

Trina Solar

INTRODUCTION OF **670W** VERTEX MODULE

Vertex

High Power

670W

High Efficiency

21.6%

Mechanical data

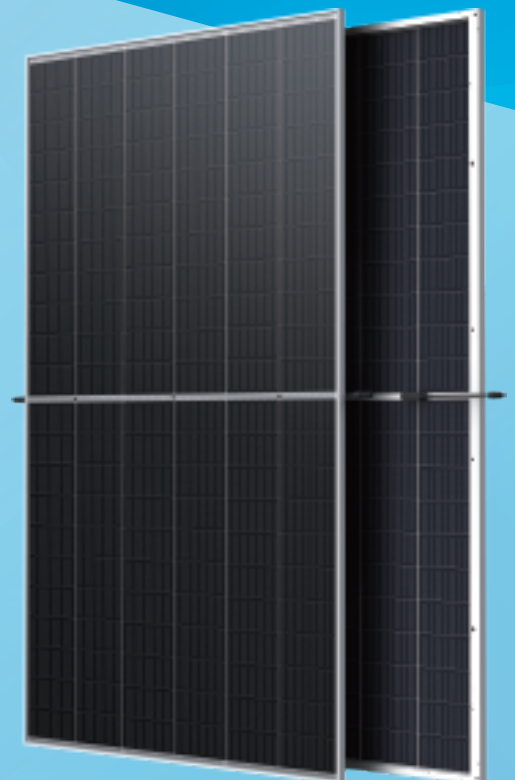
Size: 2384*1303mm

Weight: 33.9kg

Electrical Data

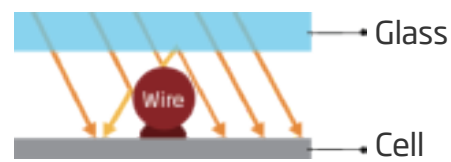
Low voltage concept design

Voc: 45.7V Isc: 18.5A

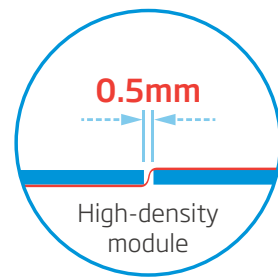
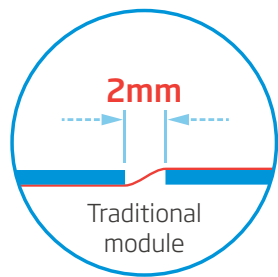


210, The Future from Now On!

Vertex module with 670W+ power and 21.6%+ efficiency

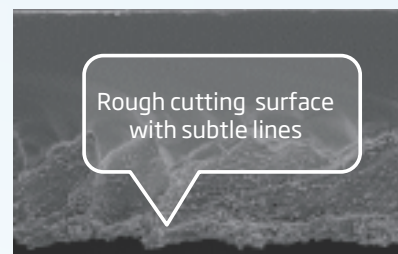


Multi-busbar technology, improving optical utilization rate with higher electricity performance, Module power increase **2~3%**, efficiency increase **0.4~0.6%**

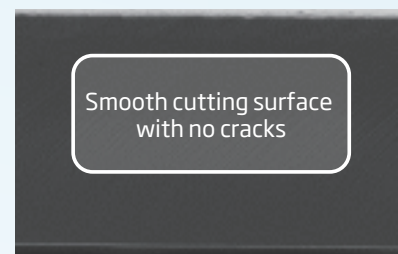


High density encapsulation technology, optimizing power output with good balance between reliability and efficiency, module efficiency increase **0.2~0.3%**

Non-destructive Cutting(NDC) Technology



Cross-section from conventional cutting



Cross-section from NDC

Achieving better cell strength, lower micro-cracks risk for better product reliability

LOWER VOLTAGE BRINGS HIGHER STRING POWER **34%**

Module Type	String Module Number	Module Pmax	String Power	Higher Power
210	28	670W	18,760	34%
182	26	540W	14,040	-

670W

String Power **18,760W**

28 pcs/string
53.3 Strings/MW

Rack Steel **33.76 ton/MW**

VS

540W

String Power **14,040W**

26 pcs/string
71.4 Strings/MW

Rack Steel **37.15 ton/MW**

HIGHER STRING POWER BRINGS LOWER COST

CUSTOMER VALUE OF 670W VERTEX MODULES



Case study

Location: Minnesota
 Project Capacity: 100MW
 Inverter: String Inverter
 Capacity ratio: 1.2
 Fixed Tilt



-15%
Racks



-17%
Foundation



-11%
Cable

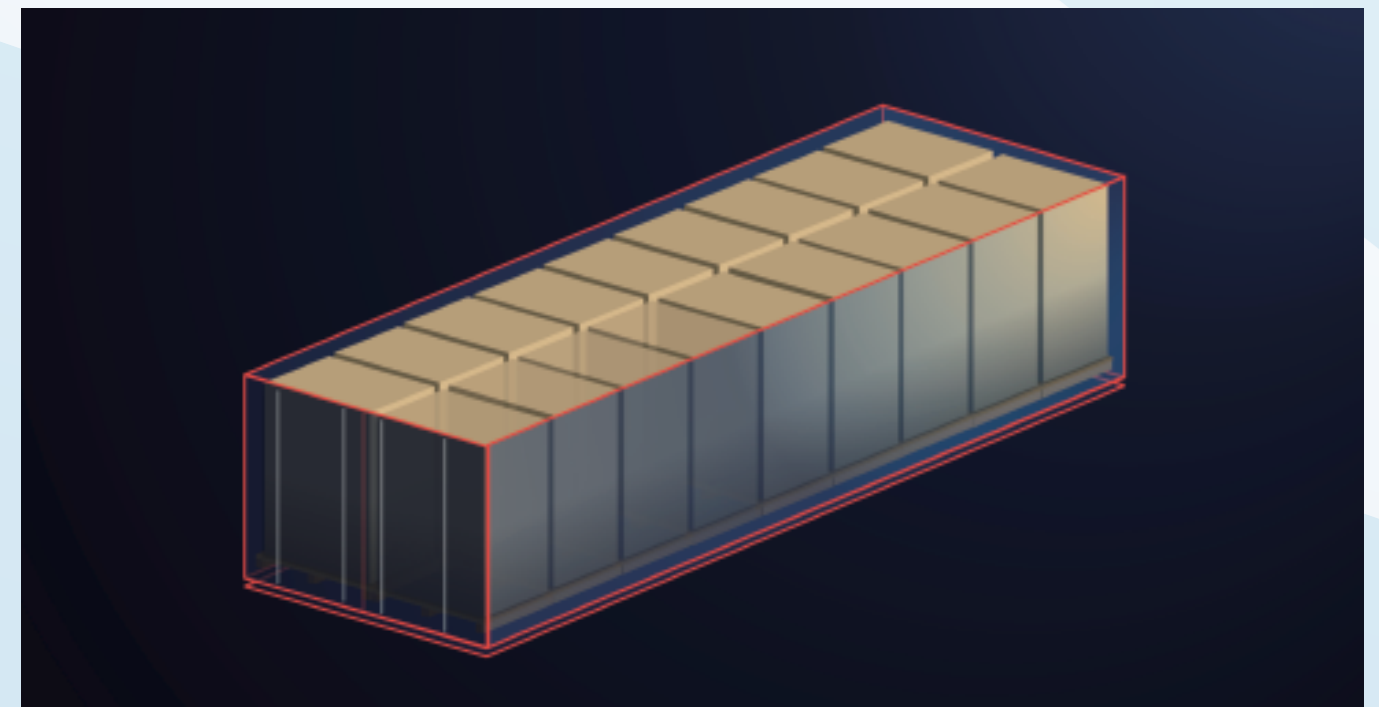
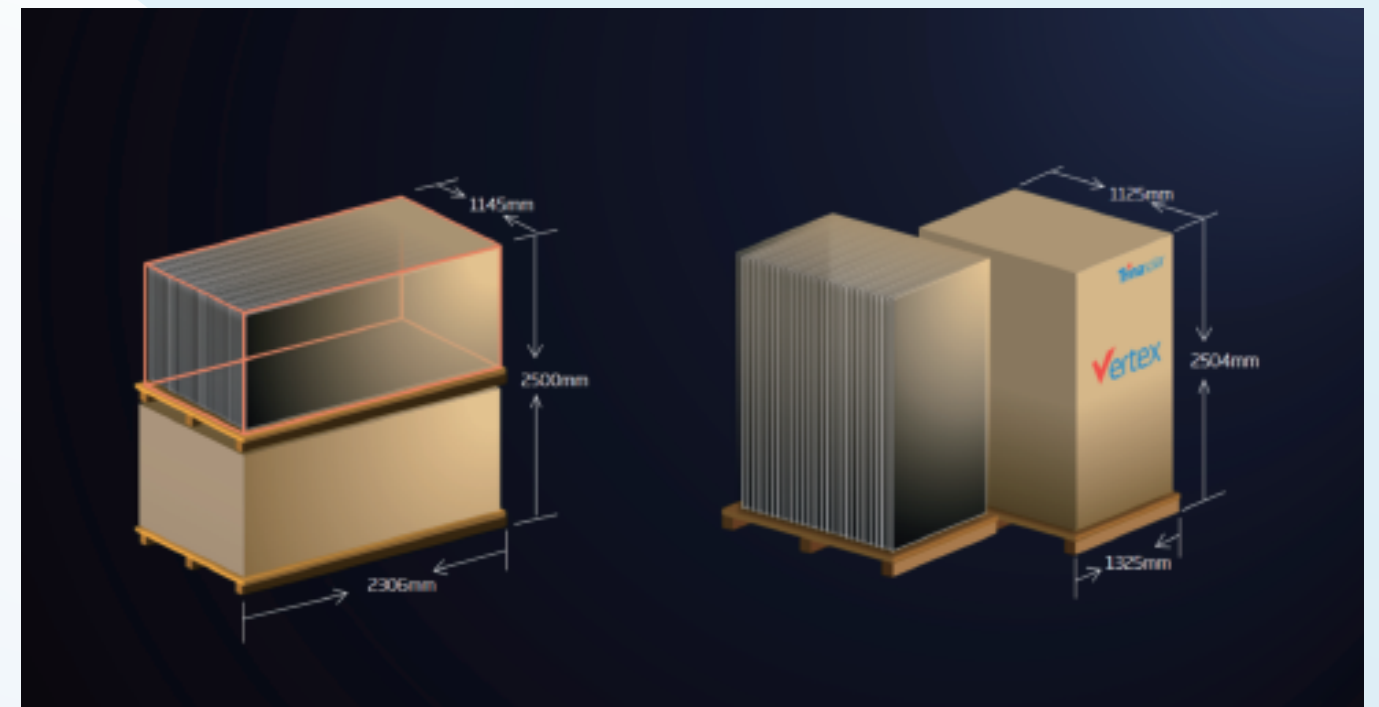


-7%
installation

	Module Type Power	Reference module 540W	Vertex 670W
BOS(\$/W)	Racks	BL	-0.0035
	Foundation	BL	-0.0015
	Cable	BL	-0.0027
	installation	BL	-0.0053
	Sum	BL	-0.013
LCOE			~ -1.2%

*Source: Authority expert.

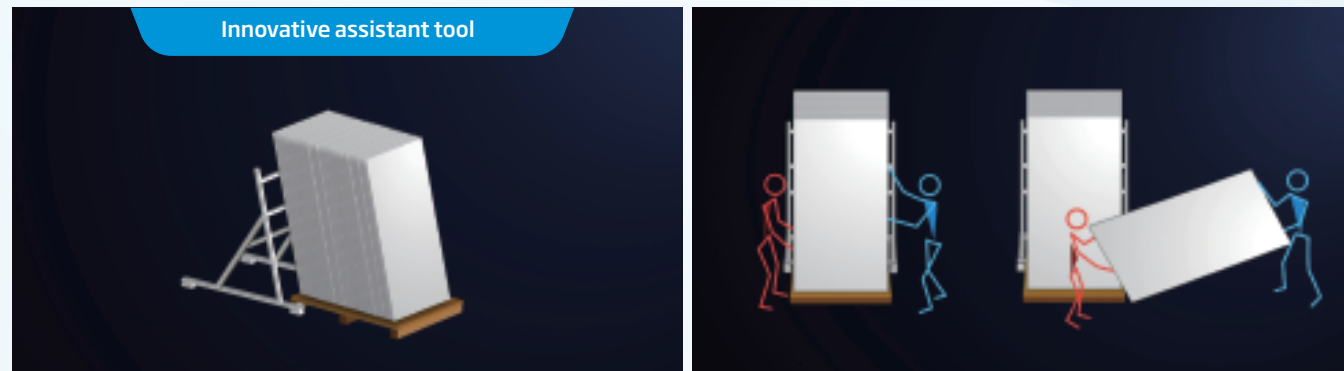
Logistic cost reduce **12%** per container



Category	Module Power	Piece per Pallet	Pallet NO. per Container	Power per Container
Other Module	540W	31	20	334,800W
Vertex Module	670W	31	18	373,860W

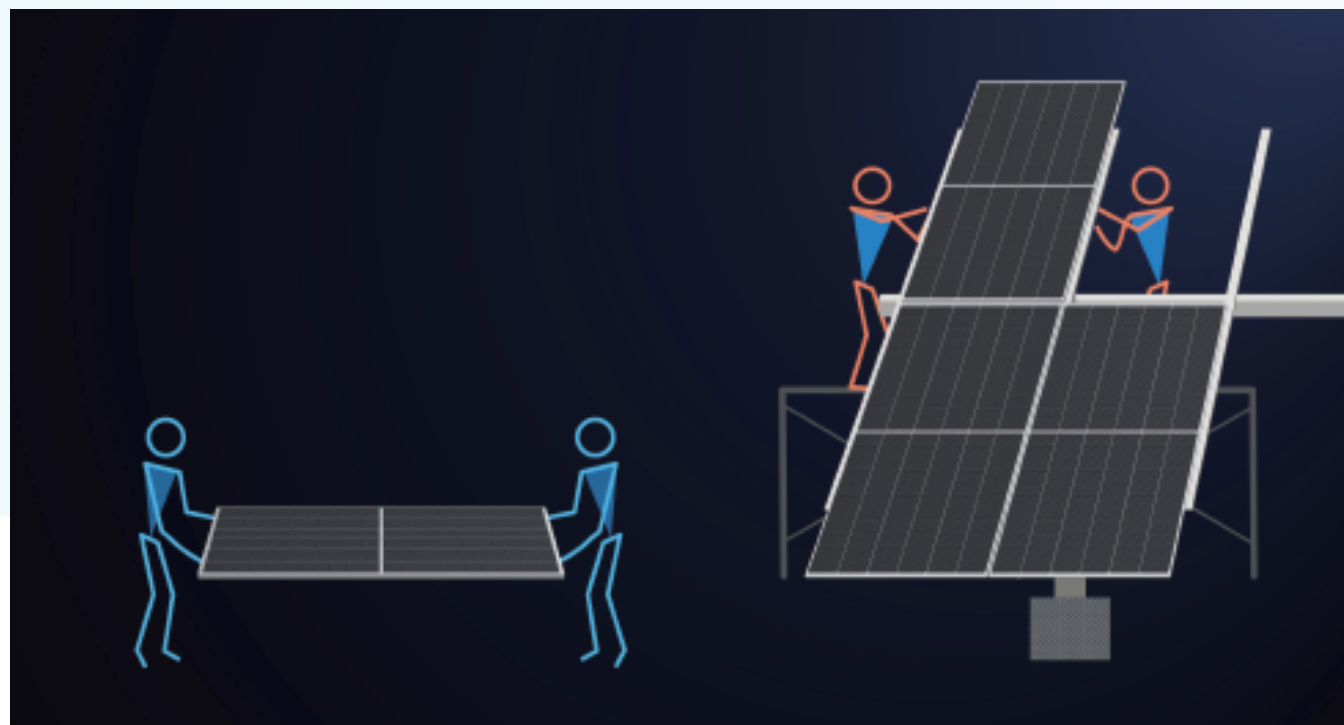
+390,60W (+12%)

Easy for unpacking and prevent module from falling down



Manual handling

4 crews/group, same staffing as traditional installation



-24%

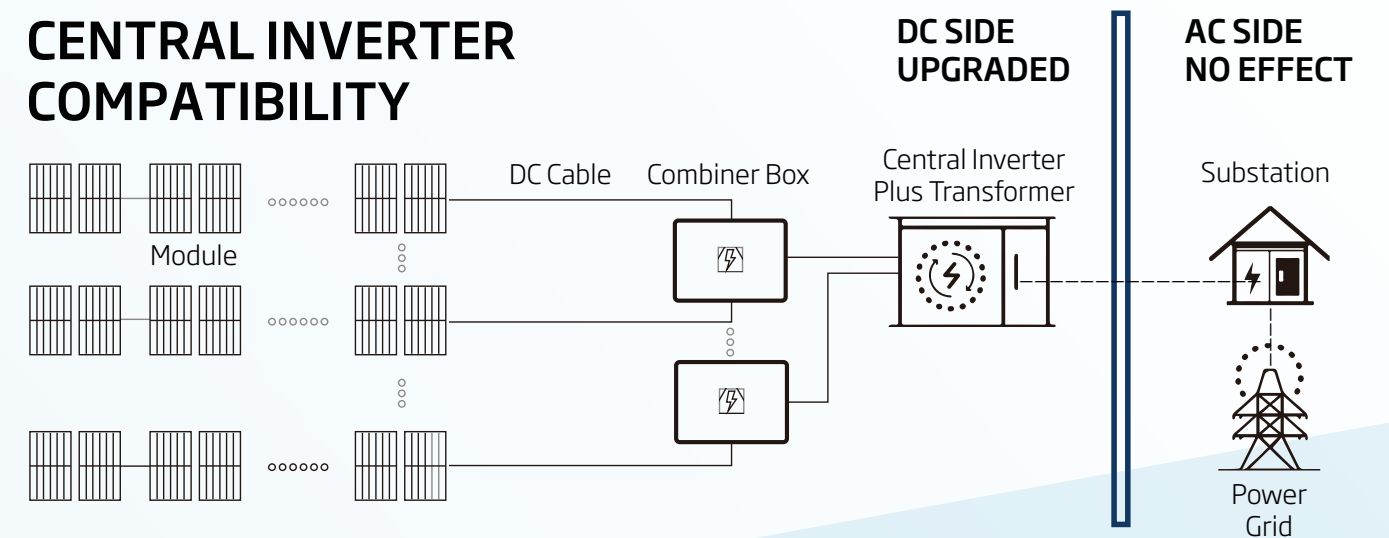
Module installation Quantity

Installation cost reduction 5-7%

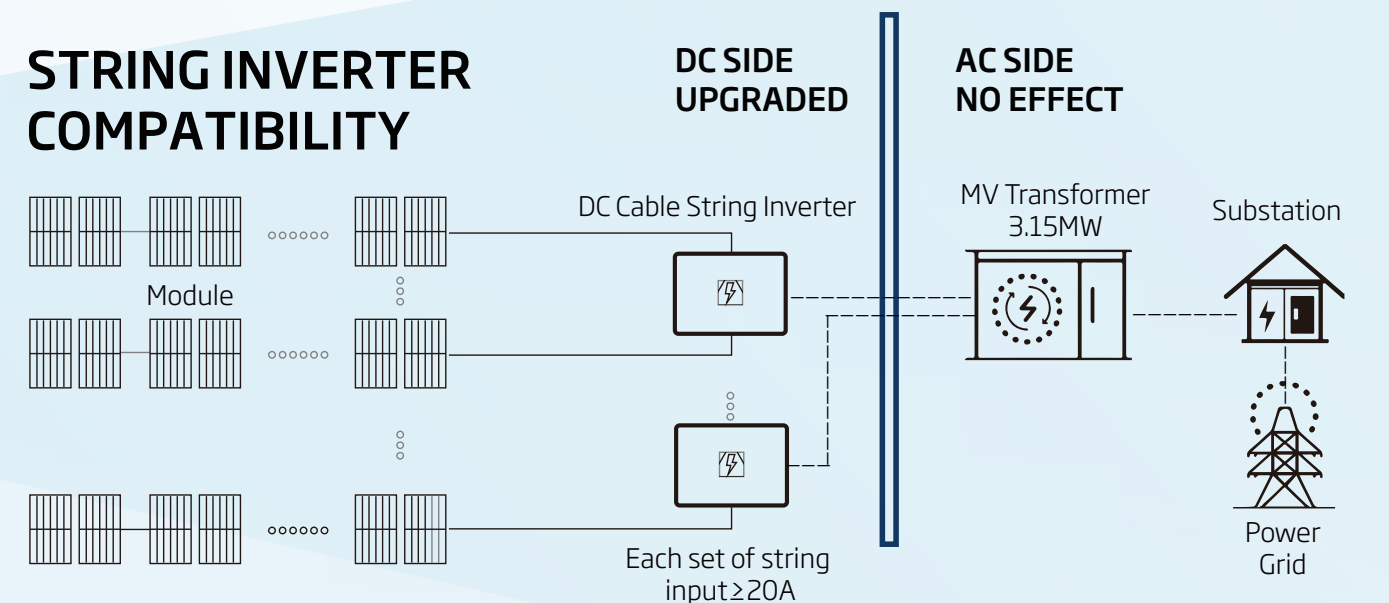
ECOSYSTEM IS COMPLETELY IN PLACE

TYPE	BRAND	MODEL	
INVERTER	Central	SUNGROW	1600/2500/3125KW
	String	SUNGROW	SG225HX/SG250HX
		HUAWEI	SUN2000-196KTL-H0/SUN2000-196KTL-H3
		SMA	Sunny Tripower 150-20
		SINENG	SP-225-H/SP-250K-H
COMBINER BOX	LongMax, Bentek, ConnectPV Shoals, SolarBOS	1500V High Current	
CABLE	4MM ² /6MM ²		

CENTRAL INVERTER COMPATIBILITY



STRING INVERTER COMPATIBILITY



MECHANICAL LOADING

Compatible with Fixed-tilt and Tracker

Frame design optimization

Conventional Module frame *670W Vertex Module frame*

Optimal Design:
 Optimized frame profile design;
 Strengthened material;
 Reinforced supporting bar for backsheet module;
 Excellent loading performance suits diversified scenarios.

 **TÜVRheinland®** **IEC 61215, IEC 61730**
 Precisely Right. Received certification in Jan 2021.


Fix-tilt

Static loading
+5400Pa/-2400Pa

Tracker

Static loading
+2400Pa/-2400Pa

Company Name	Brand/Product Type	210 Modules
Arcotech Solar Holdings Co., Ltd.	Skyline/Skysmart II	✓
Array Technologies Inc	DuraTrack HZ v3	✓
GameChange Solar LP	GENIUS TRACKER™ 1P/ GENIUS TRACKER™ 2P	✓
IDEEMATEC Deutschland GmbH	H4PLUS™	✓
Nexttracker Inc.	Nexttracker products	✓
PV HARDWARE SOLUTIONS, S.L.U	Independent row: Monoline™ (all its versions 1V, 3H and 2V); Multi-row: Axone™, Axone Duo™	✓
SOLTEC ENERGIAS RENOVABLES S.L.	SF7 & SF8	✓
Trina Solar Co., Ltd	TrinaTracker (Vanguard™/Agile™)	✓
FTC Solar	Voyager/Voyager+	✓
Soltigua	Soltigua products	✓

Vertex Module Capacity in 2021  **50+ GW**





Power Beyond Solar

Uif!Xpsme!Mfbejoh!QW!boe!Joufhsbufe!Tnbsu!Fofshz!Tpmvujpo!Qspwjefs



Trina Solar
Official Website



Vertex Product
information

For more information regarding Vertex module,
please follow our social media accounts or
scan the QR codes to visit us at our website.