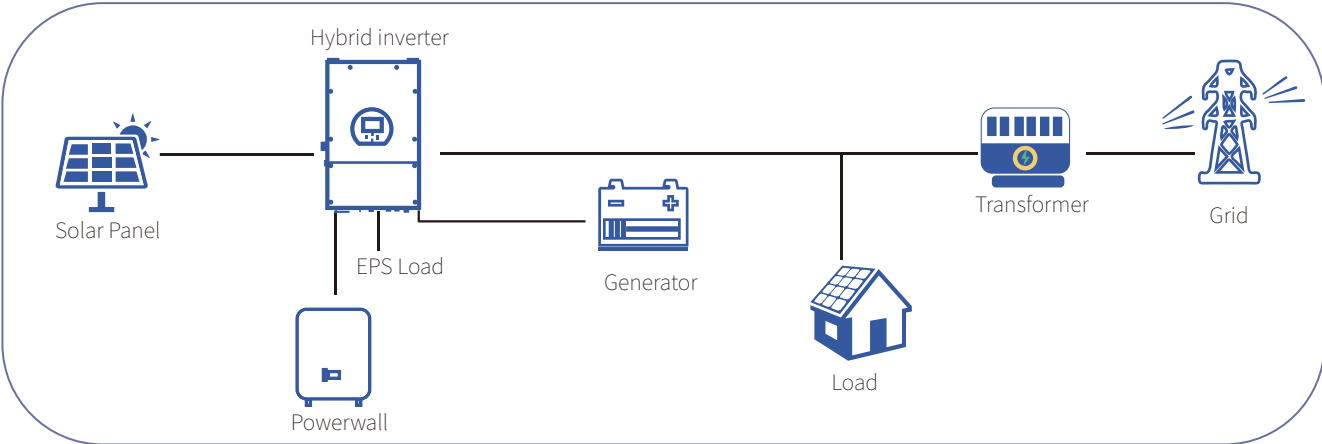
ESS system configuration

Simplified Operation

Just plug into the wall socket, the battery can achieve bidirectional current flow; When the current is flowing, it will charge itself, and when the power is interrupted, it will deliver power to the home circuit.

Expectation

In the future, such storage systems will benefit not only homeowners, who have greater autonomy over how and when they get the power they need, but also the power sector, as people shift electricity demand to off-peak hours, reducing the load on the system.



ESS System configuration

| Model | 5KW | 8KW | 10KW | 12KW | 20KW |
|------------------------------------|--------------------------------------|----------|----------|----------|----------|
| Battery Date | | | | | |
| Battery Type | Lead-acid or Li-Ion | | | | |
| Battery Voltage Range (V) | 40~60 | | | | |
| Battery Capacity | 5.12kwh | 10.24kwh | 20.48kwh | 20.48kwh | 30.72kwh |
| Charging Storage for battery | Self-adaption to BMS | | | | |
| PV input data | | | | | |
| Max. DC Input Power (W) | 6500 | 10400 | 13000 | 15600 | 31200 |
| Rated PV Input Voltage (V) | 160~800 | | | | |
| Start-up Voltage (V) | 160 | | | | |
| PV Input Current (A) | 13+13 | | 26+13 | | |
| Number of MPPT / Strings per MPPT | 2/1+1 | | 2/2+1 | | |
| AC Output Data | | | | | |
| Rated AC Output and UPS Power (W) | 5000 | 8000 | 10000 | 12000 | 20000 |
| Max. AC Output Power (W) | 5500 | 8800 | 11000 | 13200 | 22000 |
| AC Output Rated Current (A) | 7.6 | 12.1 | 15.2 | 18.2 | 30.4 |
| Max. AC Current (A) | 11.4 | 18.2 | 22.7 | 27.3 | 31.2 |
| Max. Continuous AC Passthrough (A) | 45 | | | | |
| Peak Power (off grid) | 2 time of rated power, 10S | | | | |
| Power Factor | 0.8 leading to 0.8 lagging | | | | |
| Output Frequency and Voltage | 50/60Hz; 3L/N/PE 220/380, 230/400Vac | | | | |
| Grid Type | Three Phase | | | | |
| DC injection current (mA) | THD<3% (Linear load<1.5%) | | | | |
| Mounting bracket | | | | | |
| Bracket Design | Customized(Roof and Ground) | | | | |
| Design | Y | | | | |
| User Installation Manual | Y | | | | |

COMMERCIAL STORAGE SYSTEM



ESS system configuration



All-in-one Multi-Functional smart hybrid solar system

Inverter, Battery, load, grid/generator solar connection all supported.

Touch screen LCD

Easier parameter setting and maintenance.

Dry contact output

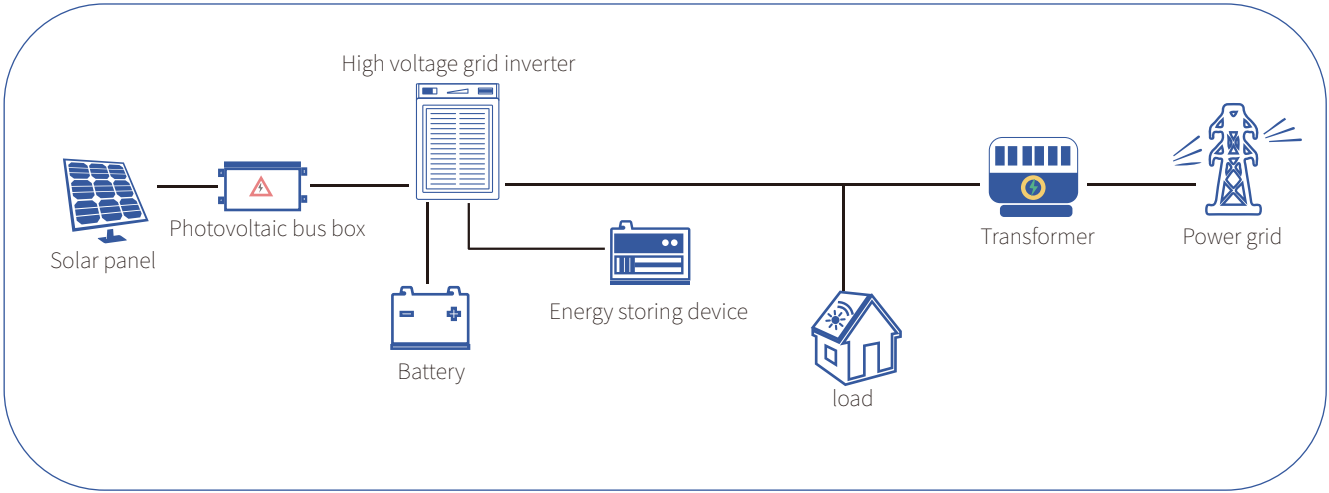
Supports remote control of the DG

scalable design

Quadruple the capacity by connecting 4 units in parallel

Solar system

Solar integrated energy hybrid system



ESS System configuration

| Model | 30KW | 50KW | 100KW | 150KW | 250KW | 500KW |
|--------------------------------|-------------------------|---------|-------------|-------------|---------|-------------|
| Battery date | | | | | | |
| Type of battery | Lead-acid or Li-Ion | | | | | |
| Battery voltage range (V) | 250~850 | 320~850 | 420~850 | 420~850 | 420~850 | 500~850 |
| PV Input data | | | | | | |
| Maximum DC input power (KW) | 60/120 | 60/120 | 120/180/240 | 120/180/240 | 300/360 | 600/660/720 |
| Rated PV input voltage (V) | 1000 | | | | | |
| Starting voltage(V) | 160 | | | | | |
| MPPT voltage range (V) | 250-850 | | | | | |
| Ac output data | | | | | | |
| Rated AC output | 30 | 50 | 100 | 150 | 250 | 500 |
| Maximum output power of AC(KW) | 33 | 55 | 110 | 165 | 275 | 550 |
| Nominal voltage(V) | 400 | | | | | |
| Rated AC output current(A) | 43 | 72 | 144 | 216 | 361 | 722 |
| Mounting bracket | | | | | | |
| Design of stent | Custom (roof and floor) | | | | | |
| Design | Y | | | | | |
| User manual | Y | | | | | |

On-Grid



Solar system



Save money on electricity/invest money

Sales for personal use and access to the grid

High Yield

It consists of an efficient solar module and an efficient grid-connected inverter.

Intelligent monitoring

Multiple data collectors, multiple communication methods/ 4 hours personal monitoring/Smart APP local debugging/Supports the export restriction function

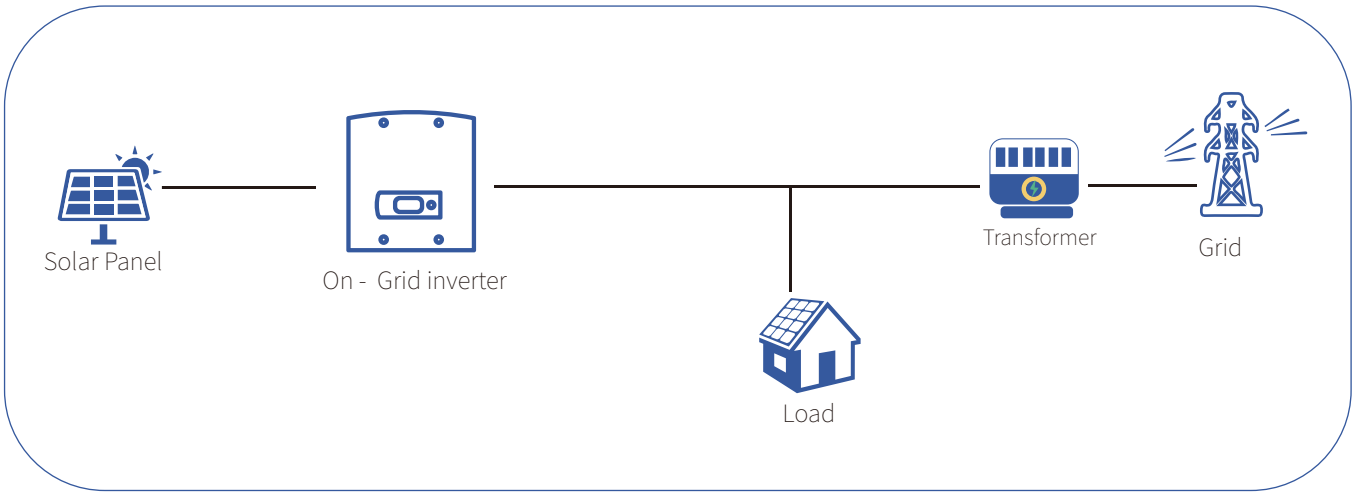
Safety and reliability

type II SPD/Optional function AFCI/ IP65, ip66

Solar system



Configuration of grid-connected solar systems



ESS System Configuration

| Model | 5KW | 10KW | 20KW | 50KW | 100KW | 500KW |
|------------------------------|----------------------------|----------|----------|--------------------------------------|----------|----------|
| PV Input data | | | | | | |
| Maximum DC input power (W) | 7000 | 15000 | 30000 | 75000 | 150000 | 750000 |
| Nominal voltage (V) | 80-550 | 140-1000 | 200-1000 | 200-1000 | 180-1000 | 180-1000 |
| Starting voltage (V) | 160 | 160 | 250 | 250 | 195 | 195 |
| Ac output data | | | | | | |
| Rated AC output (W) | 5000 | 10000 | 20000 | 50000 | 100000 | 500000 |
| Maximum AC output power(W) | 5000 | 11000 | 22000 | 55500 | 110000 | 550000 |
| Power factor | 0.8 leading to 0.8 lagging | | | | | |
| Output frequency and voltage | 50/60Hz;230V (180-280V) | | | 50/60Hz; 3L/N/PE 220/380, 230/400Vac | | |
| Grid type | one-phase | | | Three phase | | |
| Dc injection current (mA) | THD<3% | | | | | |
| Mounting bracket | Three phase | | | | | |
| Design of stent | Custom (roof and floor) | | | | | |
| Design | Y | | | | | |
| User manual | Y | | | | | |

Off-Grid



Solar system

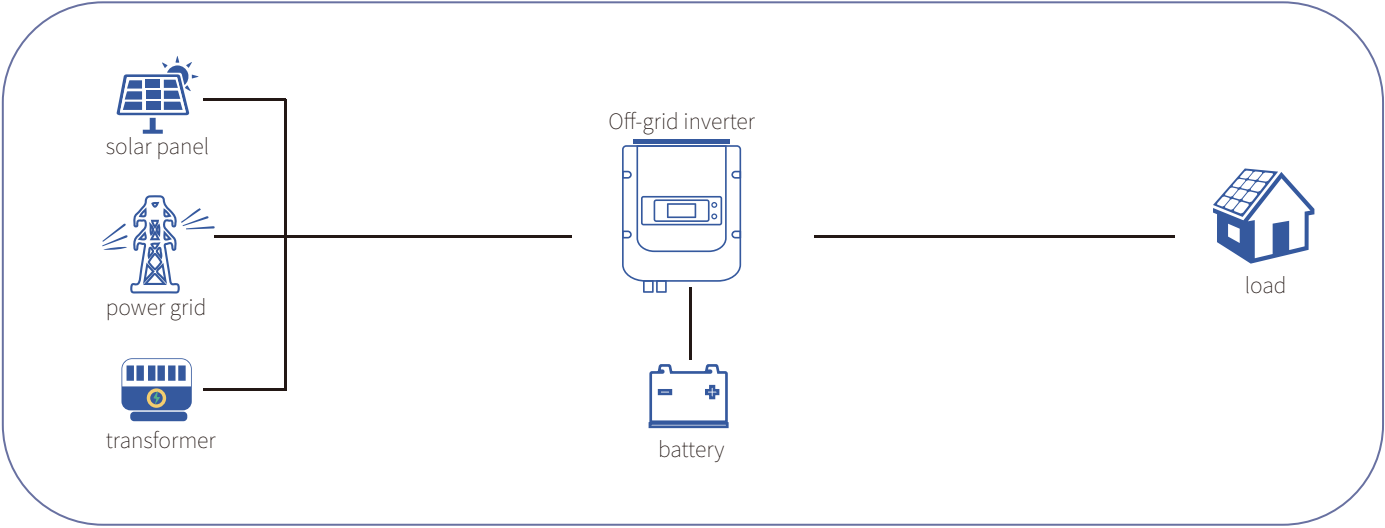


- Applicable to areas with no power grid or unstable power grid
- Independent solar system and grid bypass
- Spare batteries for night or rainy days
- Save power
- 24/7 Stop protection

solar system 



Configuration of off-grid solar systems



ESS system configuration

| Module | 5KW | 10kw | 20kw | 50kw | 100kw |
|------------------------------|------------------------------------|---------|---------|---------|----------|
| Solar panel | 5KW | 10kw | 20kw | 50kw | 100kw |
| Solar inverter | 5KW | 10kw | 20kw | 50kw | 100kw |
| Battery | Lead-acid/lithium battery optional | | | | |
| Charging Storage for battery | BMS self-adaption | | | | |
| PV Combiner box | Custom & Optional | | | | |
| PV Cable | 100m | 200m | 400m | 1000m | 2000m |
| MC4 Connector | 6Pairs | 12Pairs | 24Pairs | 60Pairs | 120Pairs |
| Mounting bracket | Custom (roof/floor/garage) | | | | |
| Bracket design | Custom (roof and floor) | | | | |
| Design | Y | | | | |
| User installation manual | Y | | | | |

Solar Bracket



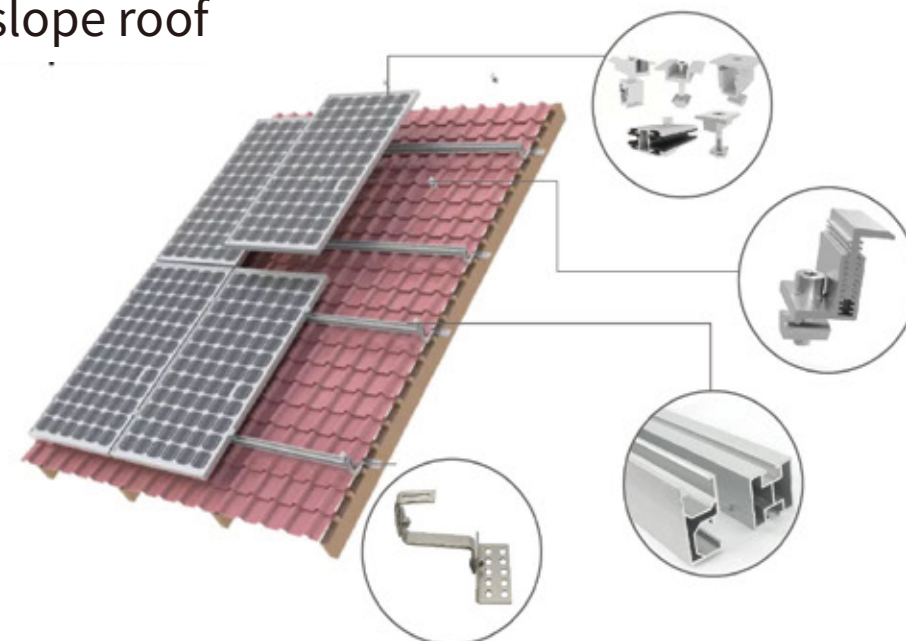
Roof coverings of metal



truncated roof



slope roof



Light weight



Solid construction

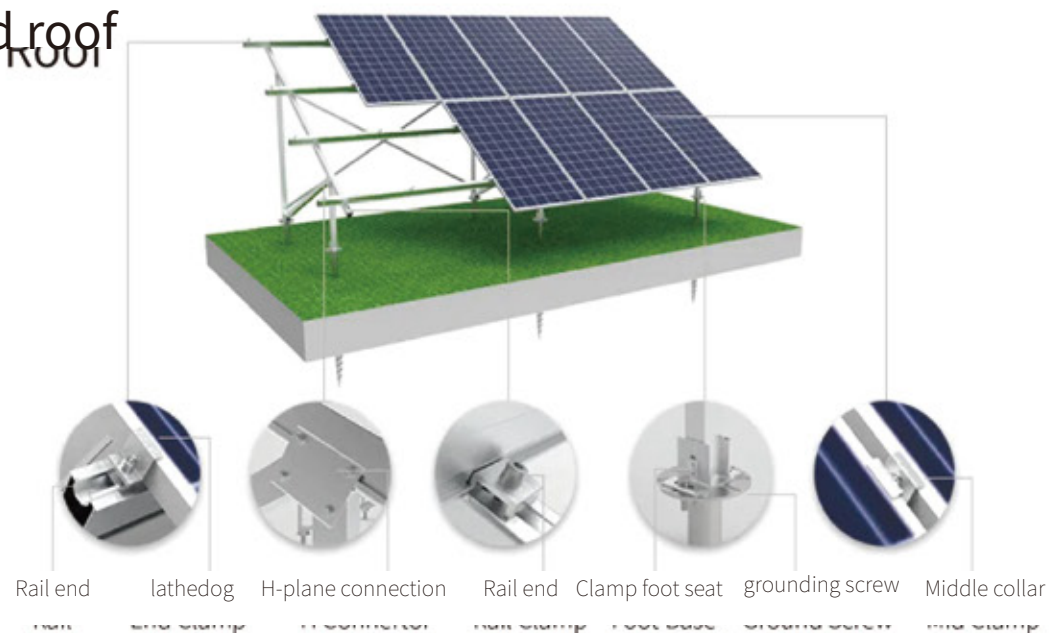


recyclable material

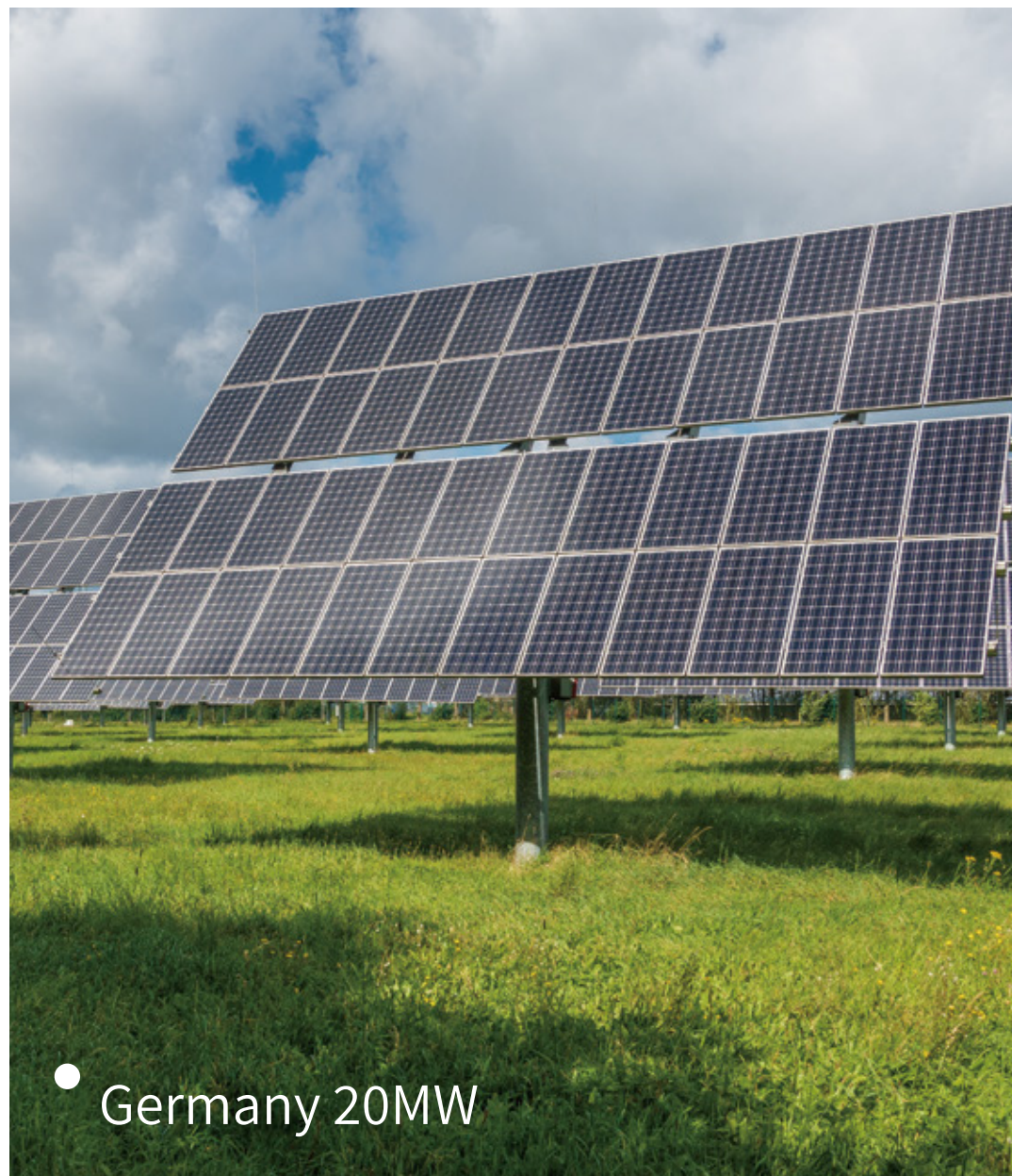


Save time and cost

Ground roof



Rail end
lathdog
H-plane connection
Rail end
Clamp foot seat
grounding screw
Middle collar



• Germany 20MW



• Czech Republic 30KW



• Nigeria 15MW



• Denmark 14.6MW



● Greece 1.5MW



● South Africa 1MW



● England 13.2MW



● Germany 30KW



● Australian 800KW