



SOLI ASTRA

570 Wp - 610 Wp

Bi-Facial Module with Dual Glass

DCR Solar Panels

N-Type
TOPCon

M10R

Wattage

570Wp - 610Wp

Junction Box

Split Junction Box
(3 nos. with individual Bypass Diodes)

Cell

144 Half-cut
N-Type Solar cell

Dimension (LxWxT in mm)

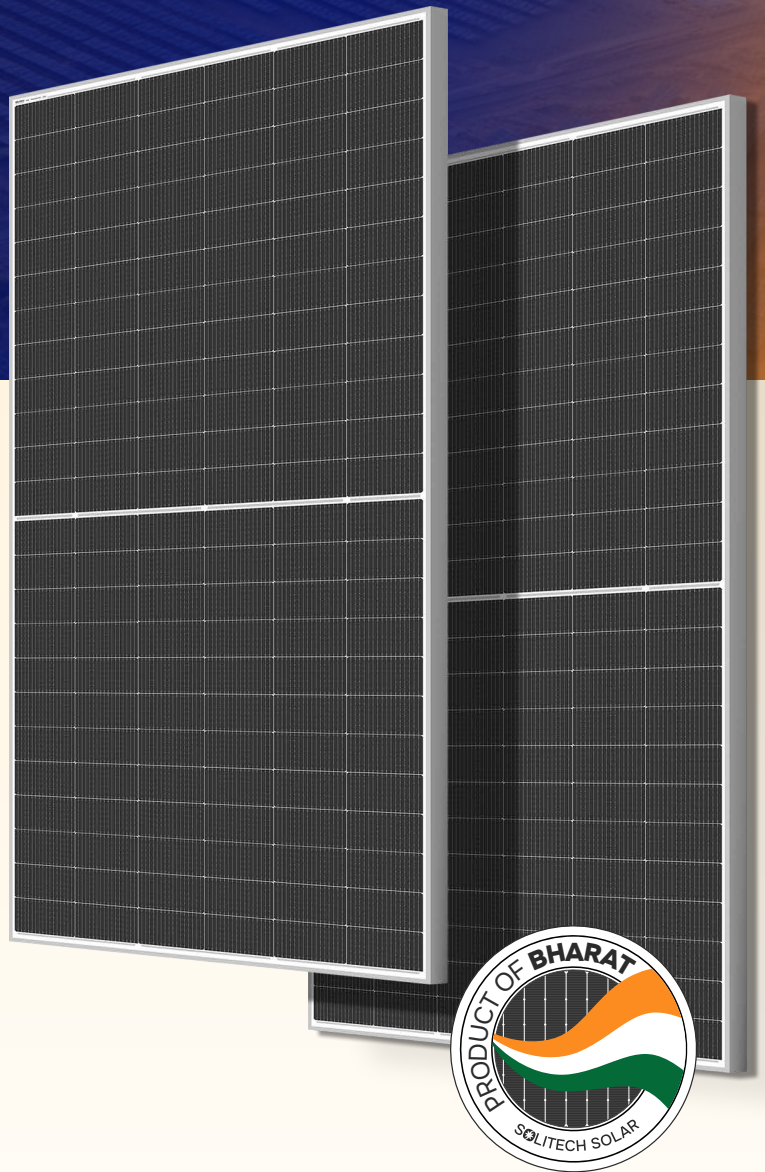
2278 × 1134 × 35 mm

Weight (kg)

31.5

Design

Silver Anodized Aluminum Alloy Frame and Semi Tempered
Glass on Front and back, AR coating on Front Glass



Certifications



BIS
Certified



9001:2015
14001:2015
45001:2018



IS 14286,
IS/IEC 61730-1 & 2,
IEC - 62804 - PID
IEC 62716 - Ammonia corrosion

IEC 61701 - Salt mist corrosion
IEC 61853 - Irradiance and
temperature performance
measurements and power rating



Years of
Product Warranty



Years of Warranty on
Linear Performance

Scan to know more



Model Type : SGE - M10144T16G - AAA*

*AAA denotes Module Wattage

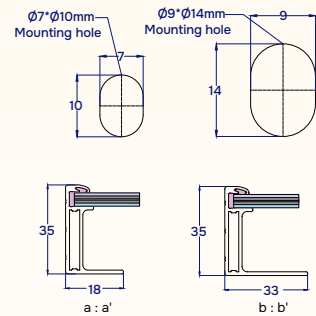
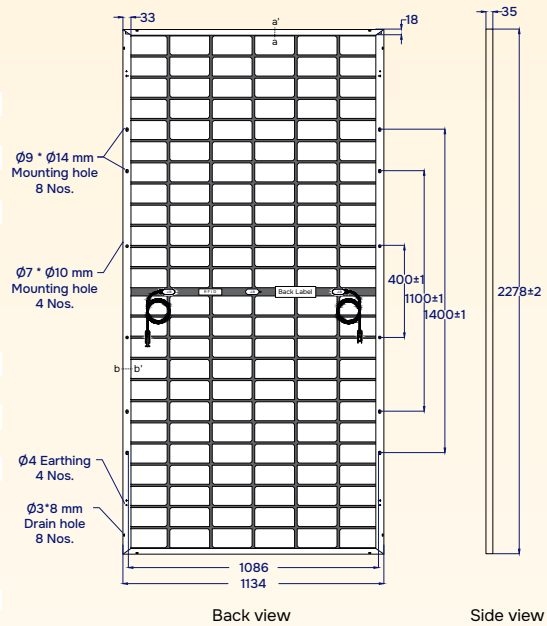
Electrical Characteristics (STC)	610	605	600	595	590	585	580	575	570
Nominal Maximum Power (Pmax)	610	605	600	595	590	585	580	575	570
Optimum Operating Voltage (Vmp)	45.54	45.5	45.42	45.33	45.21	45.15	45.06	44.97	44.89
Optimum Operating Current (Imp)	13.41	13.31	13.23	13.14	13.07	12.97	12.88	12.80	12.71
Open Circuit Voltage (Voc)	54.27	54.16	54.05	53.94	53.83	53.72	53.61	53.50	53.39
Short Circuit Current (Isc)	14.09	14.00	13.91	13.82	13.73	13.64	13.55	13.46	13.38
Module Efficiency (%)	23.61	23.42	23.23	23.03	22.84	22.65	22.45	22.26	22.07
STC: Irradiance 1000W/m², Cell Temperature 25°C, AM = 1.5									

Electrical Characteristics (NOMT)	465	461	457	453	449.5	445.5	441.5	437.9	434.0
Nominal Maximum Power (Pmax)	465	461	457	453	449.5	445.5	441.5	437.9	434.0
Optimum Operating Voltage (Vmp)	43.26	43.23	43.15	43.06	42.95	42.89	42.81	42.72	42.65
Optimum Operating Current (Imp)	10.74	10.66	10.59	10.52	10.47	10.39	10.31	10.25	10.18
Open Circuit Voltage (Voc)	51.56	51.45	51.35	51.24	51.14	51.03	50.93	50.83	50.72
Short Circuit Current (Isc)	11.28	11.21	11.14	11.07	10.99	10.92	10.85	10.78	10.71
NOMT: Irradiance 800W/m², Ambient Temperature 20°C, AM = 1.5 Wind Speed 1m/s									

Bi-Facial Output – Backside Power Gain @ STC**									
Nominal Maximum Power (Pmax)	5%	641	635	630	625	620	614	609	599
Module Efficiency (%)	5%	24.79	24.59	24.39	24.18	23.98	23.78	23.57	23.17
Nominal Maximum Power (Pmax)	10%	671	666	660	655	649	644	638	627
Module Efficiency (%)	10%	25.98	25.76	25.55	25.34	25.12	24.91	24.70	24.27
Nominal Maximum Power (Pmax)	15%	702	696	690	684	679	673	667	656
Module Efficiency (%)	15%	27.16	26.93	26.71	26.49	26.27	26.04	25.82	25.37
Nominal Maximum Power (Pmax)	20%	732	726	720	714	708	702	696	684
Module Efficiency (%)	20%	28.34	28.10	27.87	27.64	27.41	27.18	26.94	26.48

** 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	31.5 kg
Front Cover	2 mm Low Iron Semi-Tempered AR Coated Glass
Back Cover	2 mm Low Iron Semi-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

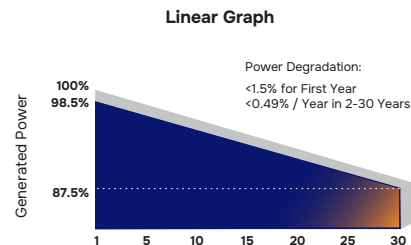
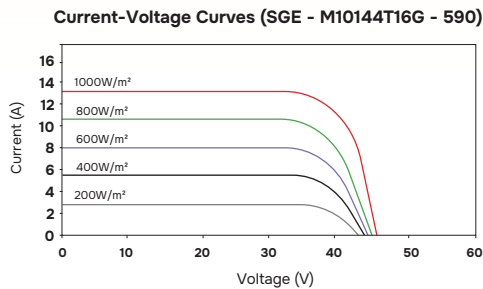
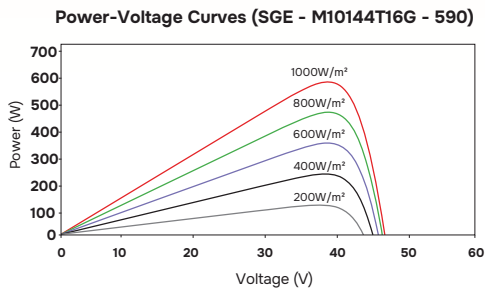


All dimensions are in mm.

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



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.

For Sales Inquiries
+91 78 744 74404
sales@solitechsolar.com