

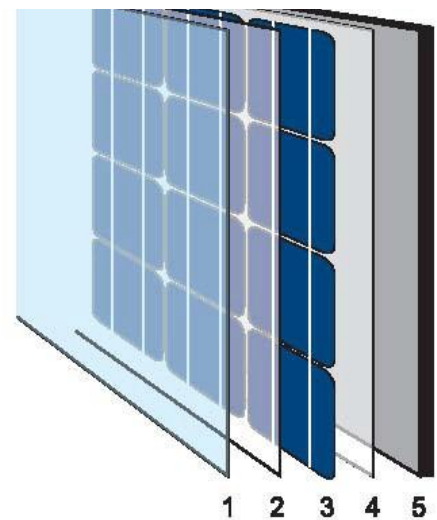
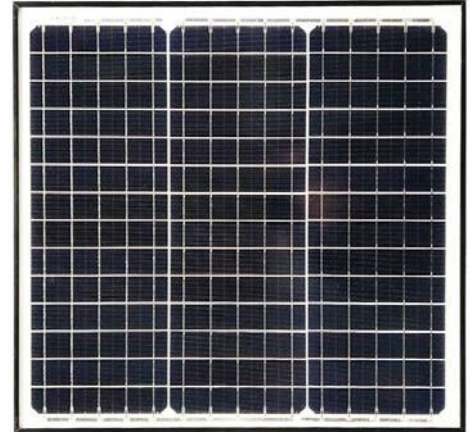
# Aloha Solar Fan

Specifications March 2020

## Monocrystalline silicon solar panel

High-efficiency photovoltaic module using silicon nitride coated monocrystalline silicon cells.

- Solar Cell: High efficiency crystalline solar cell.
- Tempered glass: Anti-reflecting coating and high transmission rated glass increase the power output and mechanical strength of solar panel.
- EVA and TPT: Ultra high quality EVA and TPT extend panel life.
- Junction box: multi-function water proof junction box.



- 1 Tempered glass
- 2 EVA
- 3 Cells
- 4 EVA
- 5 TPT

## Electrical Performance

Model	40W
Maximum Power(Pmax)	40W
Open circuit voltage (Voc)	26.8
Short circuit current (Isc)	2.0
Voltage at Pmax (Vpm)	21.8
Current at Pmax (Ipm)	1.84
Solar Module Efficiency(%)	20.1
Maximum system voltage	1000VDC,be approved by TUV ( IEC61215 and IEC61730)

STC: Irradiance 1000W/m<sup>2</sup> , Temperature 25°C , AM=1.5

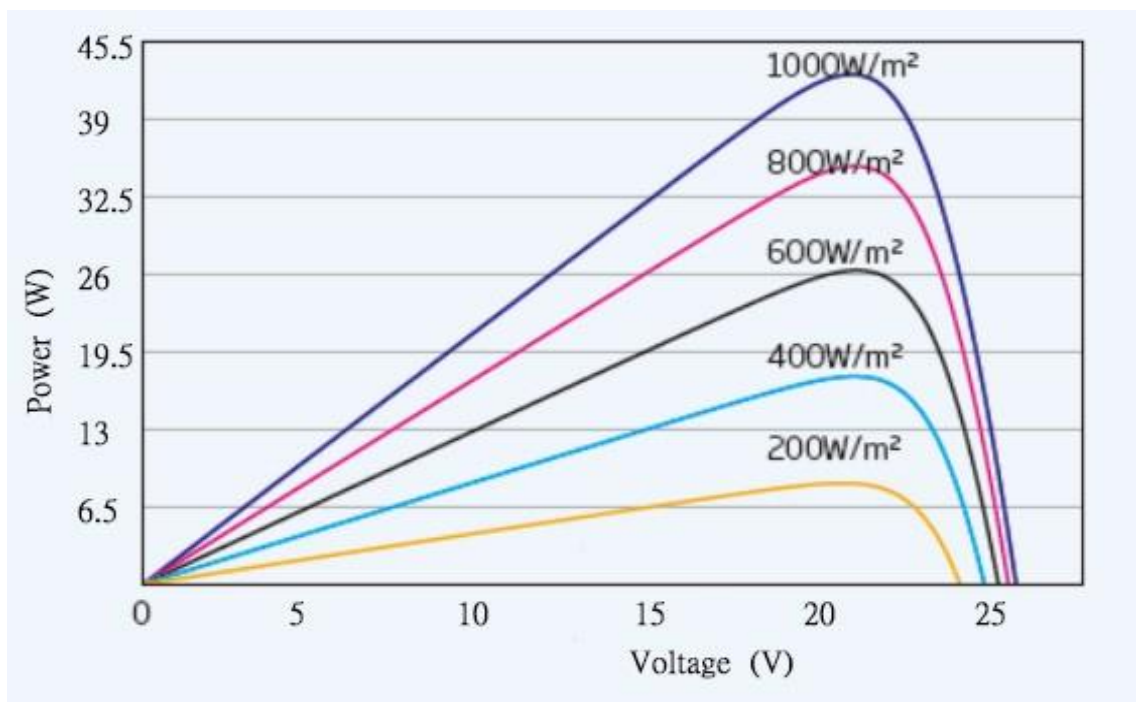
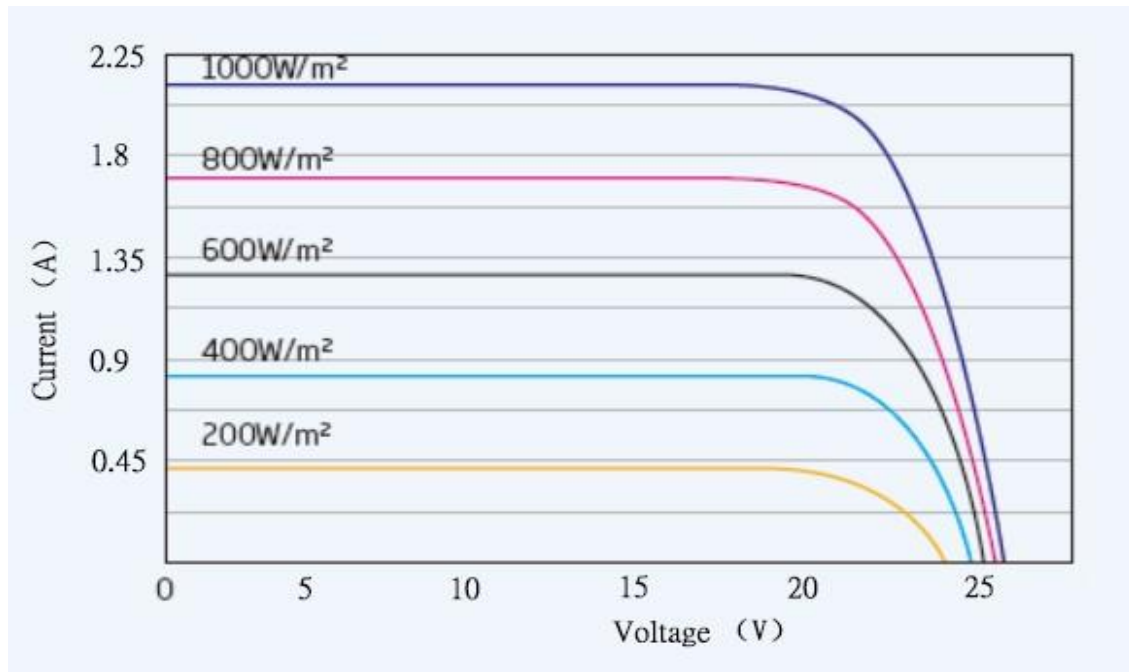
## Temperature Coefficient

NOCT	$44^{\circ}\text{C} \pm 2^{\circ}\text{C}$
The temperature coefficient of $I_{sc}$	$+0.05 \pm 0.01\%/^{\circ}\text{C}$
The temperature coefficient of $V_{oc}$	$-0.32 \pm 0.02\%/^{\circ}\text{C}$
The temperature coefficient of $P_{max}$	$-0.41 \pm 0.05\%/^{\circ}\text{C}$

## Qualification Test Parameters

Temperature cycling range	$-40^{\circ}\text{C} \sim 85^{\circ}\text{C}$
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## Electrical Curves



## DC Brushless Motor IP 68 Rated



### Technical specifications:

Rated Power	(W)	40
Rated Voltage	(DCV)	24
Voltage Range	(DCV)	12 ~ 32
Rated Current	(A)	< 1.7
Rated Speed	(RPM)	2200±5% (m=0.1N-m)
Rotation		CCW (see from stator)
Protected Class		IP68
Insulation Class		B
Ambient Temp	(°C)	-25°C ~ +60°C
Storage Temp	(°C)	-40°C ~ +90°C
Weight	kg	0.75

### Fan blade

Diameter	12"
Number of blades	5pcs
Material	Aluminum alloy
Coating	Black epoxy spray



### Surface coating

Color	Black
Material	Epoxy resin
thickness	90-110µm
Oven temperature	392°F
Oven time	25 min

# Fan Housing / Fan Base / Air Duct / Fence Mesh / Structure / Fastener: SUS316L



## Mill Test Certificate/检查证明书

Certificate No./证明书号码:190329-ZRNC-045-001

Date of Issue/发行日期:Apr., 13, 2019

Surface Finish/表面整理:NO.2B



Order No./合同号码:SRK902673

PO No./订单号码:

Supplier/订户:

Commodity/品名:STS CR Coil

Customer/客户:

Spec & Type/规格:ASTM-A240/A240M-2017:316L

Supplier/订户:

Commodity/品名:STS CR Coil

Customer/客户:

Spec & Type/规格:ASTM-A240/A240M-2017:316L

Size/尺寸	Product No. 产品号码	Quantity 数量	Weight 重量 (kg)	Heat No. 制钢号码	P O S I T I O N	Tensile/拉伸试验			Hard- ness /硬度 HRB	D I V I S I O N	Chemical Composition/化学成分(%)										
						YS 0.2%	TS	EL			C	Si	Mn	P	S	Cr	Ni	Mo	N		
2.00x1219xC	QWQ1282B	1	24,337	S682208	T	276	628	54	81	L	199	611	1348	315	16	1652	1008	205	126		
					B	276	629	54	81												
*** Sub Total (200)***			1			24,337 (kg)															
*** Grade Total ***			1			24,337 (kg)															
*** Grand Total ***			1			24,337 (kg)															
										=== Last Item											

Supplier/订户:

Commodity/品名:STS CR Coil

Customer/客户:

Spec & Type/规格:ASTM-A240/A240M-2017:316L

Size/尺寸	Product No. 产品号码	Quantity 数量	Weight 重量 (kg)	Heat No. 制钢号码	P O S I T I O N	Tensile/拉伸试验			Hard- ness /硬度 HRB	D I V I S I O N	Chemical Composition/化学成分(%)										
						YS 0.2%	TS	EL			C	Si	Mn	P	S	Cr	Ni	Mo	N		
1.20x1219xC	QXP0740B	1	24,623	S681886	T	296	653	56	82	L	200	575	1339	308	26	1673	1003	206	127		
					B	300	656	55	82												
*** Sub Total (150)***			1			24,623 (kg)															
*** Grade Total ***			1			24,623 (kg)															
*** Grand Total ***			1			24,623 (kg)															
										=== Last Item											

Supplier/订户:

Commodity/品名:STS CR Coil

Customer/客户:

Spec & Type/规格:ASTM A240/A240M-2018:316L

Size/尺寸	Product No. 产品号码	Quantity 数量	Weight 重量 (kg)	Heat No. 炉号	P O S I T I O N	Tensile/拉伸试验			Hard- ness /硬度 HRB	D I V I S I O N	Chemical Composition/化学成分(%)										
						YS 0.2% (MPa)	TS (MPa)	EL (%)			C	Si	Mn	P	S	Cr	Ni	Mo	N		
1.00x1219xC	QWS2156B	1	24,621	S683688	T	277	608	57	80	L	237	645	1334	348	42	1677	1003	204	134		
					B	280	609	58	80												
*** Sub Total (050)***			1	24,621																	
*** Grade Total ***			1	24,621																	
*** Grand Total ***			1	24,621																	
										=== Last Item											

\* Position - T: Top, M: Middle, B: Bottom  
 \* Tensile Test. Direction: Transversal, Gauge Length: 50mm(Rectangular),  
 YP Method: 0.2% off-set  
 \* Division - L:Ladle Analysis \* Tr(Trace)

We hereby certify that the material herein has been made in accordance with the order and specification.

\* This Mill Test Certificate cannot be copied for any purpose.  
 \* After-sale Tel:(0512)58569641 or 58569573



Surveyor To:

*[Signature]*