

Higher power generation

Small size and consisting of parallel strings
Using the leading shingle technology-Parallel Black

Higher efficiency, more resistant to hot-spots,

reducing shading effect and strong ability to resist impact of snow and wind.

The difference may not appear obviously between traditional panel

and Parallel Black series in the beginning,

but occur after 5 years, 10 years even more than 20 years.

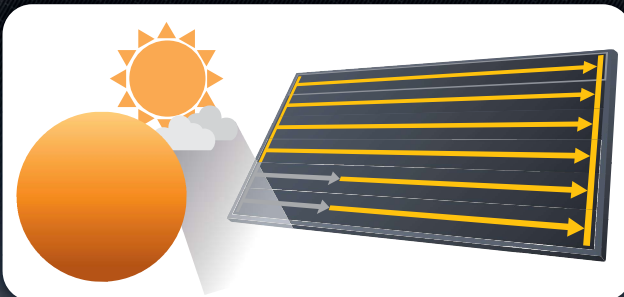
Adopting the parallel strings and innovation shingle cells.

Small size with beautiful appearance and excellent performance.

Parallel black series is a new technology that generates more electricity for long time using

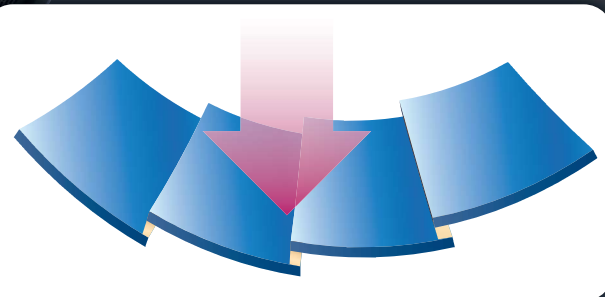
High ability to resist shadows

Consisting of parallel strings



Strong ability to resist impact

Special design for longer lifespan



Higher efficiency

Using the leading shingle technology

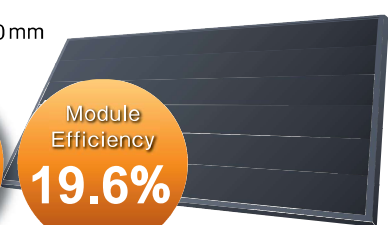
GW-E250A
1546×825×30mm

Maximum Power

250w

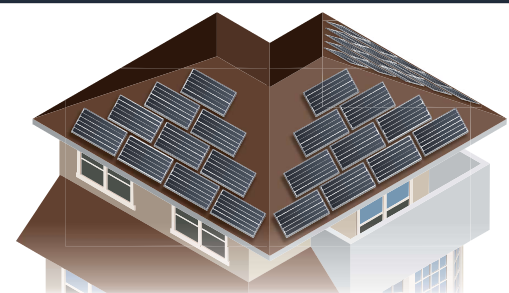
Module Efficiency

19.6%



Flexible installation on multiple sides of the roof

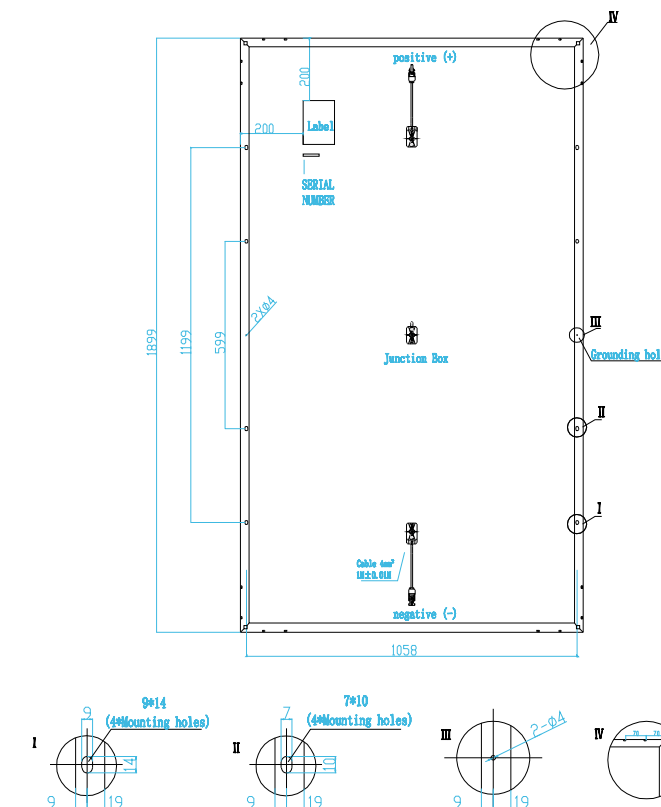
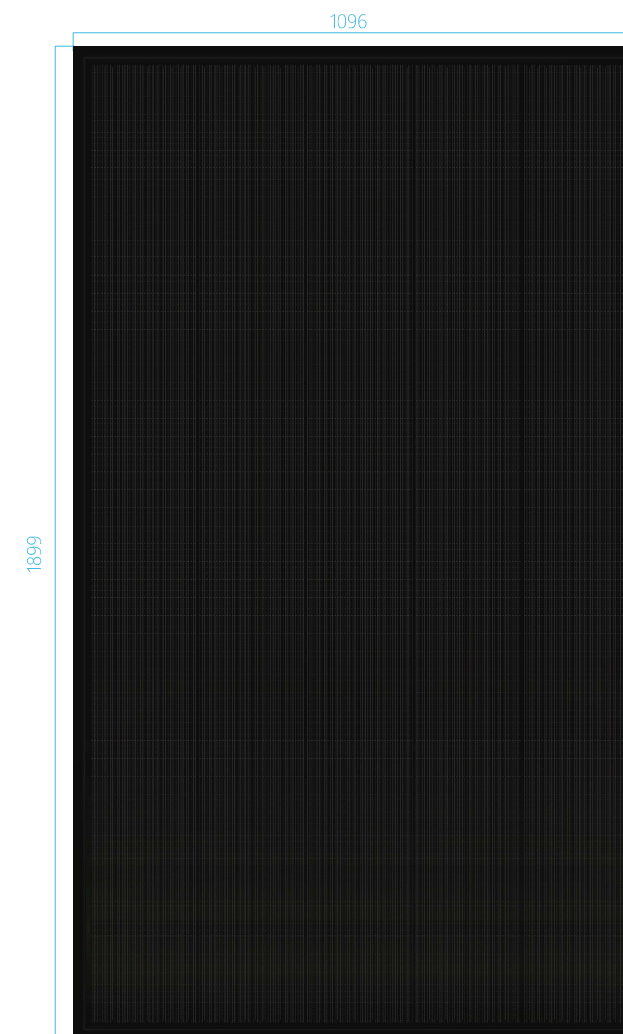
Smaller size and easier installation



Parallel Black series

—Parallel strings, Parallel module—

GW-E450A



Electrical Specifications

Module Type	Module Efficiency at STC(ηm)	Maximum Power at STC (Pmp)	Maximum Power Voltage (Vmp)	Maximum Power Current (Imp)	Open Circuit Voltage (Voc)	Short Circuit Current (Isc)	Power Tolerance (W)	Maximum System Voltage
GW-E150A	19.2%	150W	33.50	4.49	40.50	4.79	(0, +4.99)	600V
GW-E200A	19.5%	200W	33.50	5.98	40.50	6.38		
GW-E250A	19.6%	250W	33.50	7.48	40.50	7.98		
GW-E300A	19.6%	300W	33.50	8.98	40.50	9.58		
GW-E450A	21.6%	450W	31.70	14.23	37.68	15.05		1000V
GW-E540A	21.9%	540W	31.38	17.22	37.74	18.31		
GW-E570A	21.8%	570W	33.09	17.22	39.79	18.31		

Mechanical Specifications

Mechanical Specifications								
Module Type	Cell type	External Dimensions (mm)	Weight	Frame	Junction Box	Cables	Connectors	
GW-E150A	Mono-crystalline	1546*505*30	9.6kg	anodized aluminum	IP 67, waterproof	4.0mm²,1000mm Length can be customized	MC4 Compatible	
GW-E200A		1546*665*30	11.8kg					
GW-E250A		1546*825*30	14kg					
GW-E300A		1546*992*30	16.4kg			4.0mm²,300mm Length can be customized		
GW-E450A		1899*1096*30	21.6kg					
GW-E540A		1899*1303*30	25.8kg					
GW-E570A		2000*1303*30	27.4kg					

Temperature Characteristics (Parallel Black series is common)

Pmax Temperature Coefficient	-0.365%/°C	Operating Temperature	-40~+85°C
Voc Temperature Coefficient	-0.281%/°C	Nominal Operating Cell Temperature (NOCT)	45±2°C
Isc Temperature Coefficient	+0.05%/°C		