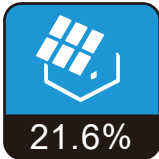




# Monocrystalline Solar Panel

## Product Features



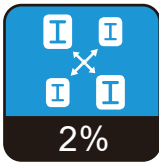
### High conversion efficiency

Achieve up to 21.6% cell conversion efficiency with superior battery technology and leading manufacturing processes



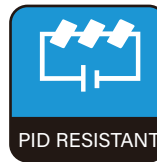
### Excellent low light performance

The component exhibits excellent low-light performance in the absence of sufficient light in the morning, evening, or cloudy days



### Current binning process

The components use a current binning process to reduce the loss of up to 2% due to mismatch and maximize system output power



### Anti-PID

The improved battery process and selected packaging materials make Courtois Energy source components have good PID resistance



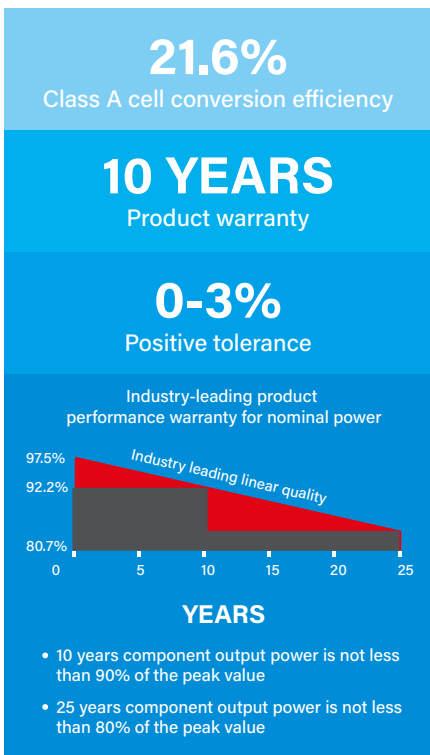
### Positive tolerance

3% positive tolerance peak power output ensures component reliability



### Super wind pressure and snow pressure bearing capacity

The module has high pressure resistance and can withstand wind pressure up to 3000 Pa and snow pressure of 5400 Pa



### Security Level

Junction box waterproof and dustproof IP67, high performance low resistance linker to minimize power output loss



### Corrosion protection

Anti-ammonia corrosion  
Salt spray corrosion



### Reliable quality

Courtois energy has passed ISO9001, quality management system certification, and strictly enforces industry standards



### Anti-crack

Three-way EL detection is strictly controlled





### Electrical performance parameters (STC) under standard test conditions

Component type	Monocrystalline					
Peak power (P)	50	80	100	120	160	180
Peak power voltage (V)	18	18	18	18	18	18
Peak power current (A)	2.78	4.44	5.55	6.67	8.9	10.2
Open circuit voltage (V)	21.4	21.4	21.4	21.4	21.4	21.4
Short circuit current (A)	3.12	4.97	6.22	7.47	9.96	11.4
Cell efficiency (A film)(%)	21.6	21.6	21.6	21.6	21.6	21.6
Size (mm)	670*535*30	670*760*30	670*940*30	670*1135*30	670*1360*30	670*1480*30

### Structural materials

Glass	Low iron tempered glass / 3.2mm
Cell	Monocrystalline / 156.75x156.75
Package	Ethylene vinyl acetate copolymer EVA
Aluminum frame	Anodized aluminum / silver / transparent
Junction Box	Waterproof rating Ip67

### Operating conditions

Maximum system voltage	1000VDC
Maximum fuse rating	15A
Maximum reverse current	15A
Operating temperature	-40°C ~ 85°C
Maximum static load on the front (snow load)	5400Pa
Maximum static load on the back (wind load)	2400Pa
Hail test (ice diameter/impact speed)	25mm / 23m / s

STC: irradiance 1000 W/m, battery temperature 25 °C, air quality AM 1.5, according to EN 60904-3.

The average relative efficiency at 200 W/square is attenuated at 3.3% according to EN 60904-1.