Trinasolar

Vertex N PV Module
Introduction

210+N

Trinasolar

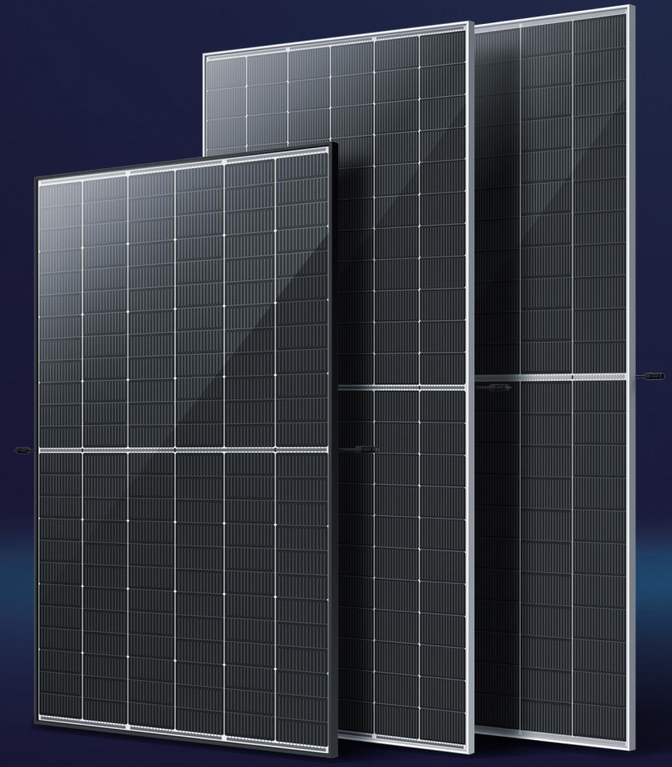
Power Beyond Solar

The World Leading PV and Smart Energy IoT Total Solution Provider

Trina Solar official website

Vertex Product information

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



Star Product for Residential Rooftops

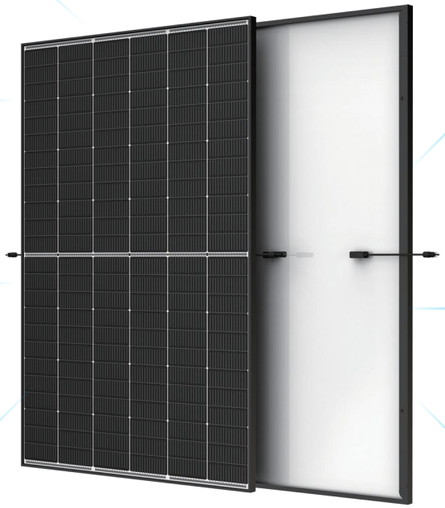
455W
Mono-facial Dual Glass

n type i-TOPCon technology with advanced 210mm innovative platform

Higher Power and Efficiency, More Energy Gain

Flexible Installation and Adaptation

1.6+1.6mm dual glass design



25 years product warranty, 30 years power warranty

Aesthetic appearance available (440W bifacial dual-glass)

IEC Fireproof Class A+C

11% lower carbon emission in production

Vertex S+

Electrical Data (STC)

Peak Power Watts-P_{MAX} (Wp)*	430	435	440	445	450	455
Power Tolerance-P_{MAX} (W)				0~+5		
Maximum Power Voltage-V_{MPP} (V)	43.2	43.6	44.0	44.3	44.6	45.0
Maximum Power Current-I_{MPP} (A)	9.96	9.99	10.01	10.05	10.09	10.11
Open Circuit Voltage-V_{OC} (V)	51.4	51.8	52.2	52.6	52.9	53.4
Short Circuit Current-I_{SC} (A)	10.59	10.64	10.67	10.71	10.74	10.77
Module Efficiency ηm (%)	21.5	21.8	22.0	22.3	22.5	22.8

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

Full Black - Solar with Style

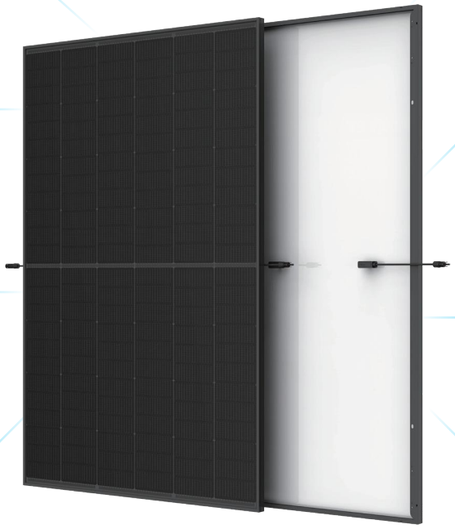
450W
Mono-facial Dual Glass

n type i-TOPCon technology with advanced 210mm innovative platform

Higher Power and Efficiency, More Energy Gain

Flexible Installation and Adaptation

1.6+1.6mm dual glass design



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Aesthetic appearance available (440W bifacial dual-glass)

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Vertex S+

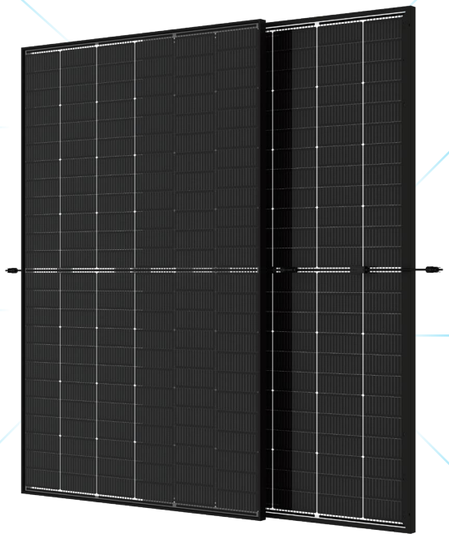
Electrical Data (STC)

Peak Power Watts-P_{MAX} (Wp)*	425	430	435	440	445	450
Power Tolerance-P_{MAX} (W)				0~+5		
Maximum Power Voltage-V_{MPP} (V)	42.9	43.2	43.6	44.0	44.3	44.6
Maximum Power Current-I_{MPP} (A)	9.92	9.96	9.99	10.01	10.05	10.09
Open Circuit Voltage-V_{OC} (V)	50.9	51.4	51.8	52.2	52.6	52.9
Short Circuit Current-I_{SC} (A)	10.56	10.59	10.64	10.67	10.71	10.74
Module Efficiency ηm (%)	21.3	21.5	21.8	22.0	22.3	22.5

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

Clear Black - A New Black

445W
Bifacial Dual Glass



n type i-TOPCon technology with advanced 210mm innovative platform

Higher Power and Efficiency, More Energy Gain

Flexible Installation and Adaptation

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Aesthetic appearance available (440W bifacial dual-glass)

IEC Fireproof Class A+C

11% lower carbon emission in production

Vertex S+

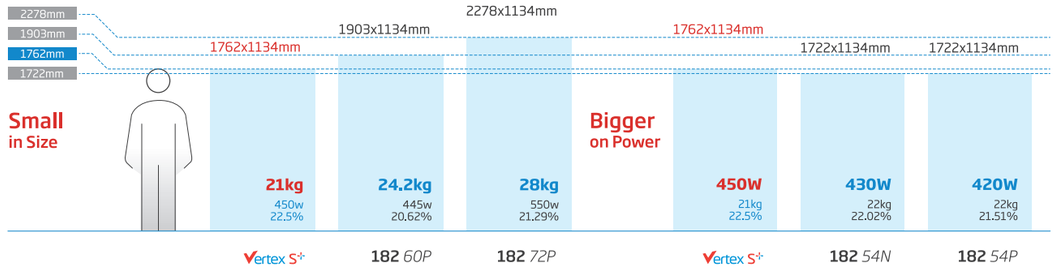
Electrical Data (STC)

Peak Power Watts-P_{MAX} (Wp)*	415	420	425	430	435	440	445
Power Tolerance-P_{MAX} (W)				0~+5			
Maximum Power Voltage-V_{MPP} (V)	42.1	42.5	42.9	43.2	43.6	44.0	44.3
Maximum Power Current-I_{MPP} (A)	9.86	9.89	9.92	9.96	9.99	10.01	10.05
Open Circuit Voltage-V_{OC} (V)	50.1	50.5	50.9	51.4	51.8	52.2	52.6
Short Circuit Current-I_{SC} (A)	10.50	10.53	10.56	10.59	10.64	10.67	10.71
Module Efficiency ηm (%)	20.8	21.0	21.3	215	21.8	22.0	22.3

STC: Irrdiance 1000W/m², Cell Temperature 25°C, Air Mass AM1.5. *Measuring tolerance: ±3%.

Excellent Balance between Power, Size and Weight

1.76m module size, up to 40W+ power higher

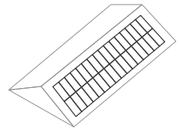


More Installation, Less Cost, and High Revenue

182-54P 420W
2rows16columns
13.44kW installed capacity

182-54N 430W
2rows16columns
13.76kW installed capacity

Vertex S+ 450W
2rows16columns
14.56kW installed capacity



For 25-year power generation on a south-faced sloping rooftop with size of 16.7m x 5.5m

The power generation in the 25 years could be **15.1%** more and the extra **57,826**kwh electricity gain can drive the EV for **404,377**km



power generation ⬆ **15.1%**
=
drive the EV **+ 404,377**km

Outstanding Mechanical Load

Positive mechanical load up to **5400Pa** with snow thickness of **50 cm***

Pass 35mm Hail Test according to IEC61215-2:2016

Negative mechanical load up to **4000Pa** with wind speed of 235km/h

Better frame design for Vertex S+:
- thicker frame profile
- stronger material strength
- larger frame chamber to disperse loading pressure

Vertex S+ is specially designed for working at extreme weather conditions thanks to its excellent mechanical performance.