



# SOLAR PLUS

SP-M10/156HG

# CYGNUS

## PERC Bifacial

# 580-600W



**HIGHER  
EFFICIENCY**



**LOWER TEMPERATURE  
COEFFICIENT**



**LOW ATTENUATION,  
LONG WARRANTY**



**HIGHER  
BIFACIALITY**

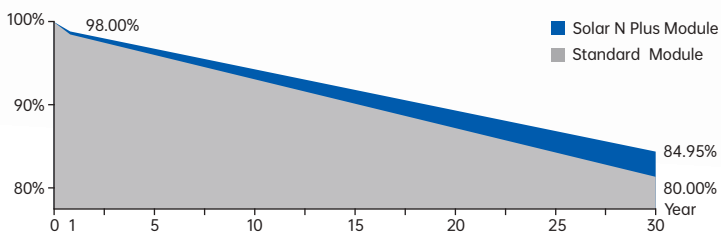
### WARRANTY



Guarantee on product material and workmanship



Linear power output warranty



### CERTIFICATION



- ISO 9001: 2015/quality management system
- ISO 14001: 2015/environment management system
- ISO 45001: 2018/occupation health safety management system

# 580-600W SP-M10/156HG

## ELECTRICAL CHARACTERISTICS (STC)

Maximum Power (Pm)	W	580	585	590	595	600
Power Tolerance	W				0~+5	
Maximum Power Voltage (V <sub>m</sub> )	V	45.10	45.25	45.40	45.55	45.70
Maximum Power Current (I <sub>m</sub> )	A	12.86	12.93	13.00	13.06	13.13
Open Circuit Voltage (V <sub>oc</sub> )	V	53.50	53.65	53.80	53.95	54.10
Short Circuit Current (I <sub>sc</sub> )	A	13.75	13.81	13.87	13.93	13.99
Module Efficiency (η <sub>m</sub> )	%	20.70	20.90	21.10	21.30	21.50

STC:AM=1.5, irradiance=1000W/m<sup>2</sup>, module temperature=25°C

## ELECTRICAL CHARACTERISTICS (NMOT)

Maximum Power (Pm)	W	436	440	444	448	452
Maximum Power Voltage (V <sub>m</sub> )	V	40.65	40.80	40.95	41.10	41.25
Maximum Power Current (I <sub>m</sub> )	A	10.73	10.78	10.84	10.90	10.96
Open Circuit Voltage (V <sub>oc</sub> )	V	49.15	49.30	49.45	49.60	49.75
Short Circuit Current (I <sub>sc</sub> )	A	11.35	11.41	11.47	11.53	11.59

NMOT: irradiance=800W/m<sup>2</sup>, environment temperature=20°C, wind speed=1m/s

## REAR SIDE POWER GAIN

<b>5%</b>	Max Power	609W	614W	620W	625W	630W
	Efficiency	21.79%	21.97%	22.16%	22.35%	22.54%
<b>15%</b>	Max Power	667W	673W	679W	684W	690W
	Efficiency	23.86%	24.07%	24.27%	24.48%	24.68%
<b>25%</b>	Max Power	725W	731W	738W	744W	750W
	Efficiency	25.94%	26.16%	26.38%	26.61%	26.83%

## MECHANICAL SPECIFICATIONS

External Dimension (L×W×H)	2465×1134×35mm
Weight	34.6kg
Solar Cells	156 (6x26)/10BB Mono/182×91mm
Front Glass	2.0mm AR-coating heat-strengthened glass
Rear Glass	2.0mm heat-strengthened glass
Frame	Anodized aluminum alloy, silver color
Junction Box	IP68
Output Cables	4.0mm <sup>2</sup> , 300mm or customized length
Connector	MC4 Compatible

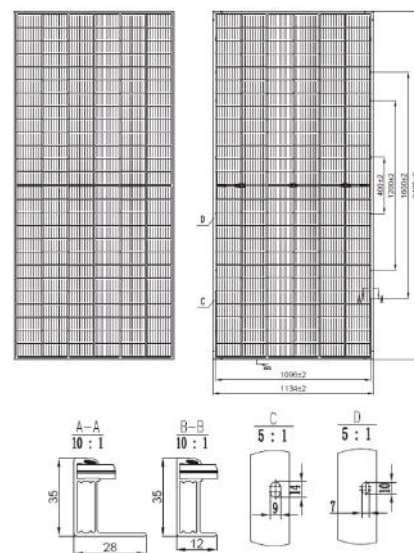
## APPLICATION CONDITIONS

Maximum System Voltage	DC1500V (IEC)
Maximum Series Fuse Rating	25A
Operating Temperature	-40°C ~ +85°C
Mechanical Load	5400Pa/2400Pa
Hail Test	25mm diameter hail at 23m/s
Bifaciality	70±5%
Application Rating	Class A

## TEMP CHARACTERISTICS

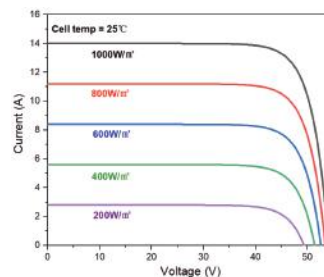
Nominal Module Operating Temperature	45±2°C
Temperature Coefficient of P <sub>max</sub>	-0.35%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.28%/°C
Temperature Coefficient of I <sub>sc</sub>	+0.050%/°C

## TECHNICAL DRAWING

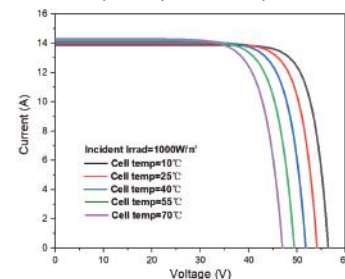


## I-V CURVE

I-V characteristics at different irradiance (SP-M10/156HG600W)



I-V characteristics at different temperatures (SP-M10/156HG600W)



## PACKING CONFIGURATION

Container	40'HC
Pieces per Pallet	31 pcs
Packaging box Size	2495×1140×1290mm
Pieces per Container	558 pcs



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