



SOLITECH
SOLAR

SOLI ASTRA

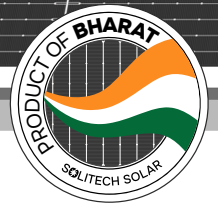
570 Wp - 590 Wp

Bi-Facial Module with Dual Glass

N-Type
TOPCon

M10

SOLITECH



2.0 GW
GIGA FACTORY

WITH ADVANCED AI

30 Years

Warranty for Linear Performance

15 Years

Product Warranty on Workmanship

APPLICATIONS

UTILITY

INDUSTRIAL

AGRICULTURE

RESIDENTIAL

Salient Features



N-type Technology

For reduced light-induced degradation (LID/LeTID)



Dual-Sided Power Generation

To boost power output and lower the levelized cost of energy (LCOE).



SMBB Technology

Enhanced light absorption and efficient current extraction



Mechanical Load Enhanced

Certified to withstand:
5400 Pa front & 2400 Pa rear max static test load



Anti-PID

Minimizes the occurrence of Potential Induced Degradation (PID)



High Efficiency

Enhanced module conversion efficiency of upto 22.84%

Model Type : SGE - M10144T16G - AAA*

*AAA denotes Module Wattage

Electrical Characteristics (STC)	590	585	580	575	570
Nominal Maximum Power (Pmax)	590	585	580	575	570
Optimum Operating Voltage (Vmp)	45.21	45.15	45.06	44.97	44.89
Optimum Operating Current (Imp)	13.07	12.97	12.88	12.80	12.71
Open Circuit Voltage (Voc)	53.83	53.72	53.61	53.50	53.39
Short Circuit Current (Isc)	13.73	13.64	13.55	13.46	13.38
Module Efficiency (%)	22.84	22.65	22.45	22.26	22.07

STC: Irradiance 1000W/m², Cell Temperature 25°C, AM = 1.5

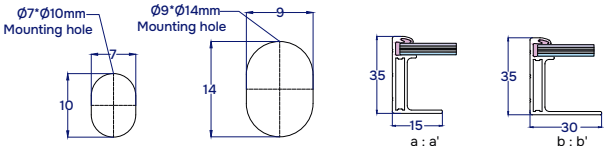
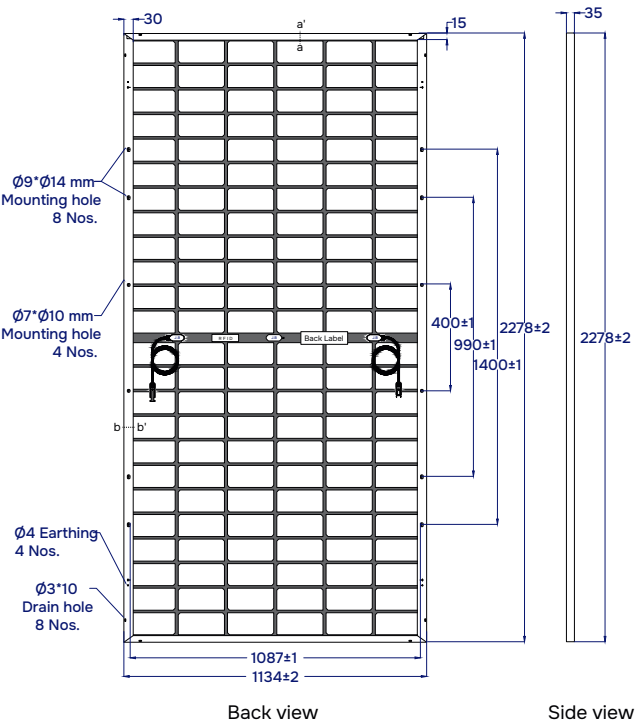
Electrical Characteristics (NOMT)	443	439	435	431	427
Nominal Maximum Power (Pmax)	443	439	435	431	427
Optimum Operating Voltage (Vmp)	42.46	42.45	42.45	42.44	42.43
Optimum Operating Current (Imp)	10.49	10.40	10.29	10.20	10.12
Open Circuit Voltage (Voc)	49.52	49.50	49.50	49.47	49.47
Short Circuit Current (Isc)	11.11	11.00	10.91	10.81	10.73

NOMT: Irradiance 800W/m², Ambient Temperature 20°C, AM = 1.5 Wind Speed 1m/s

Bi-Facial Output – Backside Power Gain @ STC**	620	614	609	604	599
Nominal Maximum Power (Pmax)	620	614	609	604	599
Short Circuit Current (Isc)	14.47	14.34	14.22	14.09	13.99
Nominal Maximum Power (Pmax)	649	644	638	633	627
Short Circuit Current (Isc)	15.16	15.03	14.89	14.76	14.65
Nominal Maximum Power (Pmax)	679	673	667	661	656
Short Circuit Current (Isc)	15.85	15.71	15.57	15.43	15.32
Nominal Maximum Power (Pmax)	708	702	696	690	684
Short Circuit Current (Isc)	16.54	16.39	16.25	16.10	15.98

** Additional power gain from the rear side, relative to the front side's power at STC, is influenced by the mounting structure (such as height and tilt angle) and the ground's reflectivity. Bi-Faciality Factor: 70 ± 5%.

Mechanical Specifications	
Cell Type	M10 Half-Cut N-type TOPCon Bifacial Solar Cells
No. of cells	144 (72×2)
Dimensions	2278 × 1134 × 35 mm
Weight	32.0 kg
Front Cover	2 mm Low Iron Tempered AR coated Glass
Back Cover	2 mm Low Iron Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	30A Split Junction Box - IP68 Rated
Protection Class	Class II
IEC Fire Type	Class C
Connector Type	MC4 Compatible
Output Cables	4.0 mm² (+): 300 mm, (-): 300 mm or Customized Length

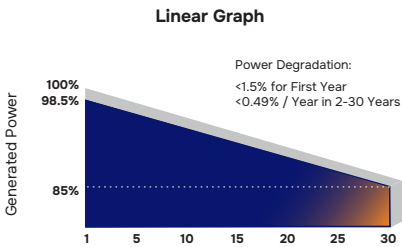
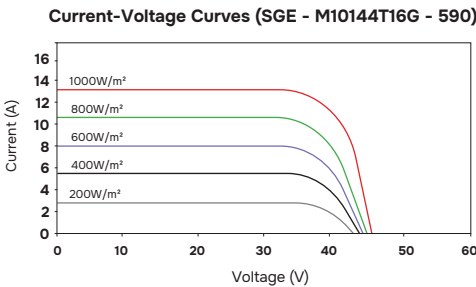
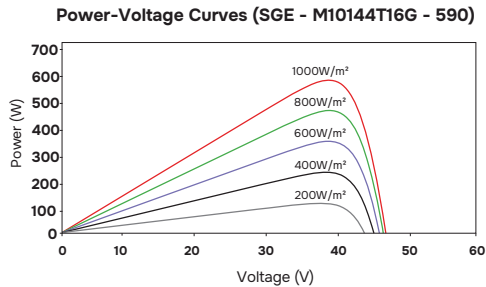


All dimensions are in mm.

Maximum Operating Conditions	
Operating Temperature	-40°C to +85°C
Maximum System Voltage	1500V
Maximum Series Fuse Rating	30 A / 35 A

Temperature Coefficients	
Current α (Isc)	0.0265 %/°C
Voltage β (Voc)	-0.2261 %/°C
Power γ (Pmax)	-0.29 %/°C

Packing Configuration#	20 ft	40 ft
No. of Modules per Pallet	31 Nos	31 Nos
No. of Pallets per Container	10 Pallets	20 Pallets
No. of Modules per Container	310 Nos	620 Nos



- #Quantity of modules/container may get changed without prior notice.
- For handling & installation instructions, refer to Solitech Solar's installation manual available on the company website
 - Before placing an order, confirm your requirements with our sales representative
 - The electrical data provided is for reference purposes only
 - PV modules need to be disposed of as per government regulations after their life cycle
 - Refer to Solitech Solar's warranty document for terms and conditions
 - Due to constant product modifications, Solitech Solar reserves the right to amend the above specifications without prior notice
 - Images in the datasheet are for representation purposes only

For Sales Inquiries

+91 78 744 74404

sales@solitechsolar.com



SOLITECH GREEN ENERGY PRIVATE LIMITED

- www.solitechsolar.com
- info@solitechsolar.com
- Block No 210, Chhamuchhal Village, Behind Karanj Textile Park, Karanj, Surat-394 110, Gujarat, INDIA.