

# ASTORIOS

per aspera ad astra

## PHOTOVOLTAIC MODULE

ASTR 156HC/10 Series 565-585 Wp

HALF CUT PERC CELLS

**585 Wp**  
MAXIMUM POWER OUTPUT

**21.4%**  
MAXIMUM MODULE EFFICIENCY



### MORE YIELD

PV modules are positive tolerance current lever sorted bringing to increase in energy yield and avoiding solar panel degradation due to mismatch.



### HOT SPOTS RISK REDUCTION

Sophisticated electrical design, cells sorting, cutting and soldering technology leads to low hot spot risk and temperature control



### HIGH QUALITY GLASS

Additional yield and easy maintenance are provided by high transparent and self-cleaning glass



### MULTI BUSBAR TECHNOLOGY

Better light absorption and current collection for better power output



### MINIMIZING THE SHADING IMPACT

Better partial-shade tolerance due to separated half panel string wiring



### PID RESISTANT

Selected encapsulants, precision in manufacturing quality control makes modules highly PID resistant and snail trails free



### SAND, AMMONIA AND SALT MIST RESISTANCE

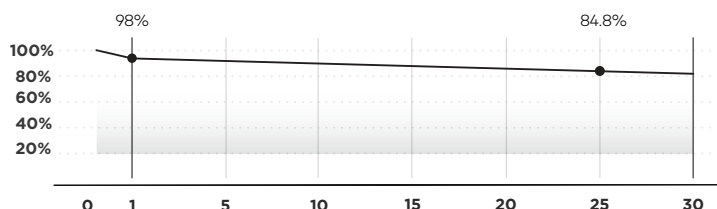
Sand blowing, ammonia and salt mist resistance tests have been passed by international standards to ensure operation in harsh conditions



### SUPERIOR SAFETY AND RELIABILITY

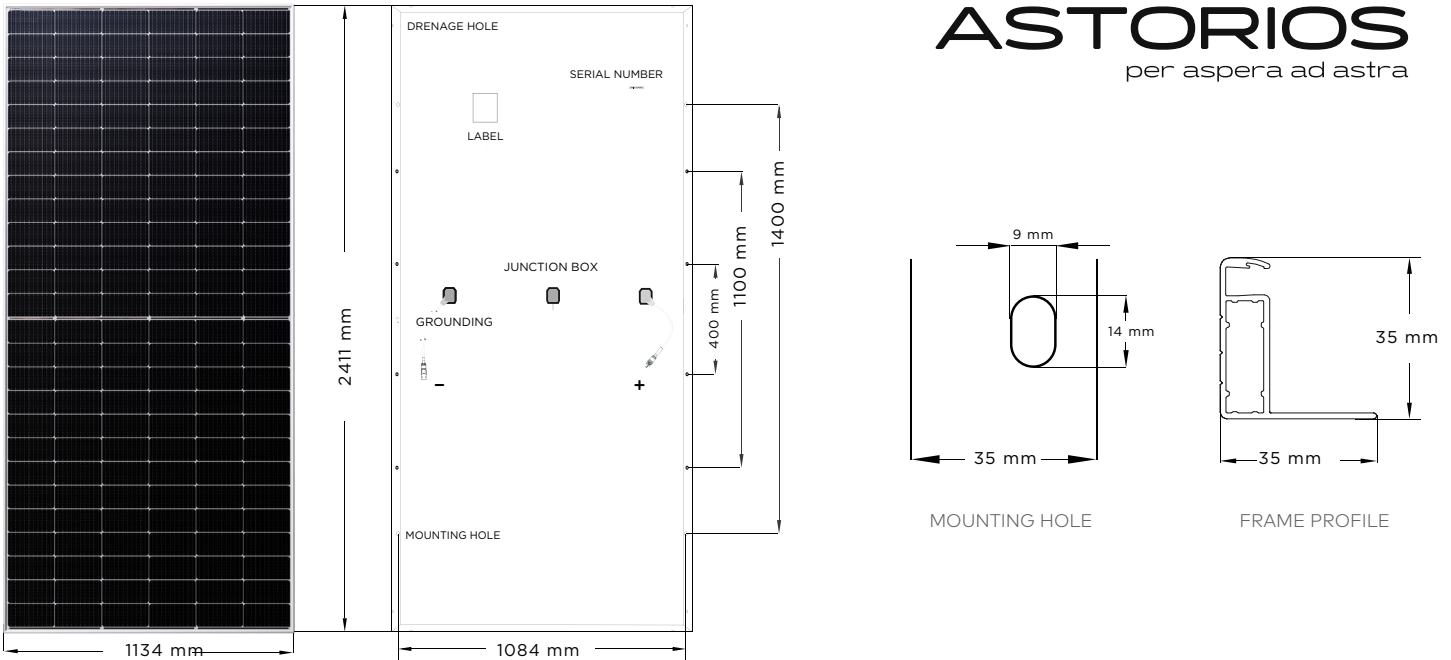
Tested to avoid microcracks and welding cracks, can withstand high pressure loads, passed multi-step quality control

## PERFORMANCE



**30 YEARS**  
Performance Guarantee

**15 YEARS**  
Product Warranty



## MATERIAL CHARACTERISTICS

Dimensions	2411 x 1134 x 35 mm
Weight	30.6 kg
Number Of Cells	156 pcs (6x26)
Cells	Mono-crystalline, Half Cut PERC 10BB (182mm)
Glass	3.2 mm, High transparency, AR coated
Frame	Silver color, Anodized aluminum alloy
Junction box	IP68 Rated, 3 bypass diodes
Connector type	Staubli MC4-Evo 2 / MC4 (Original)
Cable	4 mm <sup>2</sup> , 300 mm

## TEMPERATURE PARAMETERS

Temperature Coefficient of Pmax	-0.35 % / °C
Temperature Coefficient of Voc	-0.27% / °C
Temperature Coefficient of Isc	+0.048 % / °C
Operating Temperature	-40°C to +85 °C
Nominal Module Operating Temperature (NMOT)	44±2°C

## MAXIMUM RATINGS

Max. System Voltage	1500V DC -(H)
Max. Series Fuse Rating	25 A
Uplift load (wind)	2400 Pa*
Downforce load (snow)	5400 Pa*

## PACKAGING INFORMATION

One pallet quantity	31 pcs
40 ft HC/HQ container	620 pcs

\*For more information please refer to Instruction Manual

MODULE TYPE	156HC/10		565 Wp		570 Wp		575 Wp		580 Wp		585 Wp	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
<b>ELECTRICAL CHARACTERISTICS</b>												
Maximum power (Pmax / Wp)	565	420	570	424	575	428	580	432	585	435		
Open circuit voltage (Voc / V)	53.53	50.53	53.61	50.60	53.70	50.69	53.81	50.79	53.92	50.89		
Short circuit current (Isc / A)	13.48	10.89	13.55	10.94	13.62	11.00	13.70	11.07	13.78	11.13		
Maximum power voltage (Vmp / V)	44.08	41.05	44.19	41.17	44.30	41.29	44.41	41.41	44.52	41.53		
Maximum power current (Imp / A)	12.82	10.24	12.90	10.30	12.98	10.36	13.06	10.42	13.14	10.48		
Module efficiency at STC (ηm / %)	20.6		20.8		21.0		21.2		21.4			
Power tolerance (Pmax)	(0,+5) Wp											

STC: Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a module temperature of 25°C  
 NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C and wind speed 1 m/s

## CERTIFICATES

IEC62716 (Ammonia)  
 IEC60068-2-68 (Sand)  
 IEC61215 / 61730 / 61701

