



# Neptune Series 0~+5W

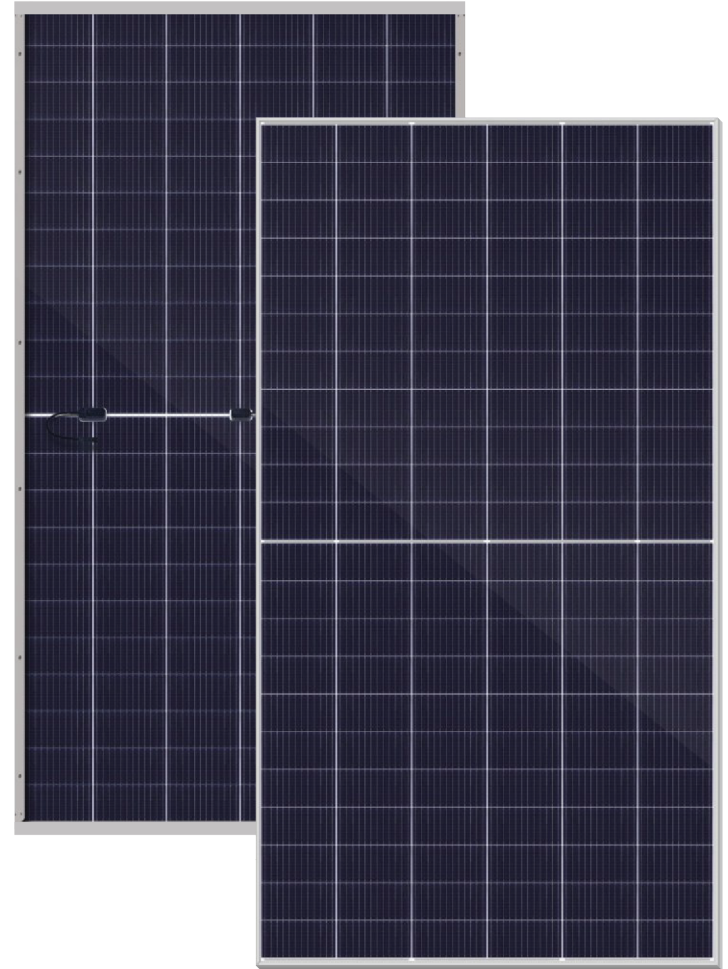
# 660~685W

N-TOPCon | Bifacial Monocrystalline Module

**2384x1303x35**      **210x105**  
 Module Dimensions (mm)      Cell Size (mm)

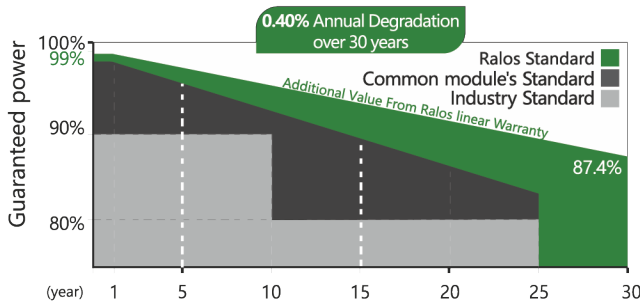
**132 Cell**      **660-685Wp**  
 Mono TOPCon Module      Power Output

**1500V DC**      **22.05 %**  
 Max. System Voltage      Max. Efficiency



## Quality Guarantee

12-Years material & technology warranty  
 30- Years linear power output warranty



- ▶ Ralos solar Liner power Output Guarantee
- ▶ Standard Liner Power Output Guarantee

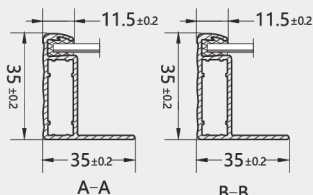
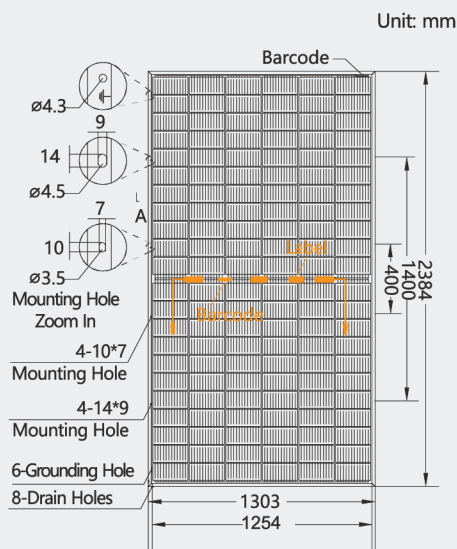
## KEY FEATURES

- Higher Power Output**  
 Module power increases by 5-25% generally, bringing significantly lower LCOE and higher IRR. 0-5w positive tolerance output warranty.
- Durability Against Extreme Environmental Conditions**  
 High salt mist and ammonia resistance, Lower temperature coefficient and operating temperature.
- ZERO LID**  
 N-Type cell is characterized by "0" LID, which generates more power
- More Outstanding Low-light Performance**  
 Higher power output even under low-light environments like on cloudy days
- PID Resistance**  
 Excellent Anti-PID performance guarantee via optimized mass-production process and material control.
- Enhanced Mechanical Load**  
 Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).
- Optimal Choice for Ultra-large Power Plants**  
 Contribute to Lower BOS cost and LCOE.
- 3 EL Full Inspection**  
 Three stage 100% EL Inspection warranting defect-free product.

**Reg. Office:**  
 904, Mauryansh Elanza, Besides Parekh's Hospital,  
 Shyamal Cross Road, Satellite, Ahmedabad - 380015, Gujarat, INDIA.

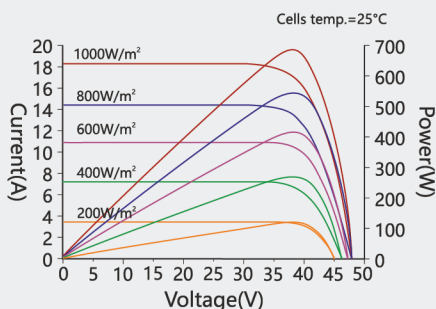
**Factory Address :**  
 Survey No: 192, At Dudhathal Village, Taluko-Kapadvanj,  
 Dist.Kheda, Pin 387 620, Gujarat, India.

### Dimensions of PV Module

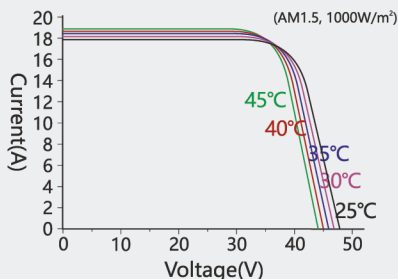


#### ASPL-685W-210M/132TB

#### I-V characteristics at different irradiances



#### I-V characteristics at different temperatures



### ELECTRICAL CHARACTERISTICS

Model Number	ASPL-660W-210M/132TB	ASPL-665W-210M/132TB	ASPL-670W-210M/132TB	ASPL-675W-210M/132TB	ASPL-680W-210M/132TB	ASPL-685W-210M/132TB
Rated Power in Watts-Pmax(Wp)	660	665	670	675	680	685
Open Circuit Voltage-Voc(V)	48.10	48.32	48.53	48.75	48.97	49.19
Short Circuit Current-Isc(A)	18.03	18.07	18.10	18.14	18.18	18.22
Max. Power Voltage-Vmpp(V)	38.78	38.99	39.21	39.43	39.63	39.85
Max. Power Current-Imp(A)	17.02	17.06	17.09	17.12	17.16	17.19
Module Efficiency(%)	21.24	21.40	21.56	21.72	21.89	22.05
Maximum system voltage(V)	1500					
Fuse Rating(A)	35					
Temperature coefficient Pmax(%/°C)	-0.30					
Temperature coefficient Isc(%/°C)	0.04					
Temperature coefficient Voc(%/°C)	-0.25					

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

#### Bifacial Output-Backside Power Gain

	Pmax(W)	726	731	737	742	748	753
10%	Module efficiency(%)	23.37	23.53	23.73	23.89	24.08	24.24
	Pmax(W)	792	798	804	810	816	822
20%	Module efficiency(%)	25.50	25.69	25.88	26.08	26.27	26.46

### WORKING CHARACTERISTICS

Power level	660	665	670	675	680	685
Pmax(W)	502	506	509	512	516	520
Vmp(V)	36.41	36.62	36.76	36.92	37.10	37.30
Imp(A)	13.79	13.82	13.85	13.88	13.91	13.95
Voc(V)	44.11	44.28	44.41	44.63	44.82	45.00
Isc(A)	14.53	14.56	14.59	14.62	14.65	14.68
Power tolerance(%)	0~+3					
NOCT(°C)	44±2					

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

### MECHANICAL CHARACTERISTICS

Number of cells	132pcs	Type of frame	Anodized Aluminum Alloy
Size of cell(mm)	210×105	Size of module(mm)	2384×1303×35
Type of cell	N-TOPCon Mono	Weight(kg)	40.8
Thickness of glass(mm)	2.0	Cables/connectors	4.0mm <sup>2</sup> , MC4 compatible
Junction box	IP68	Length of Cabel	+300mm/-300mm(connector included)

### MAXIMUM RATINGS

Operating Temperature(°C)	-40~85
Operating humidity(°C)	5~85
Allowable Hail Load	25mm ice-ball with velocity of 23m/s

### PACKAGING CONFIGURATION

	40ft (HQ)
Number of Modules Per Container	558
Number of Modules Per Pallet	31
Number of Pallets Per Container	18
Packaging Box Dimensions (l×w×h) (mm)	1325×1120×2510
Box Gross Weight (kg)	1296

#### CAUTION

Read safety and installation instructions before using the product.