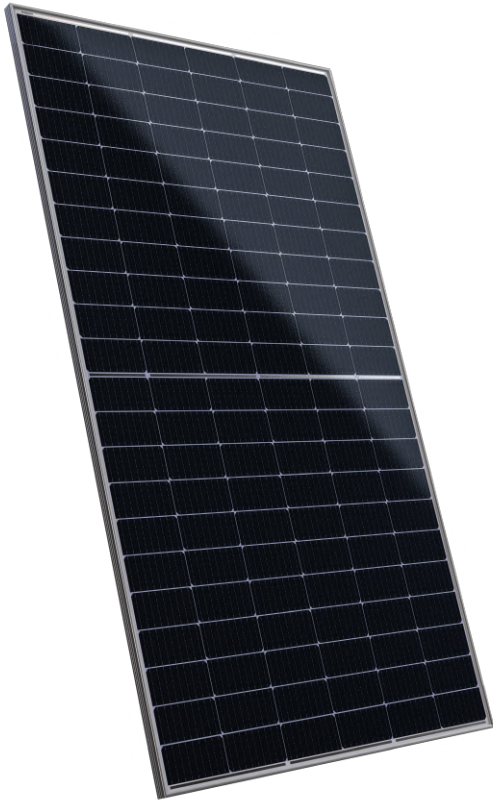


# ASTORIOS

per aspera ad astra



## PHOTOVOLTAIC MODULE

ASTR 132 HC/10 Series 490-500 Wp

HALF CUT PERC CELLS

**500 Wp**

MAXIMUM POWER OUTPUT

**21.1%**

MAXIMUM MODULE EFFICIENCY



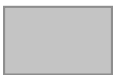
### MORE YIELD

PV modules are positive tolerance current level 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

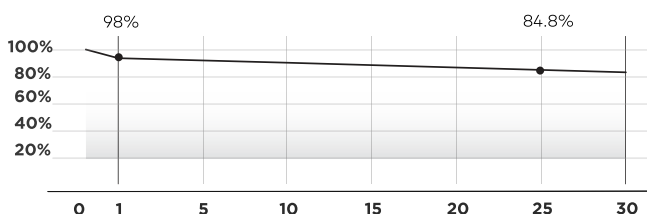
Sand blowing, ammonia and salt mist resistance tests have been passed by international standards to ensure operation in harsh conditions



### SUPERIOR SAFETY AND RELIABILITY

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

## PERFORMANCE

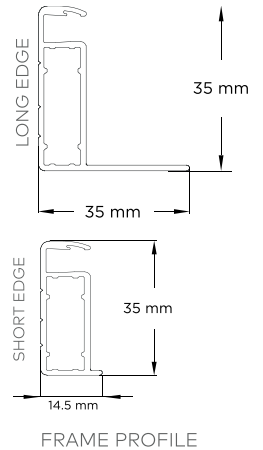
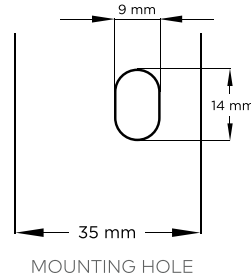
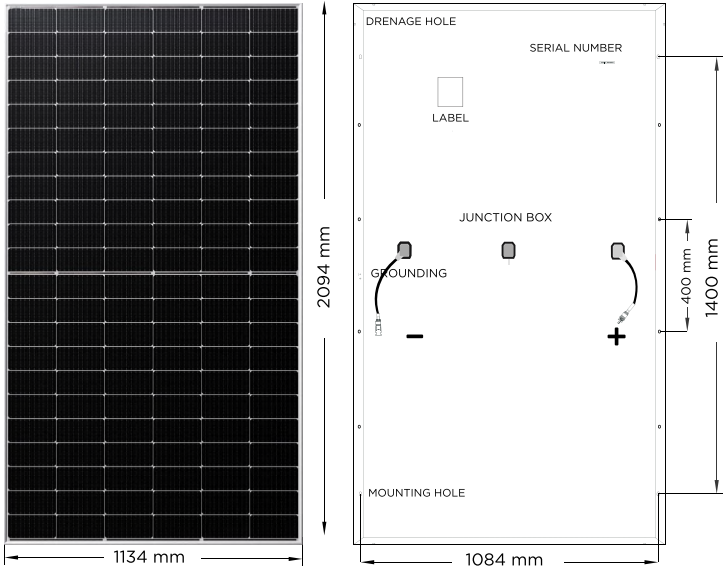


**30 YEARS**

Performance Guarantee

**15 YEARS**

Product Warranty



## MATERIAL CHARACTERISTICS

Dimensions	2094 x 1134 x 35 mm
Weight	26.6kg
Number of cells	132 pcs (6x22)
Glass	3.2mm, High transparency, AR coated
Cell layout	Mono-crystalline, Half Cut PERC 9/10BB (182mm)
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
Normal Operating Cell Temperature (NOCT)	44±2°C

## MAXIMUM RATINGS

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

## PACKAGING INFORMATION

One pallet quantity	31 pcs
40 ft HC/HQ container	682 pcs

\*For more information please refer to Instruction Manual

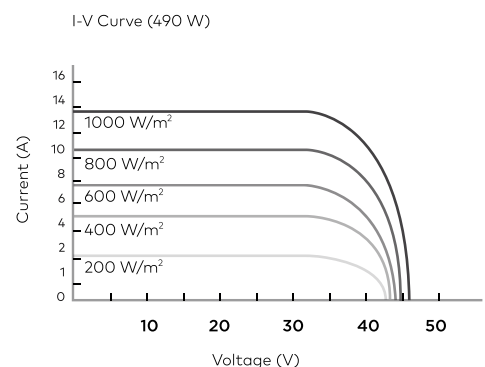
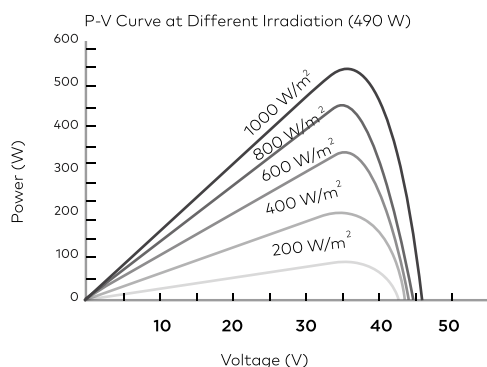
MODULE TYPE 132HC/10	490 Wp		495 Wp		500 Wp	
	STC	NMOT	STC	NMOT	STC	NMOT
<b>ELECTRICAL CHARACTERISTICS</b>						
Maximum power (Pmax/Wp)	490	370	495	374	500	378
Open circuit voltage (Voc / V)	45.31	43.77	45.50	43.89	45.70	44.01
Short circuit current (Isc / A)	13.75	10.94	13.82	11.00	13.88	11.06
Maximum power voltage (Vmp / V)	38.17	36.04	38.36	36.19	38.56	36.35
Maximum power current (Imp / A)	12.84	10.27	12.91	10.34	12.97	10.40
Module efficiency at STC (ηm / %)	20.70		20.90		21.10	
Power tolerance (Pmax)			0-+3%			

NMOT: Irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C and wind speed 1 m/s

STC: Irradiance of 1000 W/m<sup>2</sup> with spectrum AM 1.5 and a module temperature of 25°C

## CERTIFICATES

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



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