

# ASTORIOS

per aspera ad astra



## HIGH EFFICIENCY PHOTOVOLTAIC MODULE

ASTR 132 HCN/10 Series 520-530 Wp

TOPCON N-TYPE HALF CUT CELLS

**530 Wp**

MAXIMUM POWER OUTPUT

**22.3%**

MAXIMUM MODULE EFFICIENCY



### NEGLECTIBLE LID IMPACT

TOPCon cells exhibit an almost zero susceptibility to Light Induced Degradation, ensuring sustained high efficiency over time despite exposure to sunlight



### HOT SPOTS RISK REDUCTION

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



### HIGH EFFICIENCY

N-type cells technology provides the highest efficiency modern multi busbar configuration at affordable cost



### 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

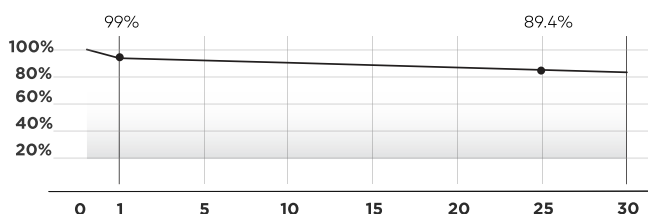
Sand blowing, ammonia and salt mist resistance tests have been passed by international standards to ensure operation in harsh conditions



### SUPERIOR SAFETY AND RELIABILITY

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

## PERFORMANCE

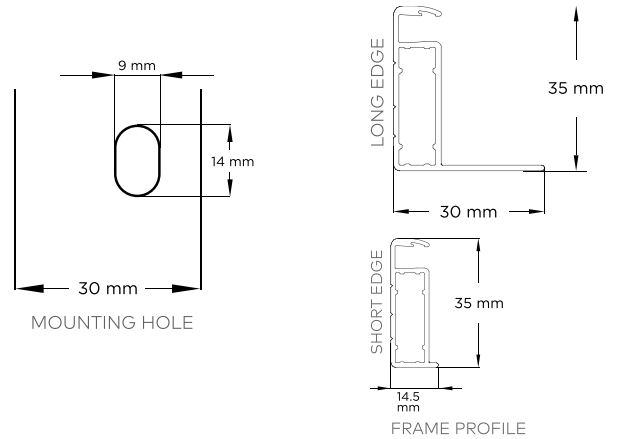
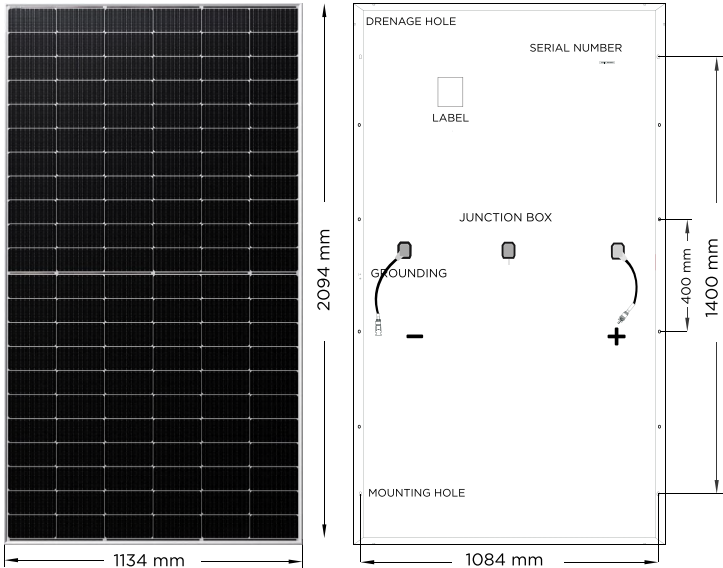


**30 YEARS**

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 N-Type 16BB
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	-0.30 % / °C
Temperature Coefficient of Voc	-0.25 % / °C
Temperature Coefficient of Isc	+0.046 % / °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

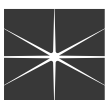
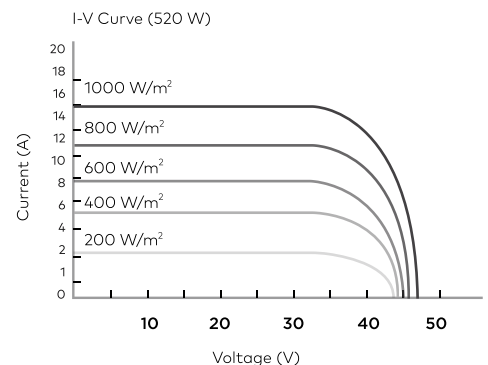
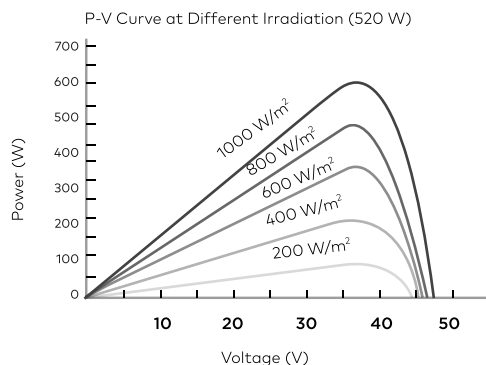
MODULE TYPE 132HCN/10	520 Wp		525 Wp		530 Wp	
	STC	NMOT	STC	NMOT	STC	NMOT
<b>ELECTRICAL CHARACTERISTICS</b>						
Maximum power (Pmax/Wp)	520	392	525	396	530	400
Open circuit voltage (Voc / V)	46.84	44.18	47.00	44.31	47.16	44.45
Short circuit current (Isc / A)	14.22	11.53	14.30	11.59	14.38	11.65
Maximum power voltage (Vmp / V)	38.75	36.21	38.92	36.27	39.09	36.43
Maximum power current (Imp / A)	13.42	10.85	13.49	10.92	13.56	10.98
Module efficiency at STC (ηm / %)	21.90		22.10		22.30	
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



ASTORIOS Holding Inc.  
16192 Coastal Highway, Lewes,  
Delaware 19958, USA  
info@astorios.com