

STAR PLUS SERIES

Glass to Glass Series: 485Wp to 530Wp - 120 Half-Cut Cells

• COMMERCIAL • COMMUNITY SOLAR

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Electrical Data (STC)

	485 Wp	490 Wp	495 Wp	500 Wp	505 Wp	510 Wp	515 Wp	520 Wp	525 Wp	530 Wp
Maximum Power (Pmax)	485	490	495	500	505	510	515	520	525	530
Maximum Power Voltage (Vmp)	37.30	37.501	37.60	37.70	37.80	37.90	38.00	38.10	38.20	38.30
Maximum Power Current (Imp)	12.95	13.051	13.15	13.25	13.35	13.45	13.55	13.65	13.75	13.85
Open-Circuit Voltage (Voc)	42.90	43.002	43.10	43.20	43.30	43.40	43.50	43.60	43.70	43.80
Short-Circuit Current (Isc)	13.32	13.422	13.52	13.62	13.72	13.82	13.92	14.02	14.12	14.22
Module Efficiency (%)	22.28	22.51	22.73	22.96	23.19	23.42	23.65	23.88	24.11	24.34
Fill Factor (%)	83.80	83.96	84.18	84.31	84.47	84.70	84.84	85.04	85.28	85.53

Electrical Characteristics with different rear side power gain (Reference 520 Wp)**

	3%	5%	10%	15%	20%
Bifaciality Gain	3%	5%	10%	15%	20%
Maximum Power (Pmax)	532	541	562	582	603
Maximum Power Voltage, Vmpp (V)	44.93	44.94	44.95	44.96	44.97
Maximum Current, Imp (A)	14.03	14.30	14.98	15.66	16.34
Open Circuit Voltage, Voc (V)	51.42	51.43	51.44	51.45	51.46
Short Circuit Current, Isc (A)	14.42	14.70	15.40	16.10	16.80

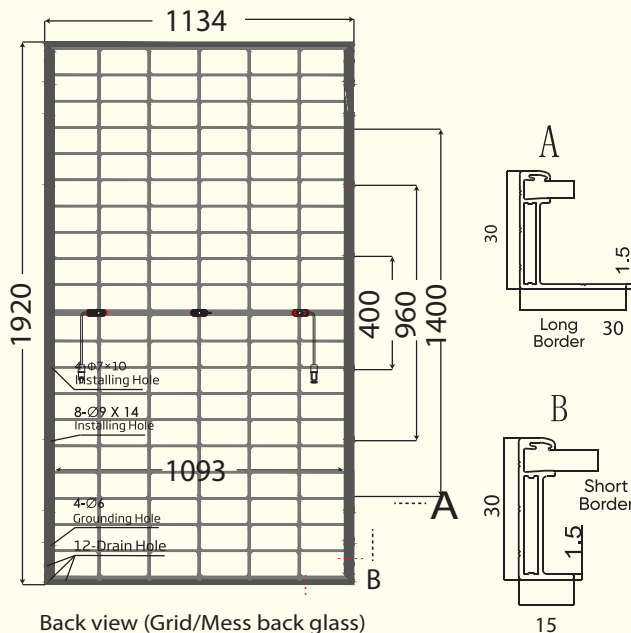
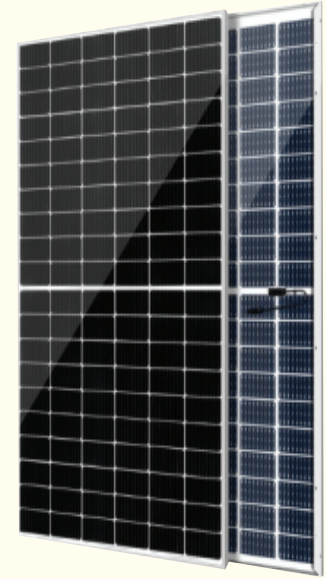
**Bifaciality Factor: 80 ± 20%, Back-side power gain varies depending upon the specific albedo

Mechanical Data

Panel Type	N-Type Bi-Facial Glass to Glass Panels
Dimensions (mm) (± 2mm)	1920 mm (L) x 1134 mm (W) x 30/35 ± 2 mm (T)
Dimensions (inch) (± 0.079)	75.59 in (L) x 44.65 in (W) x 1.18/1.38" ± 0.079" in (T)
Weight (kg)	30 kg ~
Weight (lbs)	66.14 lbs ~
Solar Cell	120 (10 x 12) nos. Half cut M10R cells
Frame	Anodized Aluminium Black/Silver
Front Glass	2.0 mm thickness, AR Coating - Tempered Glass
Back Glass	2.0 mm thickness, Semi-tempered/Grid Glass
Junction Box	Split JB with 03 diodes & IP68 UL Approved
Cable	300mm or customised length, 4 mm ² , 6.3mm dia. (UL approved)
Connector	MC4 Connector / Stabuli Connector (optional) (UL approved)

Thermal Parameters

Tc of Open Circuit Voltage	- 0.259%/°C
Tc of Power	- 0.30%/°C
Tc of Short Circuit Voltage	+0.046%/°C
Maximum System Voltage	1500V
NOCT	45 °C ± 2 °C
Operating Range	-40 °C to +85 °C



YIELD

As per albedo, increased energy gain between approx. 3% to 25% in N type Topcon PV panels



PID FREE

Glass + POE backing has a lower permeability to moisture in the N type Topcon PV panels backing material, which reduces risk from PID



WARRANTY

Extended durability with favorable warranties in N type Topcon panels with 30 years performance warranty with 0.55% annual degradation are common.



VERTICAL PACKAGING

Vertical packaging of PV panels allows easy to storage and 13% extra watt power PV panels shipping with quick loading and unloading



EXCELLENCE

Use 0.28 mm - 0.30 mm diameter round ribbon with best output with gain of 3% more power & 75% lower shading on solar cells.



LOW TEMPERATURE CO-EFFICIENT

Best output performance in higher temperature ambient along with Topcon N type technology as having low temperature co-efficient



BACK GLASS + GRID/MESS

Back glass along with grid/mess printed on cell side for achieving 0.5% to 1% Higher back gain power output



LETID

Improve efficiency with long term stability & best performance with reducing LeTid effect in N type Topcon PV panels.

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CAUTION: READ SAFETY AND INSTALLATION MANUAL BEFORE USING THE PRODUCT. Specifications included in this datasheet are subject to change without notice. Please confirm your exact requirements with the company representative before placing the order and finalizing the confirmation.

