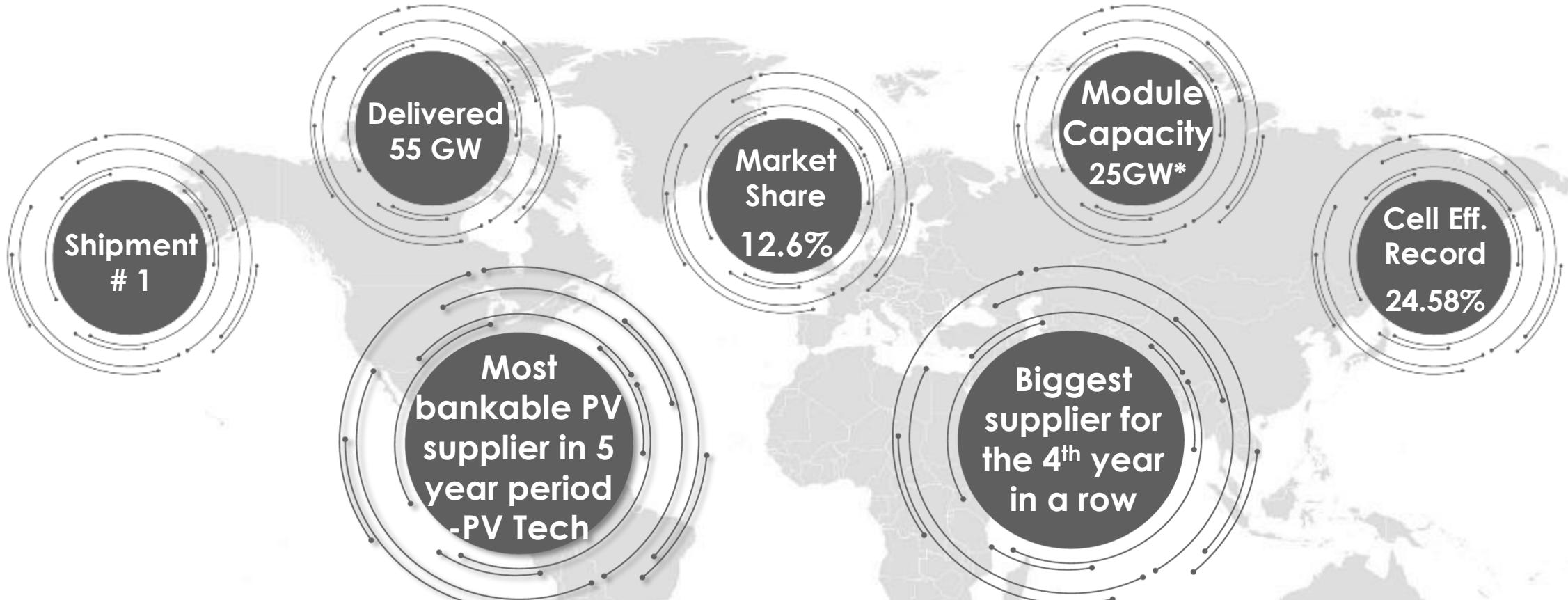




TiGER Pro Series

JinkoSolar Co., Ltd.

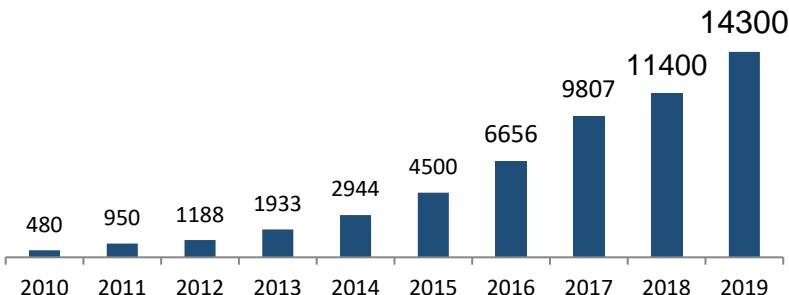


7 Global Factories | 30+ Service Centers

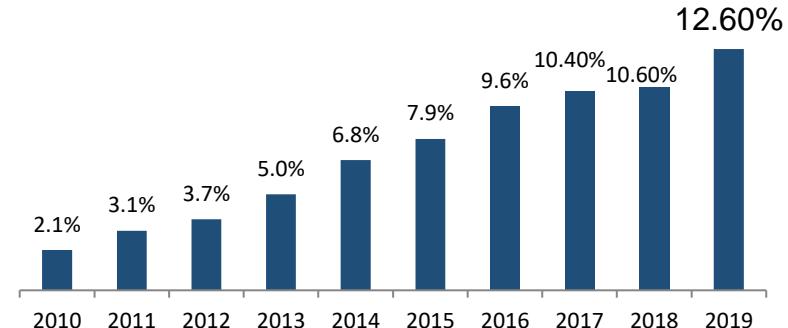
100+ Covered Countries | 8000+ Annual Orders

Branding - a marca número 1 do mundo

JinkoSolar global deliveries (in MW)



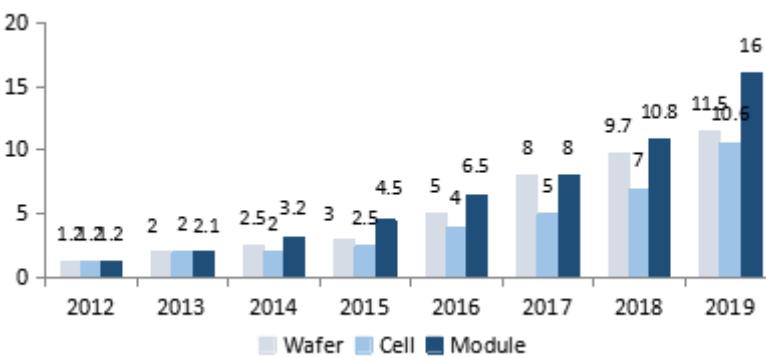
Increased market share (%)



JinkoSolar brand

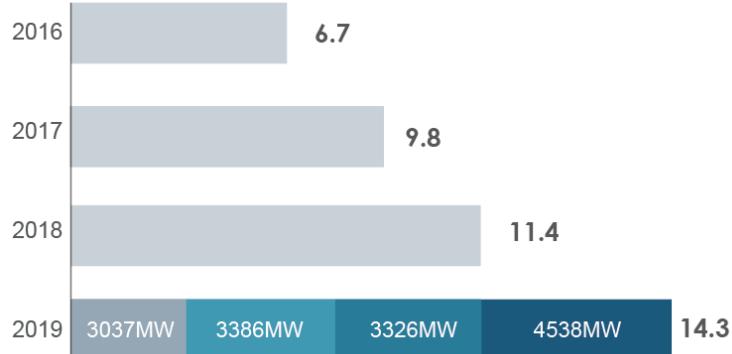


Production



Destaques Financeiros de 2019

Shipment (GW)

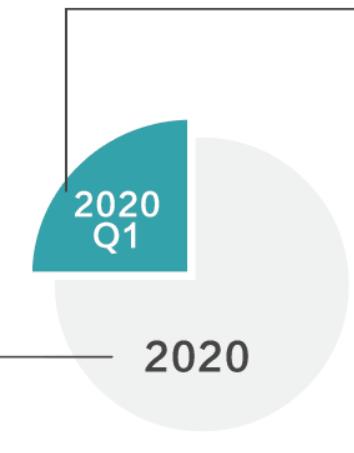


Mono product shipments ratio



Full Year 2020 Guidance

Shipments **3.4GW-3.7GW**
Revenue **1-1.08 billion\$**
Gross margin **19%-21%**



Integrated mono capacity (GW)



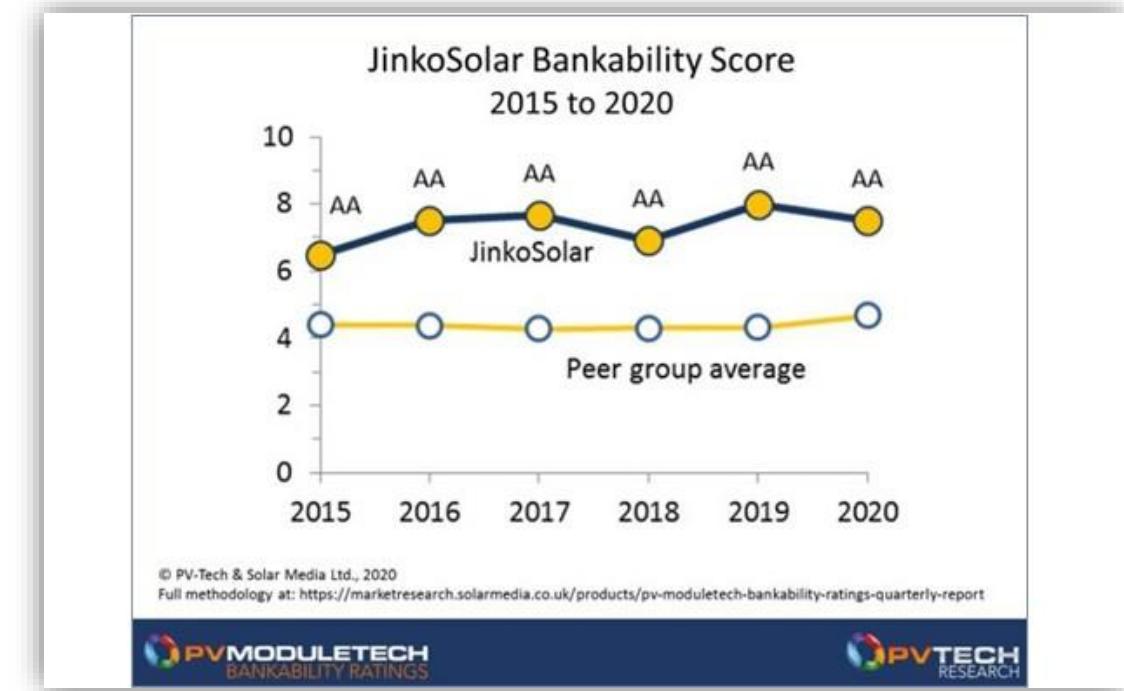
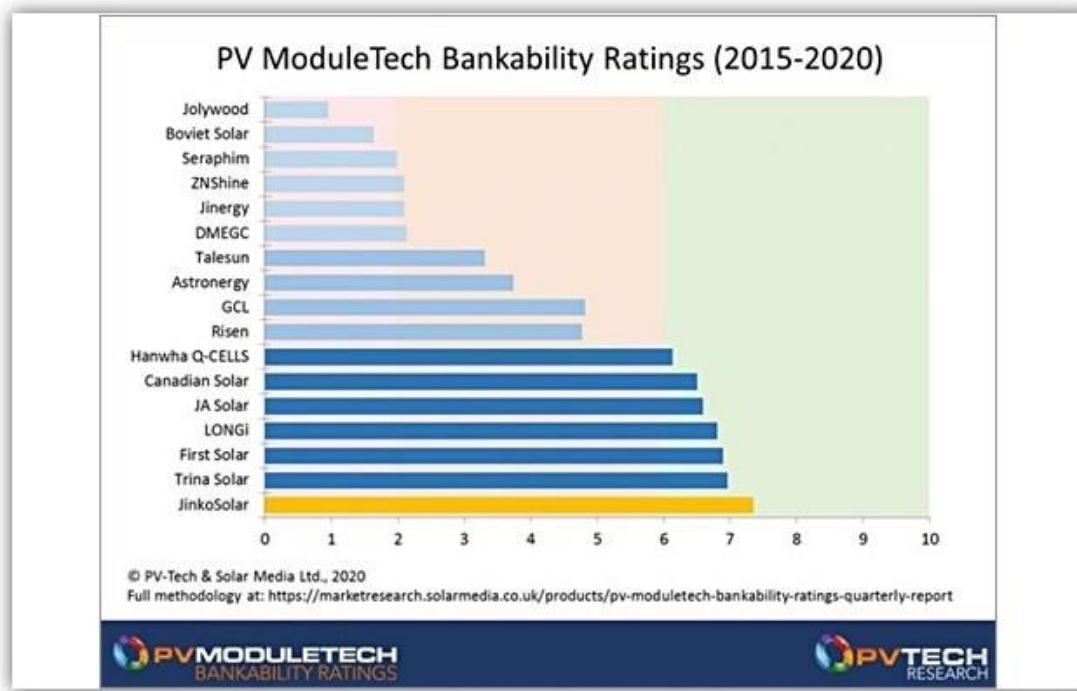
Excellent Global Marketing Network



Shipments **18GW-20GW**

Although coronavirus caused some fluctuations in the short term, the new Coronavirus epidemic will not affect the expected shipments and production capacity expansion in 2020.

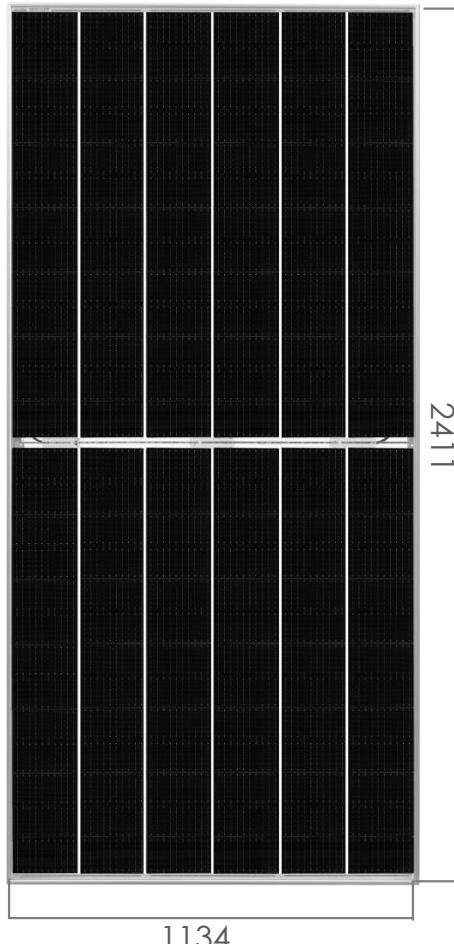
JinkoSolar Confirmed By PV Tech As The Most Bankable PV Module Supplier for the 5 years period 2015-2020



Tiger-Pro Module Monofacial Type

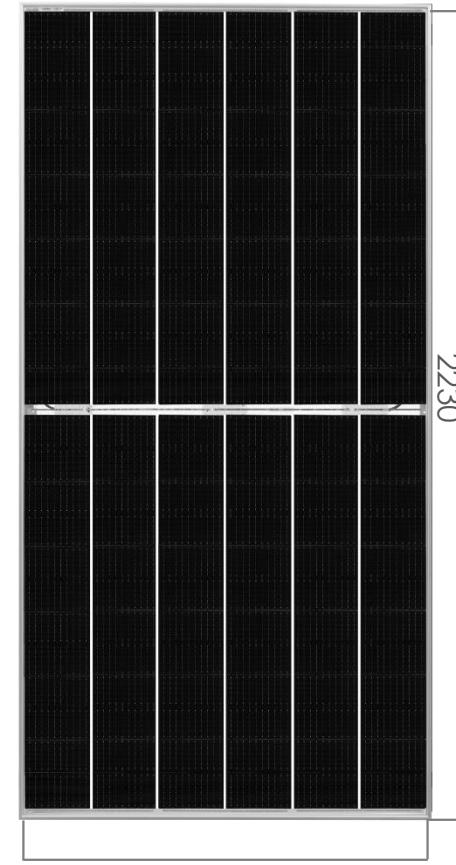
Tiger-Pro 78TR
Max 580W

Monofacial



Tiger-Pro 72TR
Max 530W

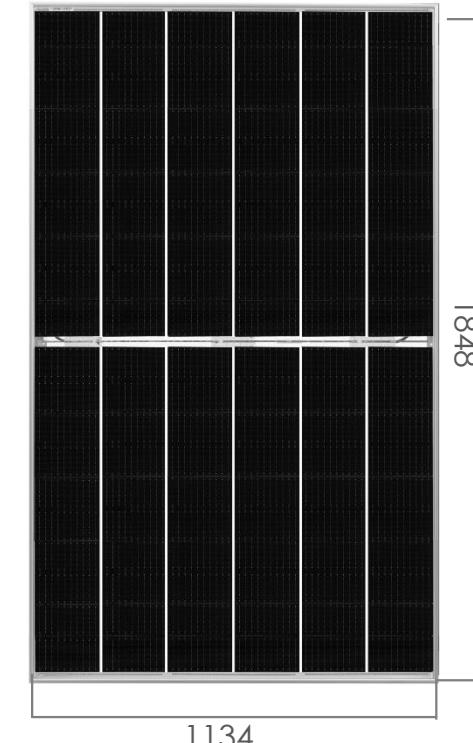
Monofacial



Geração Distribuída

Tiger-Pro 60TR
Max 435W

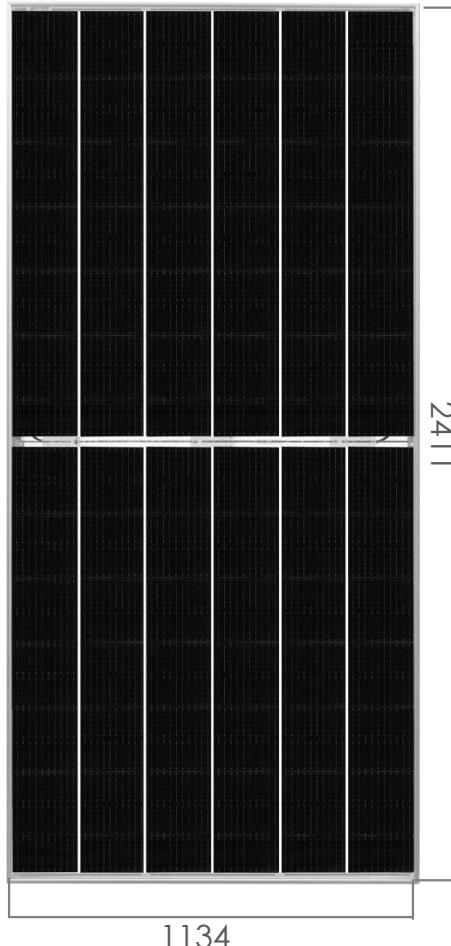
Monofacial



Tiger-Pro Module Bifacial Type

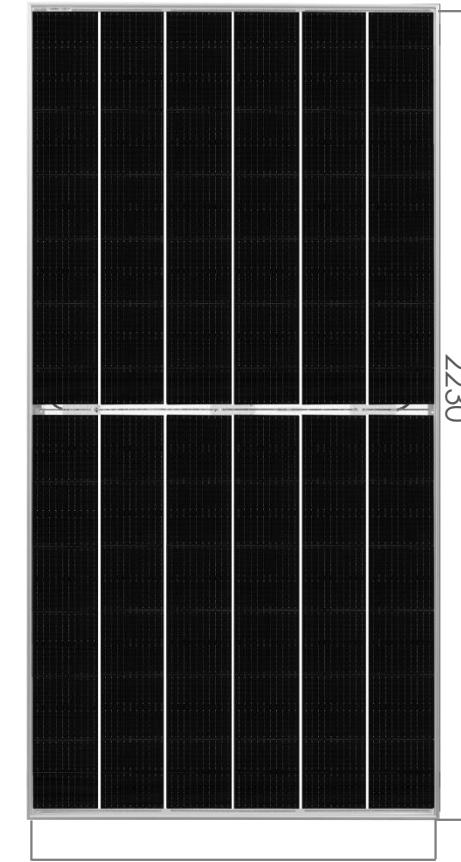
Tiger-Pro 78TR
Max 575W

Bifacial TV



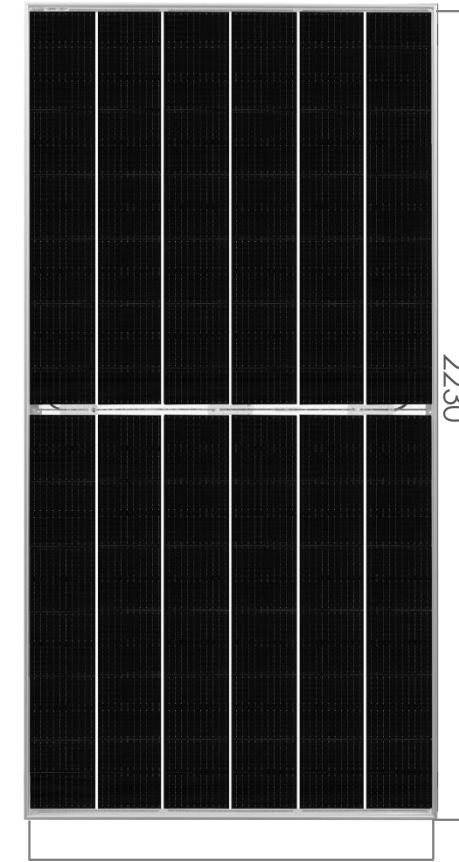
Tiger-Pro 72TR
Max 530W

Bifacial TV

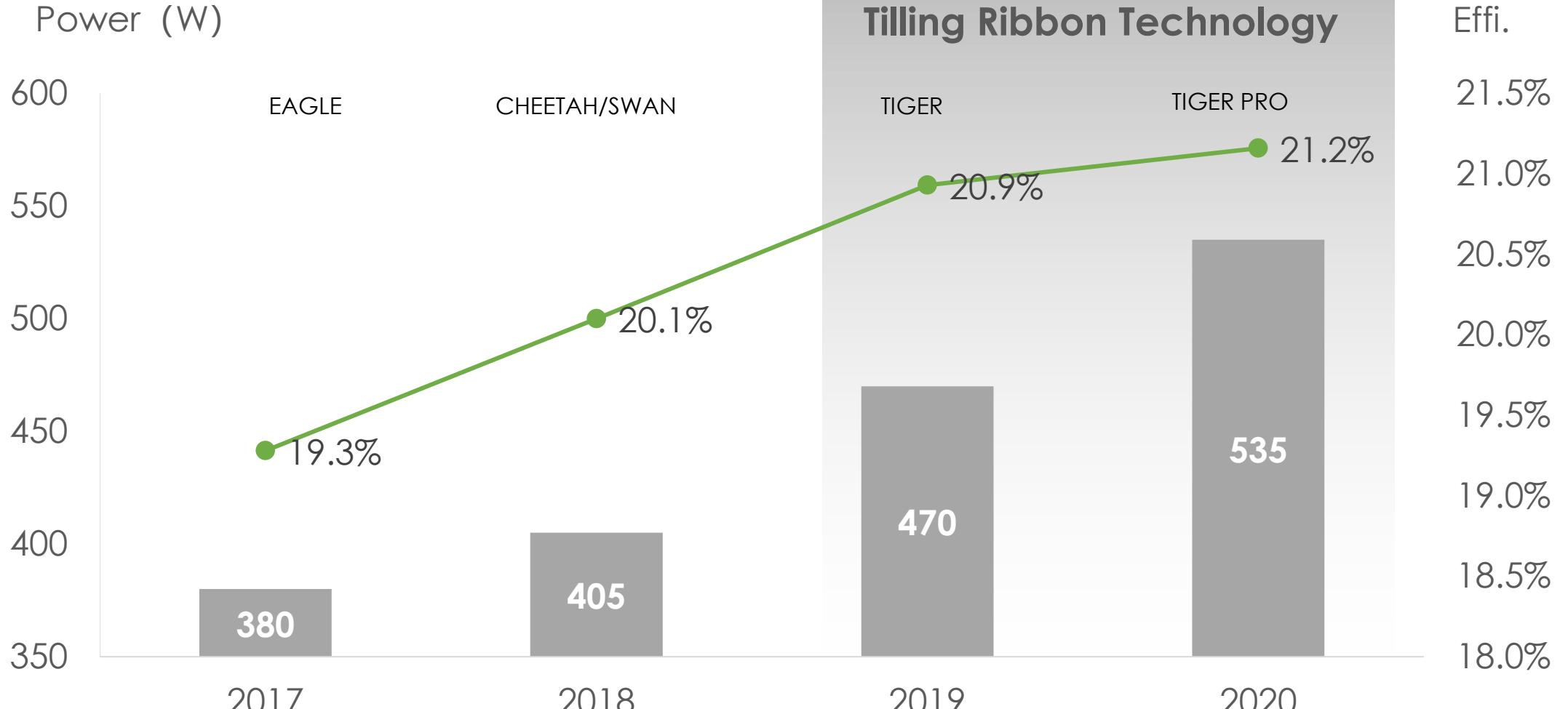


Tiger-Pro 72TR
Max 530W

Bifacial BDVP

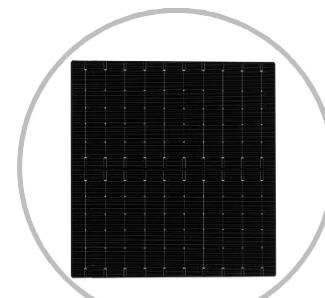


Technology Development of Solar Module



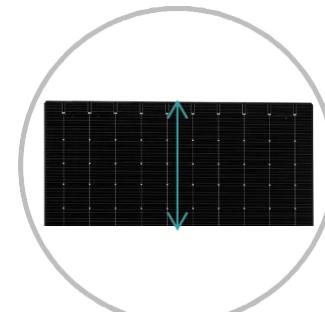
Multi Bus Bar

Diminui a perda de energia efetiva



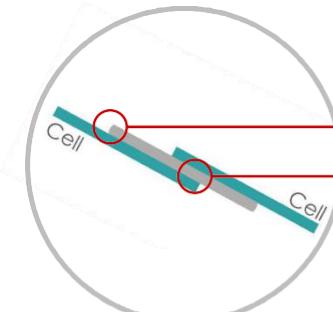
HC technology

Melhora a tolerância ao sombreamento devido à divisão de uma célula completa ao meio



Tiling Ribbon (TR)

Elimina o espaço da célula para aumentar significativamente a eficiência do módulo.



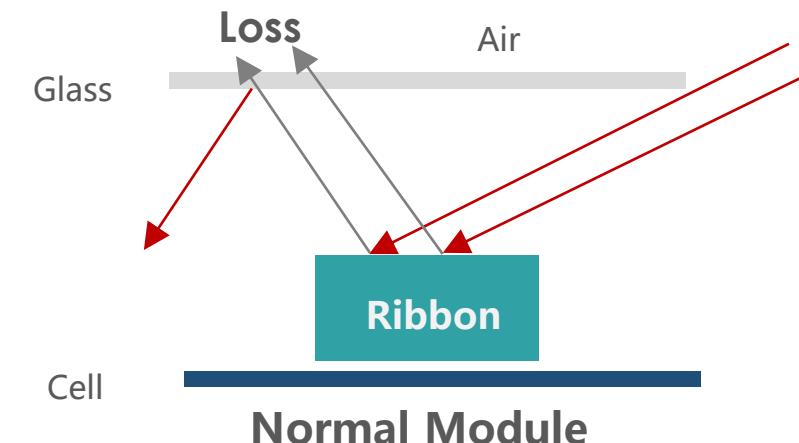
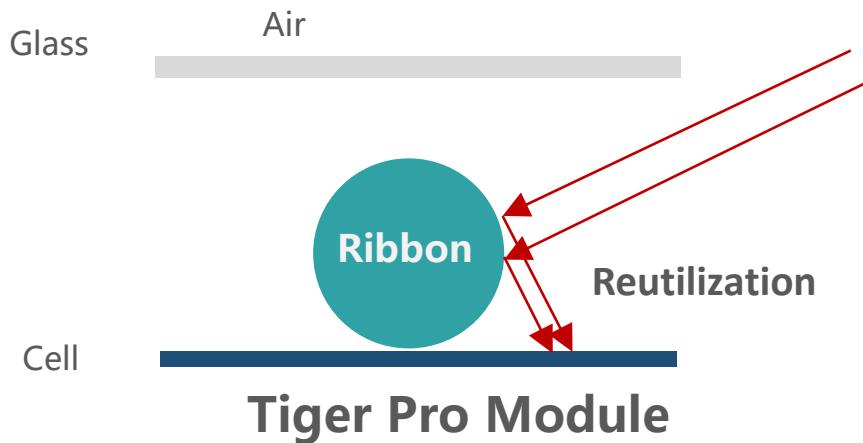
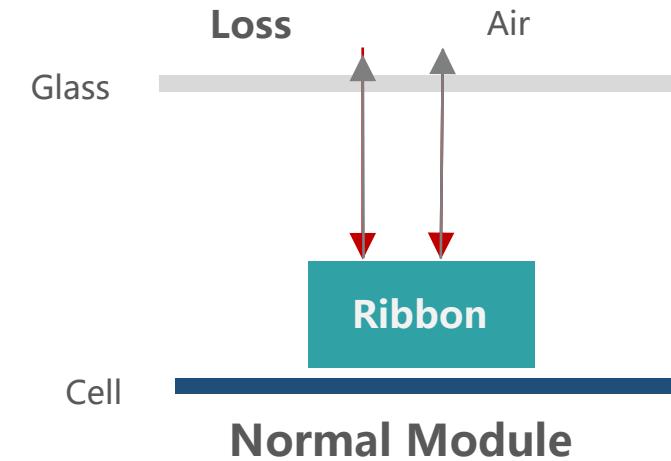
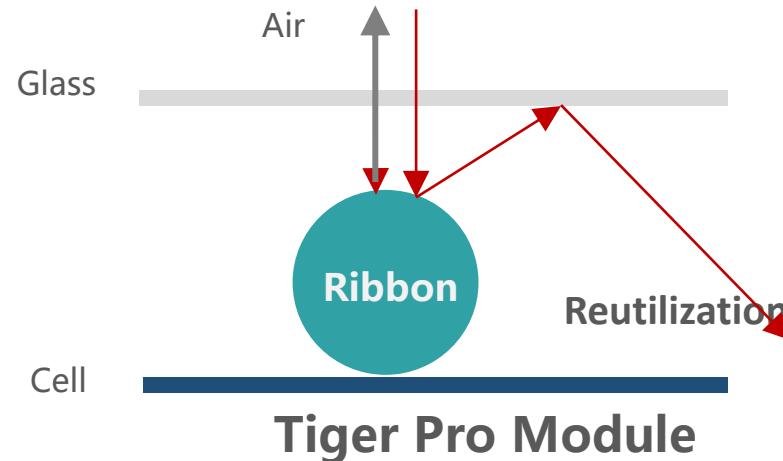
Using circular ribbon

Overlap on each cell to eliminate the gap



Ribbon circular traz mais energia

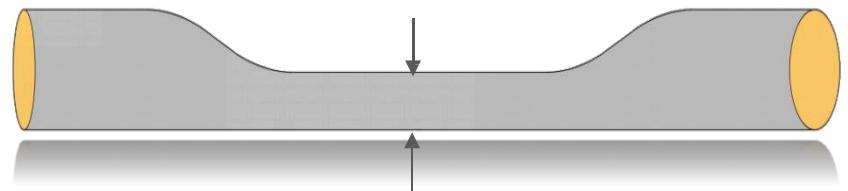
Em comparação com o 5BB, o módulo da série Tiger Pro usa ribbon circular, desenvolvido pela Jinko R&D de forma independente para alcançar a reutilização da absorção de luz e aumentar a geração de energia.



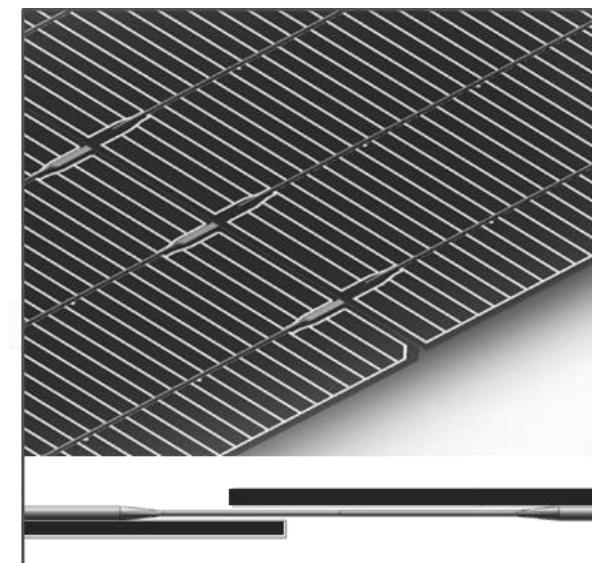
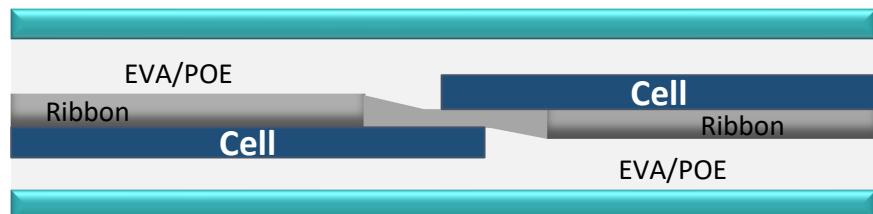
Tecnologia Tiling Ribbon (TR)

- A tecnologia Tiling Ribbon (TR) elimina o espaço entre as células na borda horizontal e empilha as células entre si com uma distância de sobreposição inferior a 2 mm.
- Ribbon circular especial é usada para conectar as células.
- O ribbon circular é comprimido na área de sobreposição e assume a forma de Z.
- Para garantir a máxima confiabilidade, o ribbon é testado antes da soldagem
- O encapsulante especial (EVA / POE) foi projetado para preencher a área de sobreposição para absorver o estresse sob alta temperatura.

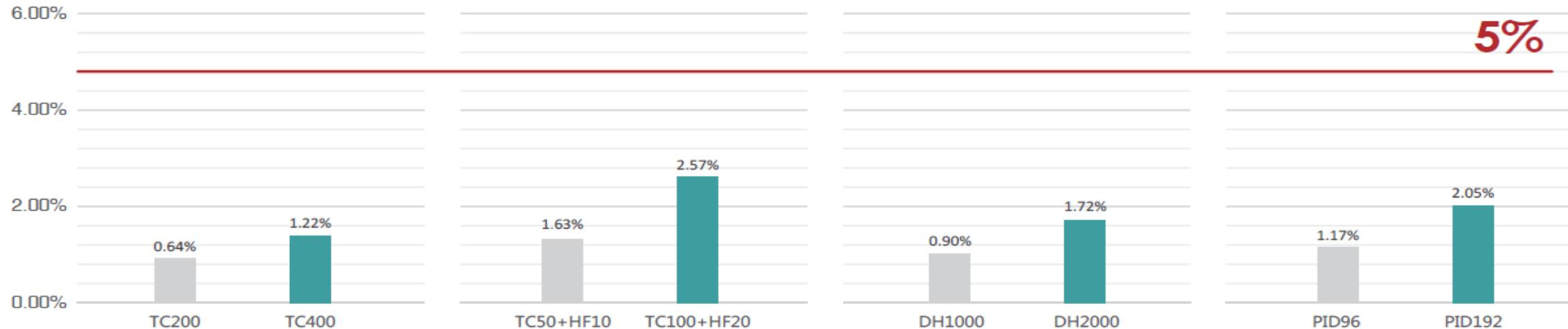
Pressing process to ensure the reliability



Structure diagram of overlapping area



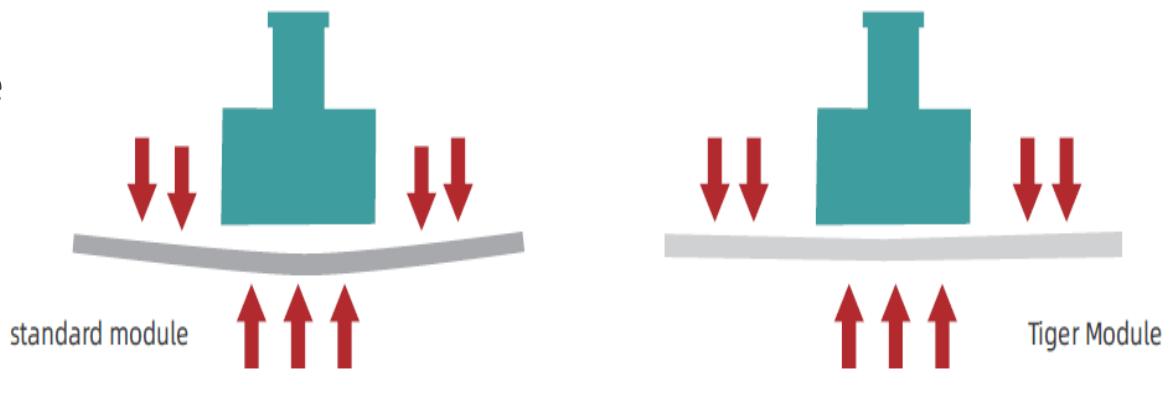
A confiabilidade do Tiling Ribbon



Excelentes testes IEC duplos com degradação inferior a 3%

Excelentes resultados de carga mecânica

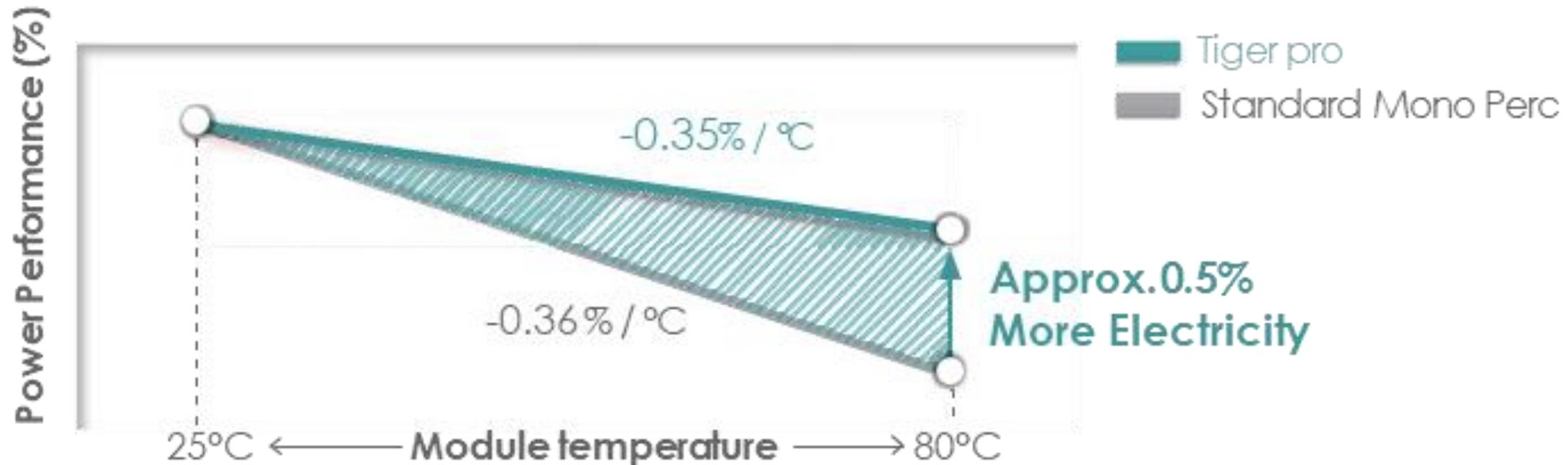
- No teste de carga dinâmica, a taxa de degradação de energia frontal é de 0,6% e a taxa de degradação de energia traseira é de 1,68%
- No teste de carga estática, a degradação de energia do lado frontal é de apenas 0,3% e a degradação de energia traseira é de 1,82%



Coeficiente de temperatura aprimorado

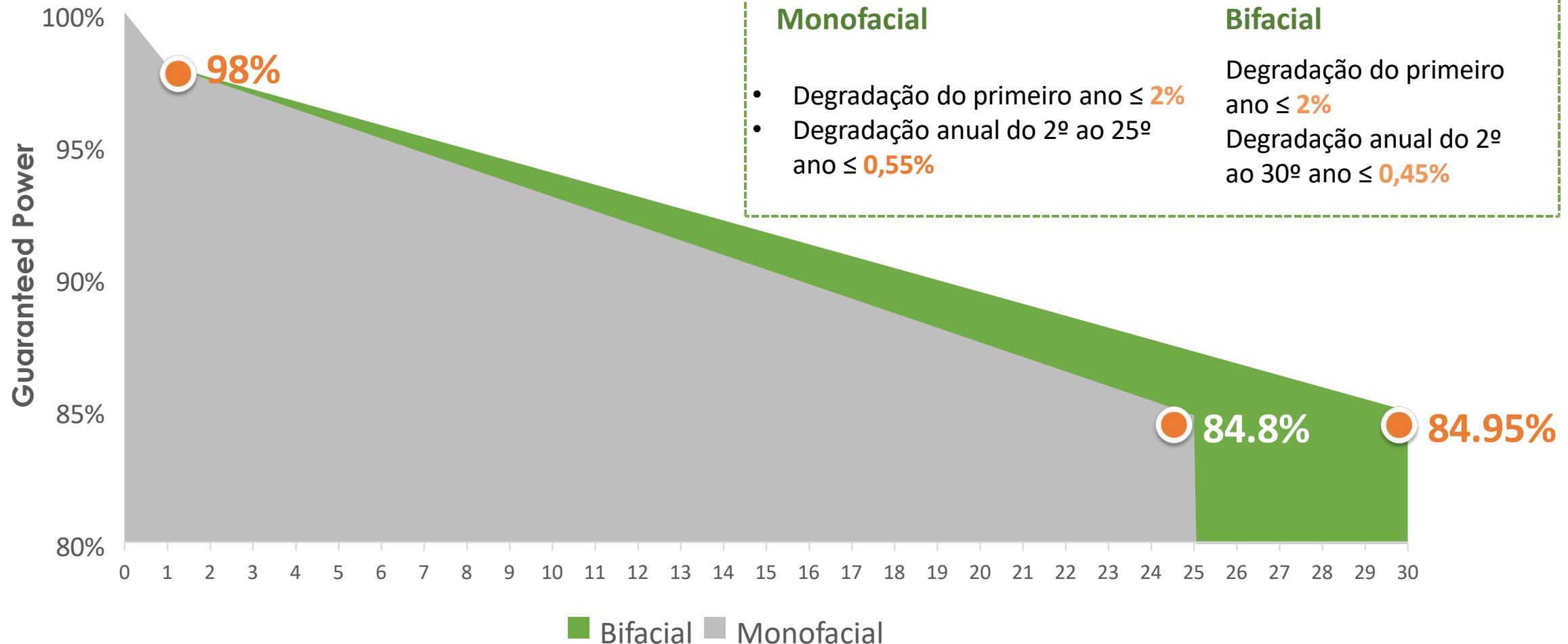
O Tiger PRO possui um coeficiente de temperatura aprimorado de -0,35% / ° C.

A produção real de energia pode ser aumentada até 0,5% por dia, perfeita para fornecer mais eletricidade nos dias quentes de verão



Garantia avançada

Garantia avançada para a Tiger Pro Series



Vantagens Logísticas

- Pelo menos 6,5% mais densidade de potência por 40 'ct
- Nova embalagem melhorada e sustentável

Packaging Configuration

(Two pallets = One stack)

31pcs/pallets, 62pcs/stack, 620pcs/ 40'HQ Container

Tiger PRO 72TR 530Wp (328,6 kWp)

Solução Bifacial— Menor Peso

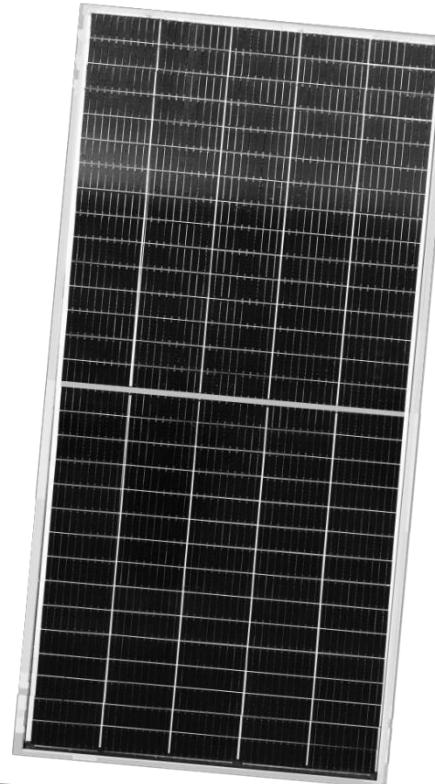
Reduz o peso
em 12%



Tiger PRO
72TR
Bifacial TB

28.2 kg
2230*1134*35

VS



500+ Bifacial DG from market

31.5 kg
2240*1102*30

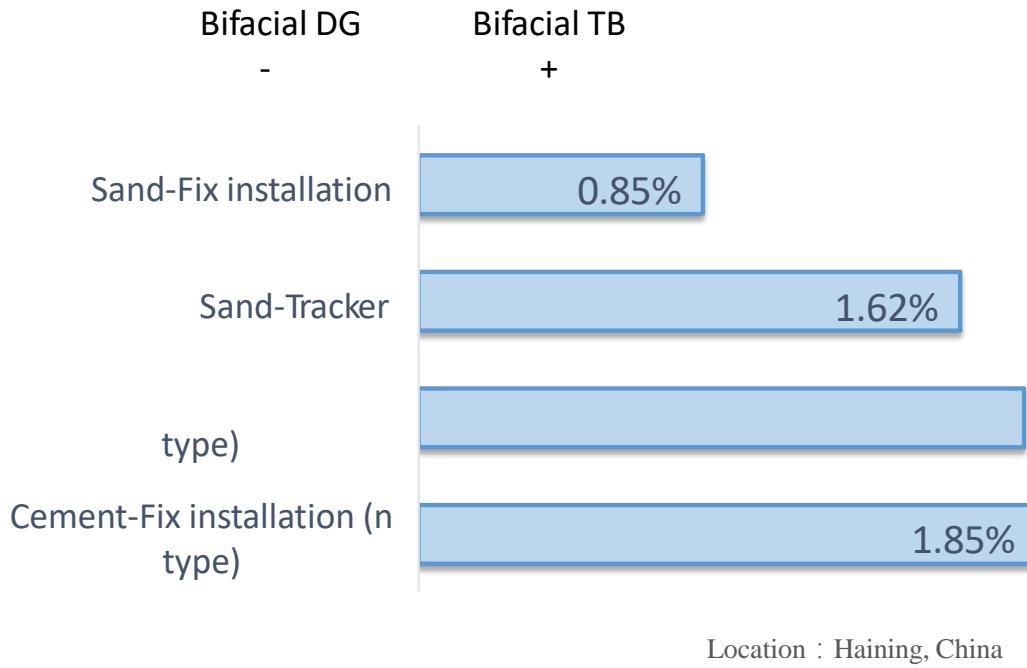
- Tamanho semelhante*
- Design leve*



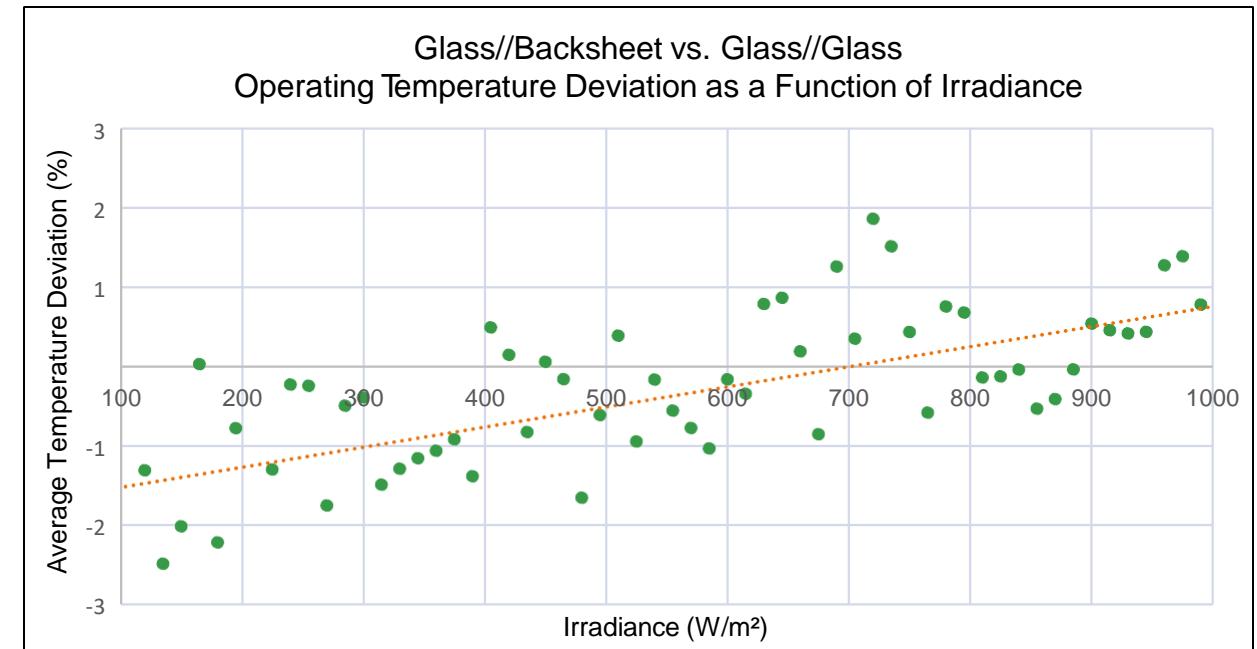
Solução Bifacial - Gera mais

Transparent backsheet or Dual glass --- Energy generation

Energy gain of SWAN TV compared with SWAN BDVP



PVEL Outdoor Performance Results: Glass//Glass vs. Glass//Backsheet



Temperature and irradiance data taken in 5-minute intervals over 3 weeks.

- Bifacial with transparent backsheet in four different kinds of field test shows **0.85%~1.85%** higher energy generation compared with bifacial with dual glass.

- With identical cells to glass//glass, glass//backsheet operates at a lower temperature during periods of higher irradiance

Solução Bifacial — Fácil de limpar

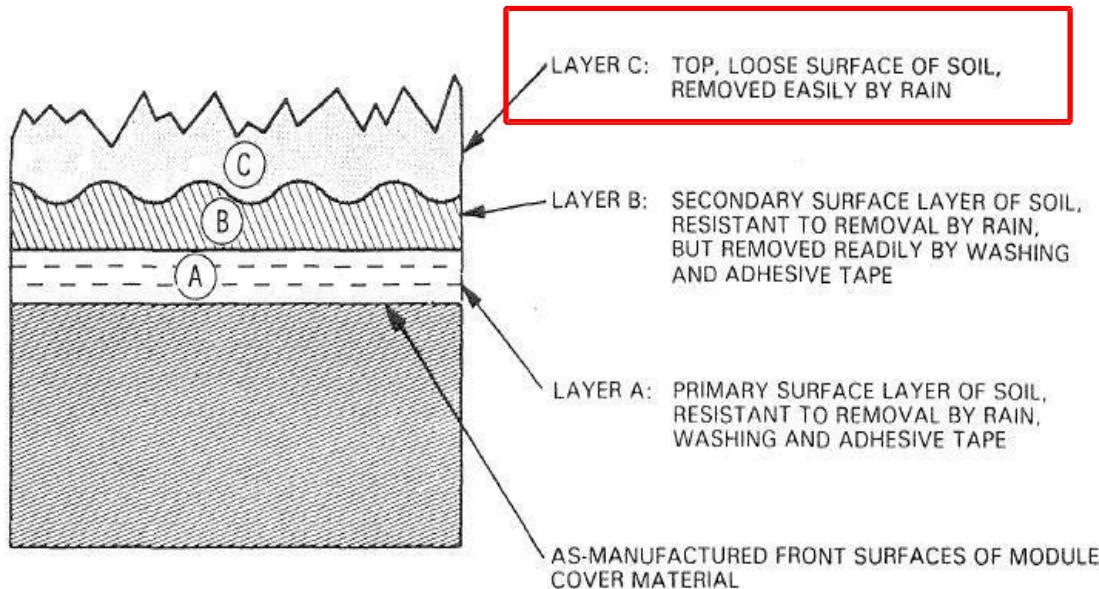
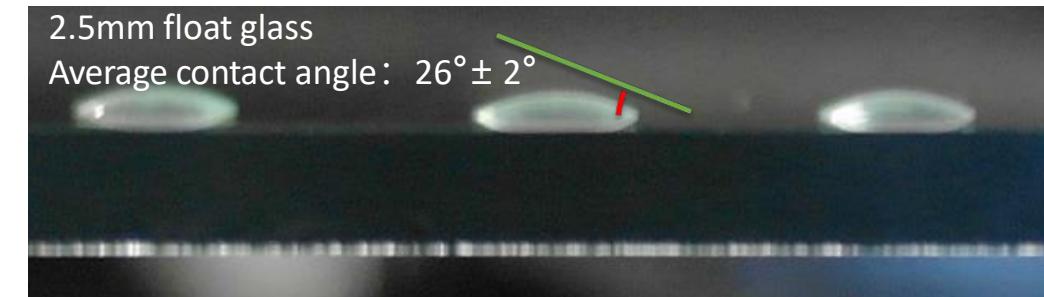
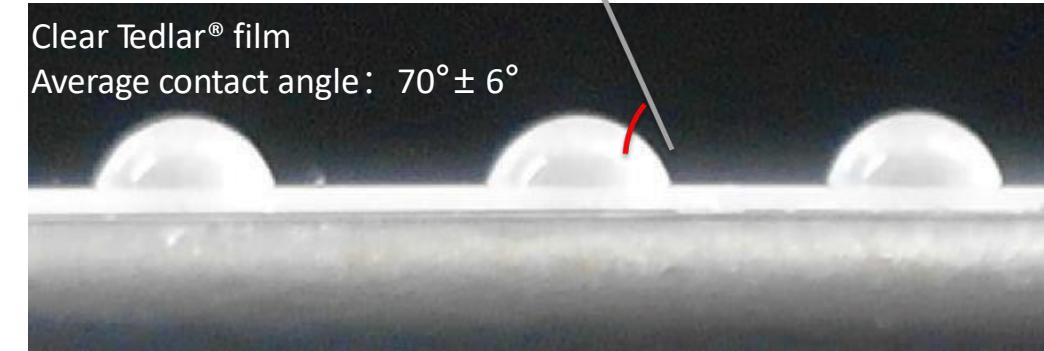


Figure 9. The Three Soiling Layers



The stain-resistance of transparent backsheets makes the rear side of bifacial modules easier to clean and maintain than glass.

- ✓ Tedlar PVF film is fluoropolymer with hydrophobic and stain resistant characteristic, it is mainly covered by loose surface of soil (Layer C).
- ✓ Glass is hydrophilic and dirt can form layers which is chemically adhered to the surface

Solução Bifacial — Fácil de limpar

Outdoor soiling test

Bifacial with transparent backsheets:

There is no obvious dirt, and very little dust in the middle area



Bifacial with dual glass:

There are dirt and mud spots which is not easy to clean



Before rinse

Transparent Backsheet



PV Glass



After rinse

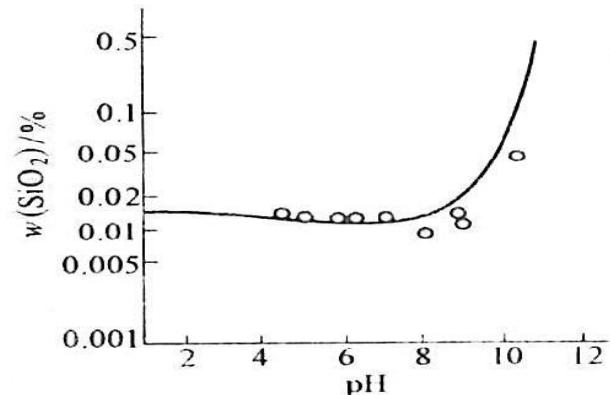


Test Standard: GB/T 9780-2005 Dirt fineness: 0.045 mm square hole sieve ($5.0 \pm 2.0\%$)
Suspension liquid: dirt: water = 1:0.9 (by weight) Suspension liquid amount: ~2 g
Stain surface: 10 cmX10 cm Dry time: 10 min
Water flush speed: 0.3-0.5 m/s Water flush time: ~10 s

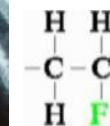
Solução Bifacial – Resistência à corrosão alcalina salina

In the long-term operation in saline alkali environment such as seaside/greenhouse/saline-alkali soil,

- Glass might be slowly corroded to reduce the light transmittance, and corroded spots are difficult to clean, affecting the back-side power generation
- Transparent backsheets with Tedlar film has good resistance to salt and alkali corrosion
- Bifacial with transparent backsheets has lower risk.



The main component of glass, silicate, has certain solubility in alkaline solution, so it is easy to be corroded in saline alkali environment



Clear Tedlar film is PVF with excellent resistance to all kinds of corrosion



Solução Bifacial— Diverças applicações



Alta Compatibilidade



Estrutura fixa

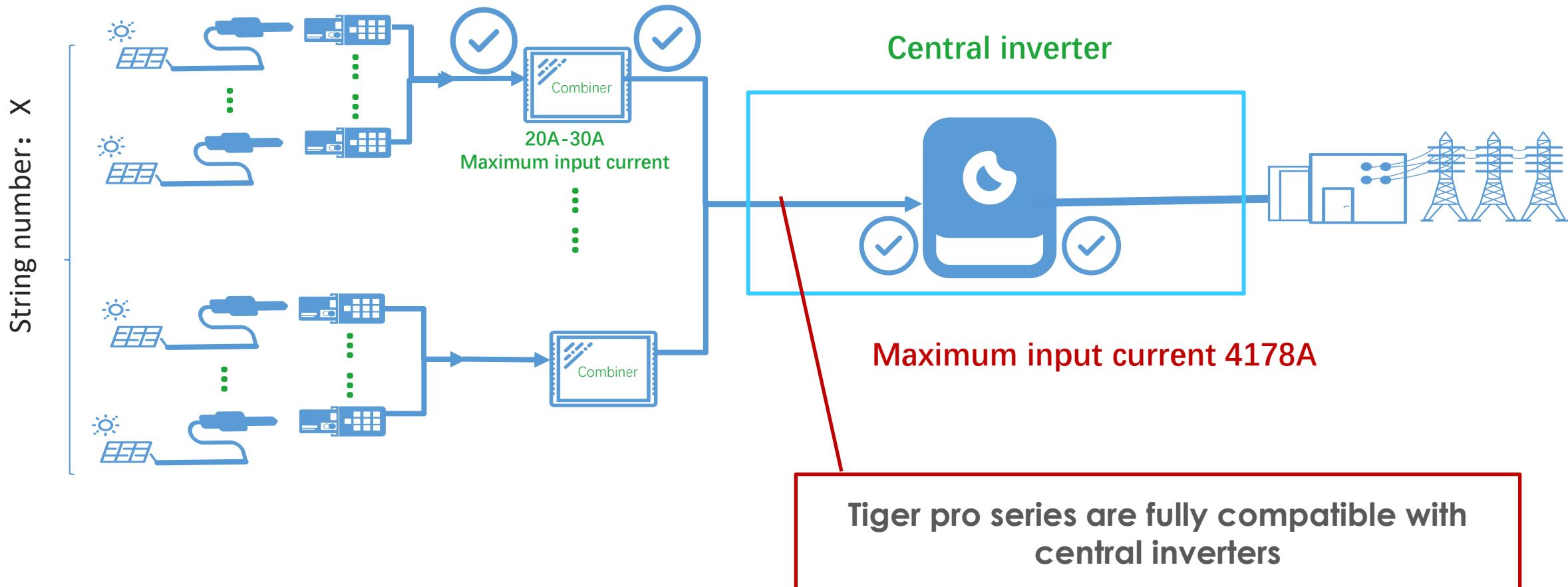


Tracker 1P



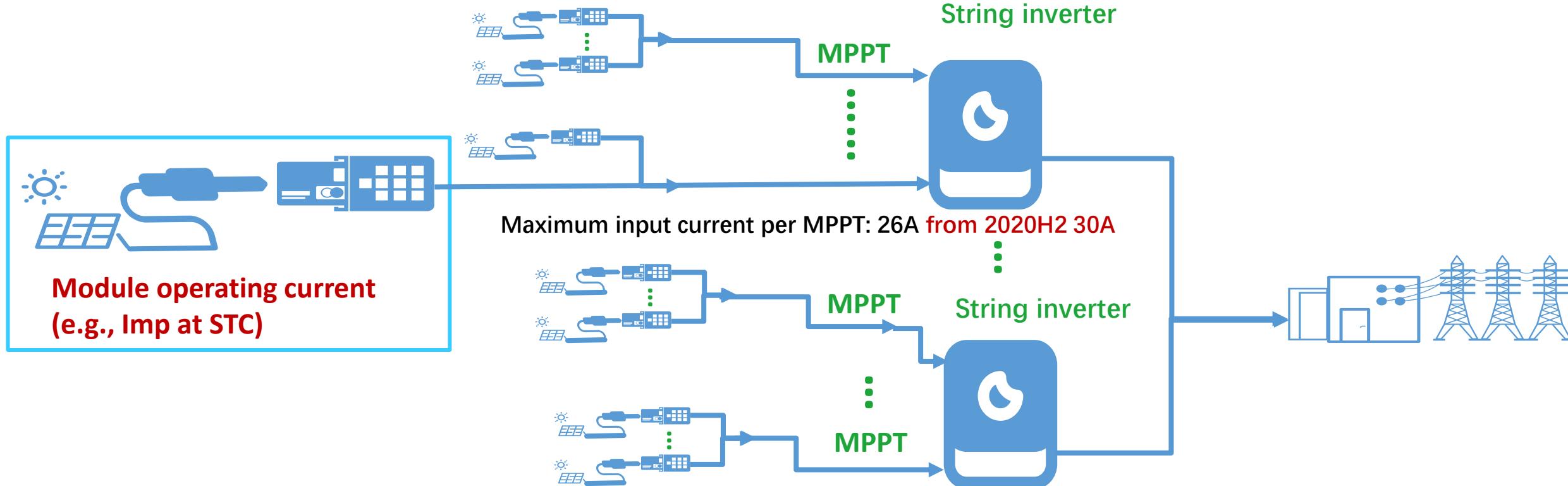
Tracker 2P

Projeto de modulos fotovoltaico com inversor central



Alta Compatibilidade

Projeto de painel fotovoltaico com inversor string



Monofacial

Bifacial

Compatible

Compatible

For 26A string inverter, in high irradiance and hot places inverter loss due to input current < 0.1%
For next generation inverters (from 2020H2), NO inverter loss.

Mais módulos por Stringer

The lowest ambient temperature is -20°C

	Tiger Pro 72TR	Module 1 from market
Power (Wp)	535	505
Voc (V)	49.34	51.9
Isc (A)	13.41	12.35
String Number	28	27
String Power	14980	13635

Each string is equipped with one more piece, and the total power of the string is increased  **11%**

Analise LCOE

* The data calculation is based on 120MW projects in Vietnam

XX
500/505W **TIGER Pro**
Monofacial **TIGER Pro**
Bifacial
530/535W **525/530W**

Initial investment	71,196,752	70,311,035	70,464,288
BOS cost per watt	0.3383	0.3309	0.3322
Tracker	10,351,852	9,999,820	10,095,056
DC cable and its installation	2,473,499	2,277,442	2,255,926
Pile foundation	2,674,597	2,439,335	2,462,600
Labor cost	480,000	452,832	457,144
LCOE (US Cent/kWh)	4.2465	4.1583	3.8596 
IRR	18.14%	18.81%	21.08% 
ROI	16.62%	16.98%	18.32%

Project	Ningshun Province
Capacity	120MW
Number of irradiation hours per year	1886
DC/AC	1.2
Bifacial gain	7%

Project selection:

Tracker+Centralized Inverters
+Monofacial/Bifacial Module

Unit: dollar

Analise LCOE

* The data calculation is based on 120MW projects in China

XX
450W

XX
500/505W

Tiger Pro
530/535W

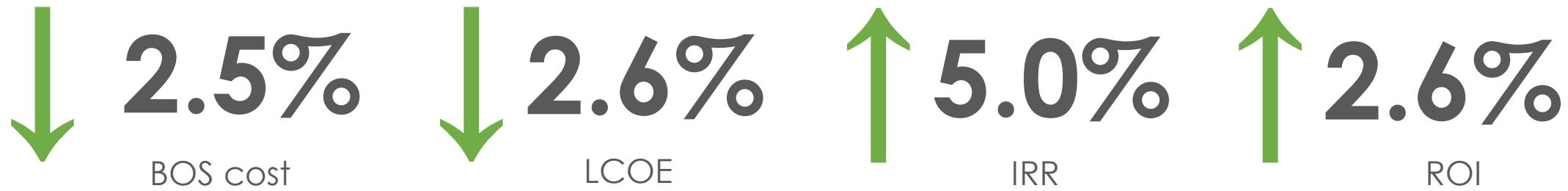
Initial investment	510,217,017	504,224,143	496,560,340	Project	Qinghai province
BOS cost per watt	2.5940	2.5442	2.4815	Capacity	120MW
Tracker	93,126,923	90,814,373	87,726,074	Number of irradiation hours per year	2195
DC cable and its installation	19,491,762	18,242,728	16,548,560	DC/AC	1.1
Pile foundation	23,823,265	22,296,667	20,225,683		
Labor cost	6,684,050	6,015,625	5,675,125		
LCOE (Yuan/kWh)	0.3058	0.3028	0.2959		
IRR	15.04%	15.39%	16.20%		
ROI	13.12%	13.26%	13.62%		

Unit: yuan

Project selection:
Tracker+Centralized Inverters
+Monofacial Module

Analise LCOE

TIGER Pro 530/535W VS XX 500/505W



*IRR/ROI Scale of change

*The data were calculated based on 120MW in qinghai, China

Q3

2020Q3 Mass production

10 GW

Capacity by end of 2020

Thanks !

