



SUNPLUS ENERGY

**SUNPLUS ENERGY**

**M2(156.75mm)**

Monocrystalline module

# Mono Module

**60 Cells**

**Sliver frame or black frame**

**12** Years Product warranty

**25** Years Linear power warranty

Integrated Solar Manufacturing & Technology Since 1964



**320W**

Output power

**19.67%**

Maximum efficiency

**0~+5W**

Power tolerance

## Better Performance

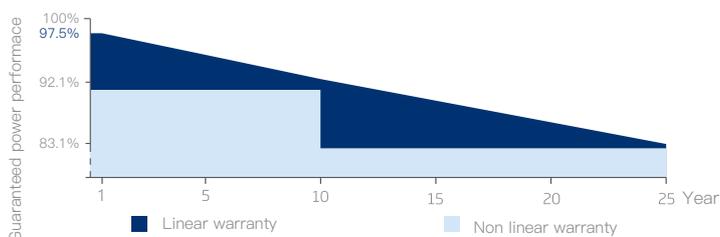
Lower Heat Loss of Internal- resistance

## Better Reliability

Reduce Shading & Risk of Micro Crack

## Design for Harsh Environment

Resistant to Salt, Ammonia, Dust & Sand



# M2(156.75mm) Monocrystalline module

## Electrical Parameter(STC)

Model	310M	315M	320M
Maximum power	310	315	320
Working point voltage	32.44	32.64	32.84
Working point current	9.56	9.65	9.74
Open circuit voltage	39.50	39.70	39.90
Short circuit current	9.82	9.90	9.98
PV module efficienc	19.05%	19.36%	19.67%
Standard test conditions	AM1.5, Irradiance 1000w/m <sup>2</sup> , Cell Temperature 25°C		

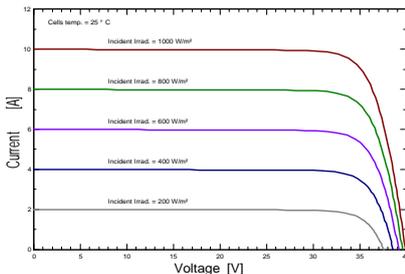
## Electriact Parameter(NMOT)

Model	310M	315M	320M
Maximum power	229.0	233.0	235.5
Working point voltage	30.6	30.8	30.9
Working point current	7.48	7.55	7.65
Open circuit voltage	36.1	36.3	36.5
Short circuit current	7.93	8.00	8.08

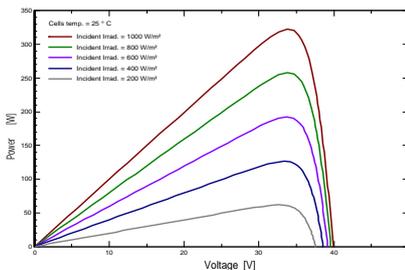
NMOT The irradiance is 800W/m<sup>2</sup>, the ambient temperature is 20 degrees, and the wind speed is 1m/s

The Electrical performance parameters are neither just referred to one PV panel, nor are a part of the contract; They are only used as reference.

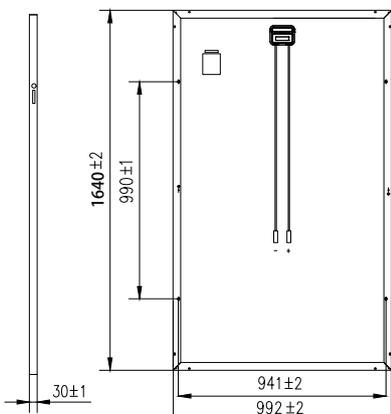
### I-V Curves of PV Module



### P-V Curves of PV Module



Model of PV Module Power Range  
CETC-xxxM(H)/60 | 310-320W



## Mechanical Parameters

Module size	1640*992*30mm
Number of solar cells	60(6*10)
Weight	18Kg ±5%
Junction Box	IP68, 3 diodes
Cables	4mm <sup>2</sup> , 900mm, (Customizable)
Front plate glass	Ultra white AR coated toughened glass
Static load on the front	5400Pa
Static load on the back	2400Pa

## Packaging&Transport

40'HQ container transport 36 Pcs/box × 28box =1008Pcs

## Temperature Parameter

NMOT	45±2°C
Pmax	-0.43%/°C
Voc	-0.34%/°C
Isc	+0.049%/°C

## Maximum Ratings

Working temperature	-40~+85°C
Maximum system voltage	1500VDC
Maximum fuse rated current	15A



<http://sunplus-jp.com>

[info@sunplus-jp.com](mailto:info@sunplus-jp.com)

サンプラスエナジー株式会社 SUNPLUS ENERGY Co.,Ltd.