



182-132 SINGLE CRYSTAL ASSEMBLY

Product characteristics



10BB Half Cell Technology

New circuit design, lower internal current, lower internal current Resistance loss gallium doped silicon wafer, first year attenuation<2%, linear attenuation Minus ≤ 0.55%



Significantly reduce the risk of hot spots

Unique circuit design significantly reduces hot spot temperature and reduces work Rate loss increases component power generation



Lower electricity cost

Increase power generation by 2% and reduce cost per kilowatt hour



Excellent anti PID performance

TUV SGS has twice the industry standard PID resistance(Potential induced attenuation) test (85°C/85% RH 192 hours)



IP68 junction box

High standard waterproof performance, effective protection against harsh environments

Quality assurance



Comprehensive product and system certification

IEC 61215, IEC 61730

ISO9001: 2015/Quality Management System

ISO14001: 2015/Environmental Management Systems

ISO45001: 2018/Occupational Health and Safety Management System Certification

Electrical performance parameters	T-480M66	T-485M66	T-490M66	T-495M66	T-500M66	T-505M66
Component performance under STC standard (tolerance: 0~+5W)						
Maximum rated power (W)	480	485	490	495	500	505
Maximum power voltage (V)	37.62	37.81	37.99	38.17	38.35	38.53
Maximum power current (A)	12.76	12.83	12.90	12.97	13.04	13.11
Open circuit voltage (V)	45.07	45.20	45.33	45.46	45.59	45.72
Short circuit current (A)	13.65	13.72	13.79	13.86	13.93	14.00
Component efficiency (%)	20.19	20.40	20.61	20.82	21.03	21.24

Component performance under the NOCT standard						
Maximum rated power (W)	363	367	370	374	378	382
Maximum power voltage (V)	35.54	35.67	35.76	35.84	35.93	36.02
Maximum power current (A)	10.21	10.28	10.36	10.44	10.52	10.60
Open circuit voltage (V)	42.15	42.30	42.43	42.58	42.72	42.86
Short circuit current (A)	10.99	11.06	11.13	11.20	11.27	11.34

Temperature Characteristic	
Maximum power temperature coefficient (Pmax)	-0.34%/°C
Open circuit voltage temperature coefficient (Voc)	-0.26%/°C
Short circuit voltage temperature coefficient (Isc)	-0.05%/°C
Working temperature	-40~ + 85°C
Rated operating cell temperature (NMOT)	42±2°C

STC (standard test environment): irradiance 1000W/ m², battery temperature 25 °C, spectral AM1.5, NOCT (nominal operating temperature of the module) irradiance800W/m², ambient temperature 20 °C, spectral AM1.5, wind speed 1m/s;

Mechanical behavior

Specifications	Single crystal silicon 182X182mm
Battery arrangement	Single crystal 132 [2X (6X11)]
Component dimensions	2097 X 1134 X 35mm
Component weight	26.5kg
Component panel	3.2mm tempered coated glass
Component Border	Anodic oxygen film aluminum alloy
Junction box	IP68, 3 Diodes
Wireway	4.0 square millimeters (IEC)
Wire length (including connectors)	300mm, wire length can be customized
Connector	KSW-CN01

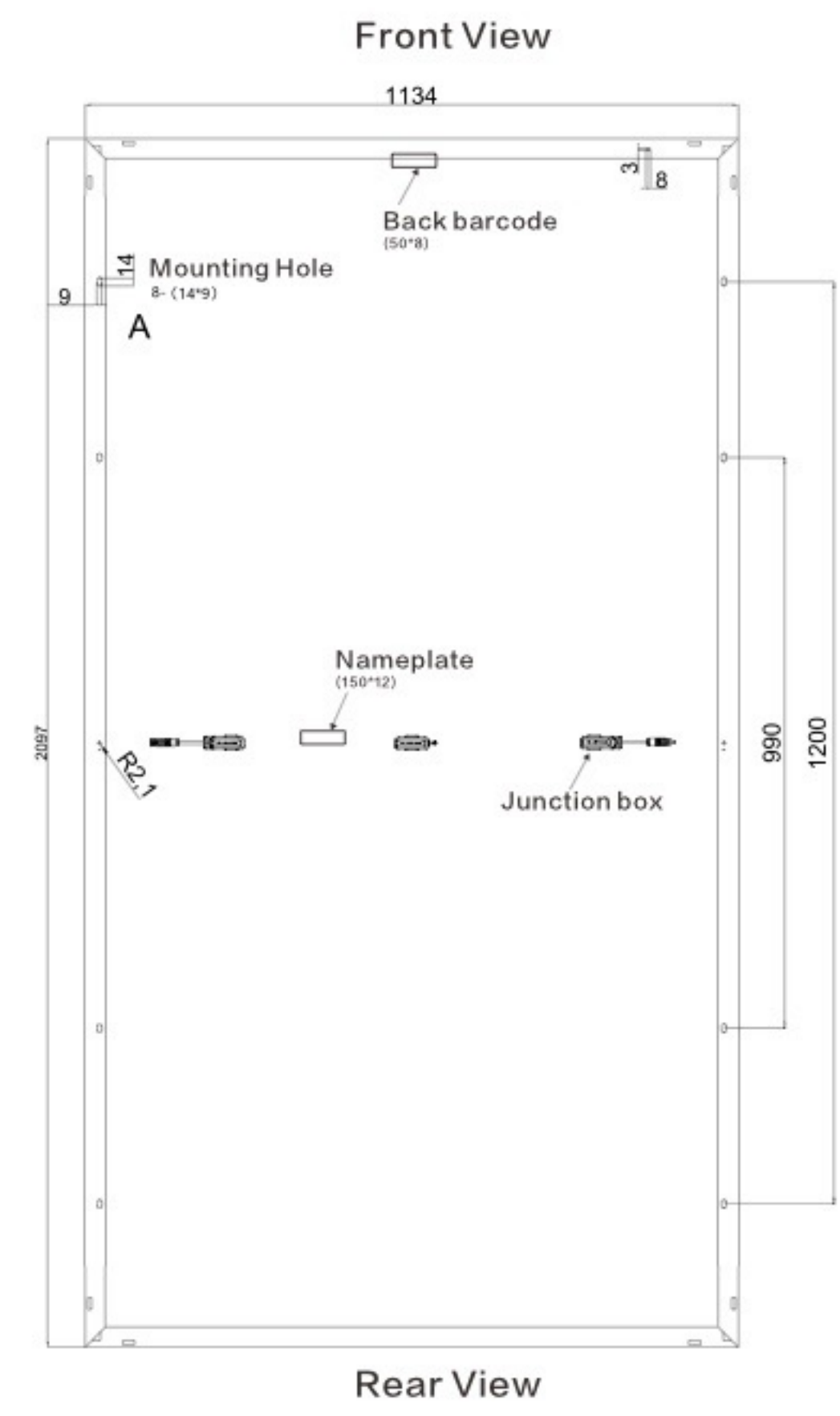
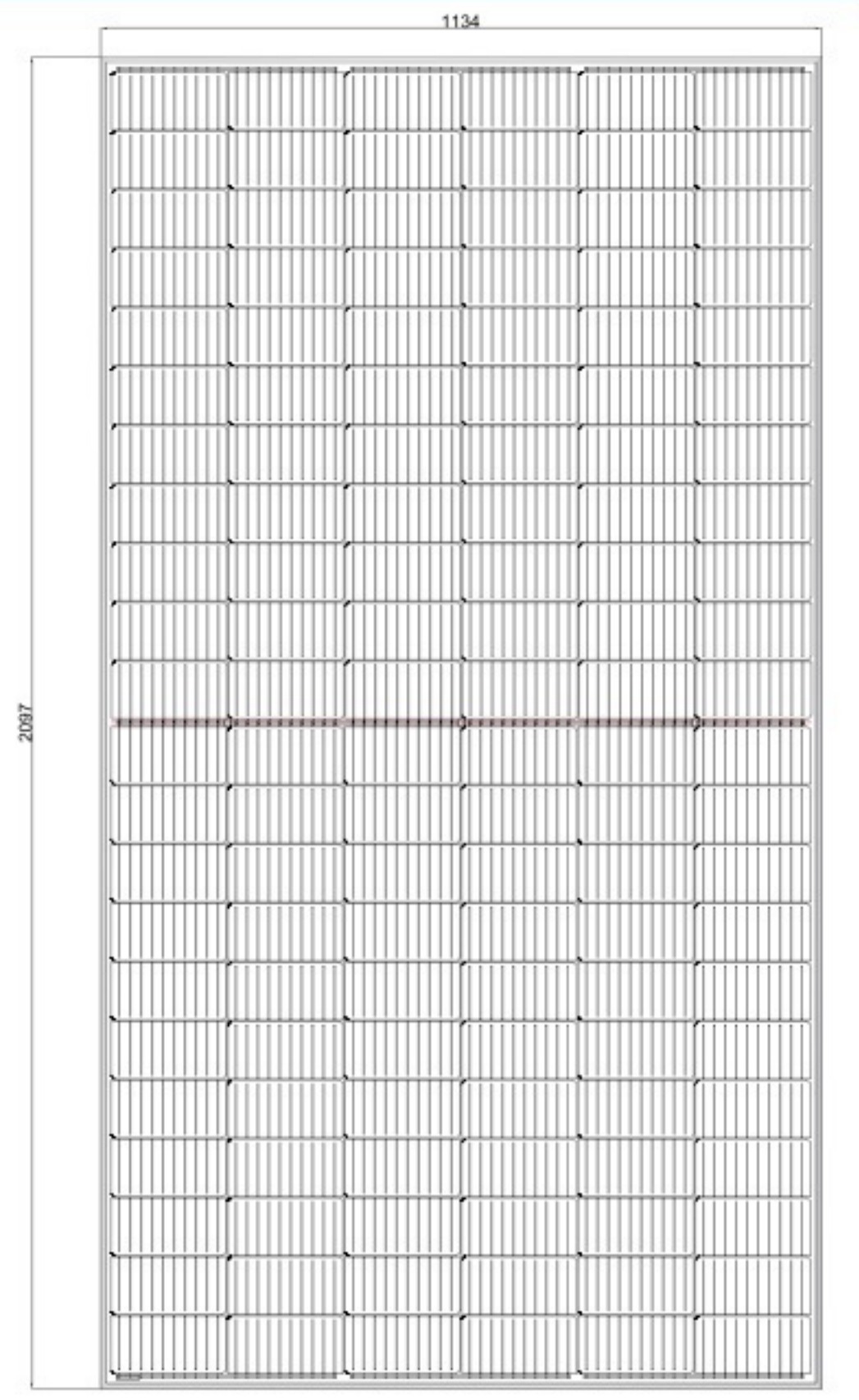
Working conditions

Maximum system voltage	1000V/1500V/DC(IEC)
Fusing current	25A
Static load	Snow load: 5400Pa/Wind load: 2400Pa
Grounding resistance	≤ 0.1Ω
Safety level	II
Insulation resistance	≥ 100M Ω

Packaging Information

Container size	40HQ
Sheet/Tray	31
Pallets/Containers	22
Pieces/Container	682
Package size	2120*1120*1235mm
Package weight	860kg

Technical drawings





182-132 SINGLE CRYSTAL ASSEMBLY

Product characteristics



10BB Half Cell Technology
New circuit design, lower internal current, lower internal current Resistance loss gallium doped silicon wafer, first year attenuation<2%, linear attenuation Minus ≤ 0.55%



Significantly reduce the risk of hot spots
Unique circuit design significantly reduces hot spot temperature and reduces work Rate loss increases component power generation



Lower electricity cost
Increase power generation by 2% and reduce cost per kilowatt hour



Excellent anti PID performance
TUV SGS has twice the industry standard PID resistance(Potential induced attenuation) test (85°C/85% RH 192 hours)



IP68 junction box
High standard waterproof performance, effective protection against harsh environments

Quality assurance



Comprehensive product and system certification

- IEC 61215, IEC 61730
- ISO9001: 2015/Quality Management System
- ISO14001: 2015/Environmental Management Systems
- ISO45001: 2018/Occupational Health and Safety Management System Certification

Electrical performance parameters	T-480M66	T-485M66	T-490M66	T-495M66	T-500M66	T-505M66
Component performance under STC standard (tolerance: 0~+5W)						
Maximum rated power (W)	480	485	490	495	500	505
Maximum power voltage (V)	37.62	37.81	37.99	38.17	38.43	38.53
Maximum power current (A)	12.76	12.83	12.90	12.97	13.01	13.11
Open circuit voltage (V)	45.07	45.20	45.33	45.46	45.98	45.72
Short circuit current (A)	13.65	13.72	13.79	13.86	13.87	14.00
Component efficiency (%)	20.19	20.40	20.61	20.82	21.10	21.24

Component performance under the NOCT standard						
Maximum rated power (W)	361	366	372	378.36	384.12	390.15
Maximum power voltage (V)	34.32	34.47	34.62	34.86	35.03	35.18
Maximum power current (A)	10.52	10.62	10.74	10.85	10.97	11.09
Open circuit voltage (V)	41.94	42.06	42.16	42.34	42.45	42.56
Short circuit current (A)	11.26	11.38	11.52	11.66	11.79	11.87

Temperature Characteristic	
Maximum power temperature coefficient (Pmax)	-0.354%/°C
Open circuit voltage temperature coefficient (Voc)	-0.266%/°C
Short circuit voltage temperature coefficient (Isc)	-0.046%/°C
Working temperature	-40~ + 85°C
Rated operating cell temperature (NMOT)	45±2°C

STC (standard test environment): irradiance 1000W/ m², battery temperature 25 °C ,spectral AM1.5, NOCT (nominal operating temperature of the module) irradiance800W/m², ambient temperature 20 °C, spectral AM1.5, wind speed 1m/s;

Mechanical behavior	
Specifications	Single crystal silicon 182X182mm
Battery arrangement	Single crystal 132 [2X (6X11)]
Component dimensions	2094 X 1134 X 35mm
Component weight	25kg
Component panel	3.2mm tempered coated glass
Component Border	Anodic oxygen film aluminum alloy
Junction box	IP68, 3 Diodes
Wireway	4.0 square millimeters (IEC)
Wire length (including connectors)	1200mm, wire length can be customized
Connector	KSW-CN01

Working conditions	
Maximum system voltage	1000V/1500V/DC(IEC)
Fusing current	25A
Static load	Snow load: 5400Pa/Wind load: 2400Pa
Grounding resistance	≤ 0.1Ω
Safety level	II
Insulation resistance	≥ 100M Ω

Packaging Information	
Container size	40HQ
Sheet/Tray	31
Pallets/Containers	22
Pieces/Container	682
Package size	2120*1120*1235mm
Package weight	860kg

Technical drawings

