

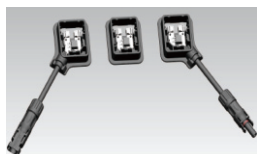
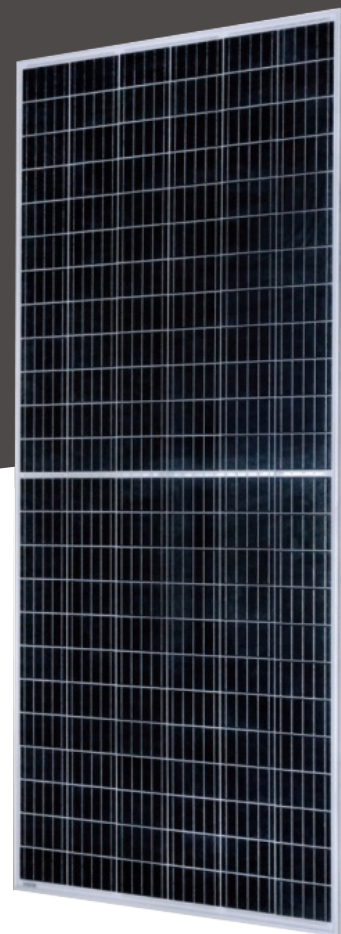
# ODA-144PH

POWER RANGE

415W~420W

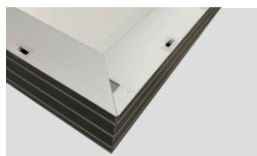
CELL SIZE

166\*83mm



### JUNCTION BOX

Waterproof protection grade:IP67/IP68  
Safety Level: Class II  
Maximum System Voltage: 1500V  
outstanding waterproof level ·  
Effectively resist harsh environments



### Frame

Strong machanical load  
resistance up to 5400Pa  
Anodic oxidation layer resistant to  
chemical corrosion available  
in silver and black



9BB



### Half-cut Technology

New circuit design, lower internal current and  
lower internal resistance loss



### Significantly avoiding heat spot

The unique circuit design to reduce the temperature  
of heat spot significantly,so that to reduce the power loss  
and then increase the output of modules.



### Lower cost

Increasing power generation can reduce the  
cost per kilowatt-hour



### Excellent performance of PID resistance

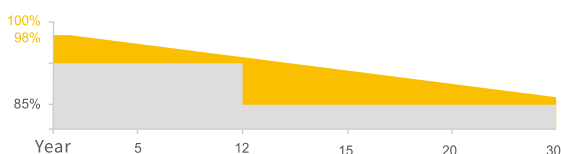
The performance of PID resistance(Potential Induced  
Degradation) passed the standard of TUV Nord.

## QUALIFICATIONS AND CERTIFICATES



· IEC61215 / · IEC61730

## WARRANTY



12 YEARS

Guarantee on product material and workmanship

30 YEARS

Linear Power output warranty

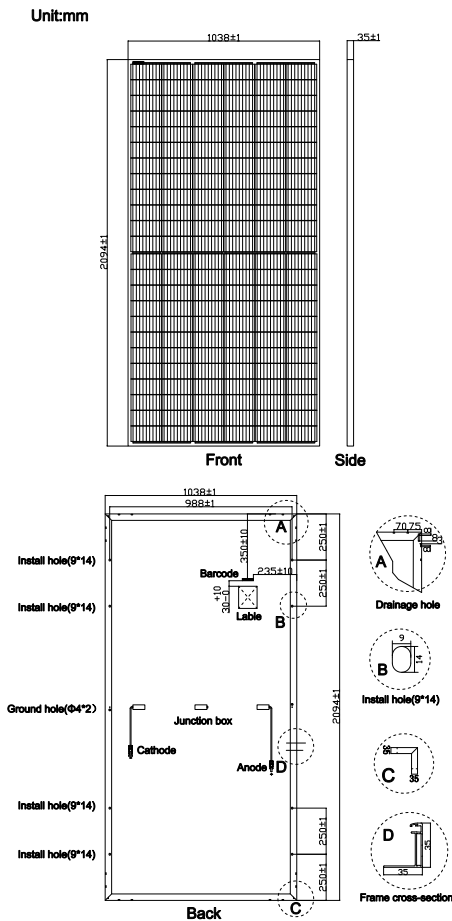
NINGBO OSDA SOLAR CO.,LTD  
[www.osdasol.com](http://www.osdasol.com)

OSDA Solar established in 2008, is a high-tech enterprise integrating R&D, production and sales of solar energy products. It is committed to the overall solution of distributed photovoltaic system and provides services from consulting, design, construction, financing to intelligent operation and maintenance.

OSDA has 3 production sites in China and branches and representative offices in more than 10 countries overseas. Products include solar cells, modules, On/Off grid solar system, solar pump and other solar related applications. Our products have passed many international certifications such as TUV, MCS, CEC, IEC, ISO, CE, CQC and so on. With excellent quality, our products are exported to more than 100 countries of the world.

Since its establishment, OSDA has always followed the idea of "Smart energy · Lightening future". It has followed the steps of "the Belt and Road Initiative", we bring bright light to the countries and people who are short of electricity. Sharing the concept of modern civilization, and building a green home together.

## PV DRAWINGS



## ELECTRICAL DATA (STC)

Model Type	ODA415-36V-PH	ODA420-36V-PH
Peak Power(Pmax)	415.00	420.00
Maximum Power Voltage(Vmp)	39.24	39.54
Maximum Power Current(Imp)	10.58	10.63
Open Circuit Voltage(Voc)	47.64±3%	47.94±3%
Short Circuit Current(Isc)	11.16±3%	11.21±3%
Module Efficiency( % )	19.09	19.32

\* STC: irradiance 1000 W/m<sup>2</sup>, AM 1.5, and cell temperature of 25°C

## ELECTRICAL DATA (NOCT)

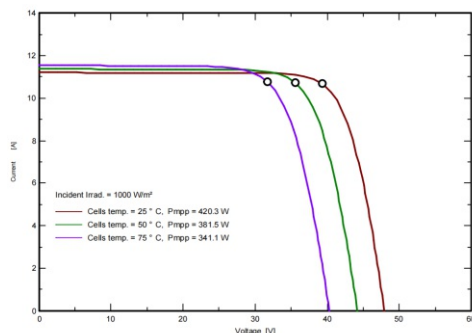
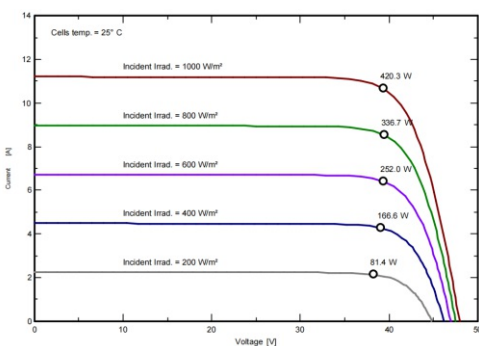
Model Type	ODA415-36V-PH	ODA420-36V-PH
Peak Power(Pmax)	308.60	312.30
Maximum Power Voltage(Vmp)	36.54	36.84
Maximum Power Current(Imp)	8.45	8.48
Open Circuit Voltage(Voc)	44.46±3%	44.76±3%
Short Circuit Current(Isc)	8.96±3%	9.01±3%

\* NOCT: irradiance 800 W/m<sup>2</sup>, AM 1.5, ambient temperature 20°C, wind speed 1 m/s

## TEMPERATURE & MAXIMUM RATING

Maximum System Voltage (V)	1500 V
Maximum Series Fuse Rating (A)	20 A
Power Tolerance	0~+3 W
Pmax Temperature Coefficients (W/°C)	-0.380 %/°C
Voc Temperature Coefficients (V/°C)	-0.320 %/°C
Isc Temperature Coefficients (A/°C)	+0.059 %/°C
NOCT Nominal Operating Cell Temperature (°C)	45±2 °C
Operating and Storage Temperature (°C)	-40~+85 °C

## IV CURVE (420W)



## MECHANICAL CHARACTERISRTICS

Cell Type	166*83 Poly
No. of Cells	144 (12*12)
Dimensions	2094*1038*35mm
Weight	23.50kg
Front Glass	3.2mm high transmission, low iron, tempered glass
Frame	Anodized Aluminium Alloy
Junction box	IP67/IP68 3diodes
Output cables	4mm <sup>2</sup> cable 35cm (Inlcuding MC4 connector)
MaxWind Load/Snow Load	2400Pa/5400Pa

## PACKING WAY

20FT container	5 Packages/155pcs
40HQ container	22 Packages/726pcs



We Are Seeking Agents And Partners!

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The company reserves the right of final interpretation, November 2020 edition