SAATVIK
FOR A BETTER FUTURE

TEJ

BIFACIAL-N TOPCon

144 CELLS (DUAL GLASS)

560-600Wp
SGE XXX-144 TGG (XXX: 560-600Wp)



KEY FEATURES

N-Type with Very Low LID
LID Resulting in higher power generation

Positive Tolerance
Power output with a positive tolerance.

Excellent performance in low light
Superior output in low irradiance Increased power production even in low-light environments.

Better Temperature coefficient (-0.30%/°C)
Higher power generation under higher ambient temperature conditions

Higher Module Efficiency
Module Efficiency Up-to 23.23%

10-30% more power generation
When compared with the P-type module

Advanced technology
MBB-Multi Bus-bar (16BB)Half-cut N-TOPCon cell

Extended Wind and snow loads
Wind Load (2400 Pascal) and
Snow Load (5400 Pascal)

Withstanding a harsh environment
Reliable quality leads to better sustainability, even in harsh environments such as deserts, Farms, coastal and the areas with ammonia exposure

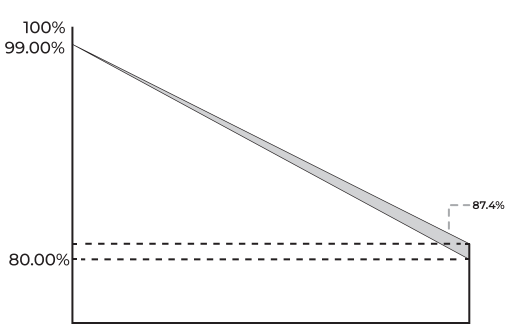
Rigorous Testing Criteria
100% I-V Measurement, HiPOT test and EL inspection, ensures defect-free modules

Bifaciality factor 80±5%
The ratio of rear efficiency in relation to the front efficiency subjected to same irradiance

12 YEARS — **Product Warranty****
12 years of product warranty

30 YEARS — **Performance Warranty****
Power degradation <1.0% in first year and <0.40% / year in 2 to 30 years

** Please read Saatvik solar warranty documents thoroughly



Certifications & Standards

IEC 61215, IEC 61730, IEC 61701, UL 61215,
UL 61730, IEC 61453-1&2, IEC 62804
IEC 62716, IS14286, IEC 60068-2-68

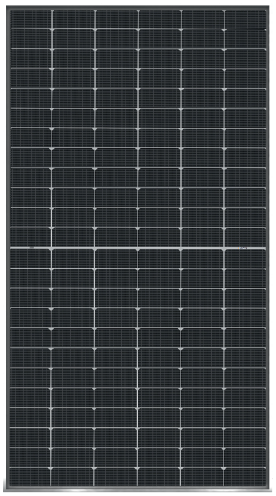
Certifications

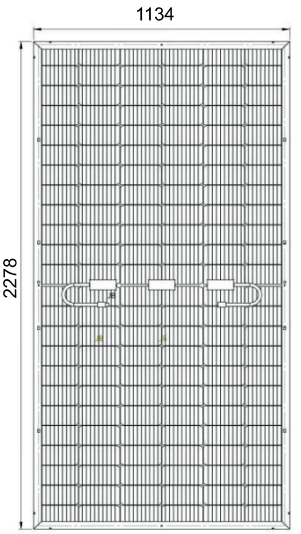
Warranty partner Munich RE

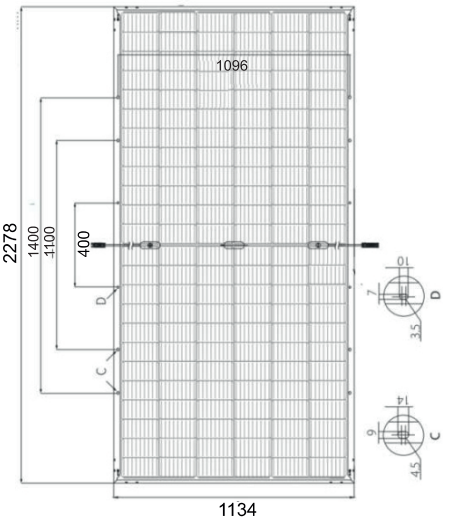
Call Us: 1800-547-1151 | www.saatvikgroup.com | sales@saatvikgroup.com

Follow us at :

SAATVIK
FOR A BETTER FUTURE







ELECTRICAL DATA PERFORMANCE

Module Type		560Wp		565Wp		570Wp		575Wp		580Wp		585Wp		590Wp		595Wp		600Wp	
Conditions	Unit	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Peak Power, Pmax (Wp)	W	560	421	565	425	570	429	575	432	580	436	585	440	590	444	595	447	600	451
Voltage at Maximum power, Vmp	V	42.41	40.20	42.53	40.32	42.65	39.69	42.82	39.89	42.94	39.98	43.06	40.82	43.18	40.93	43.3	41.50	43.42	41.16
Current at maximum power, Imp	A	13.22	10.47	13.3	10.54	13.37	10.80	13.43	10.84	13.51	10.91	13.59	10.78	13.67	10.84	13.74	10.90	13.82	10.96
Open circuit voltage, Voc	V	50.68	48.04	50.86	48.22	51.04	48.39	51.22	48.56	51.41	48.74	51.59	48.91	51.77	49.08	51.95	49.25	52.13	49.42
Short circuit current, Isc	A	13.88	11.21	13.96	11.27	14.04	11.34	14.10	11.38	14.19	11.46	14.26	11.51	14.33	11.57	14.43	11.65	14.51	11.71
Module Efficiency (%)		21.68%		21.87%		22.07%		22.26%		22.45%		22.65%		22.84%		23.03%		23.23%	
Operating Temperature (°C)		-40°C~+85°C				Temperature coefficient of Isc (α)								+0.046%/°C					
Maximum system voltage		1500 VDC				Nominal operating cell temperature (NOCT)								45±2°C					
Maximum series fuse rating		30A				Fire Safety								Class-C					
Power tolerance (Wp)		0~+3%				Protection Class II								Class-A					
Temperature coefficient of Pmax (γ)		-0.30%/°C				Safety Class								Class-II					
Temperature coefficient of Voc (β)		-0.26%/°C																	

STC: Irradiance 1000W/m², module temperature 25°C, AM =1.5; NOCT: Irradiance 800W/m², ambient temperature 20°C AM = 1.5 wind Speed 1m/s. Average power reduction of 4.5% at 200W/m² as per IEC 60904-1. Except Pmax, all other parameters have tolerance of +/-5%, measurement uncertainty +/-3%.

BI-FACIAL OUTPUT - BACKSIDE POWER GAIN*

Bifacial Gain	Measurement	Unit	560Wp	565Wp	570Wp	575Wp	580Wp	585Wp	590Wp	595Wp	600Wp
5%	Peak Power (Pmax)	W	588	593	599	604	609	614	620	625	630
	Module Efficiency	%	22.76	22.97	23.17	23.37	23.57	23.78	23.98	24.19	24.39
10%	Peak Power (Pmax)	W	616	622	627	633	638	644	649	654	660
	Module Efficiency	%	23.85	24.06	24.27	24.48	24.70	24.91	25.12	25.32	25.55
15%	Peak Power (Pmax)	W	644	650	656	661	667	673	679	684	690
	Module Efficiency	%	24.93	25.15	25.37	25.60	25.82	26.04	26.27	26.48	26.71

*Power gain from the rear side depends on the ground reflectance (Albedo) & Bifaciality factor.

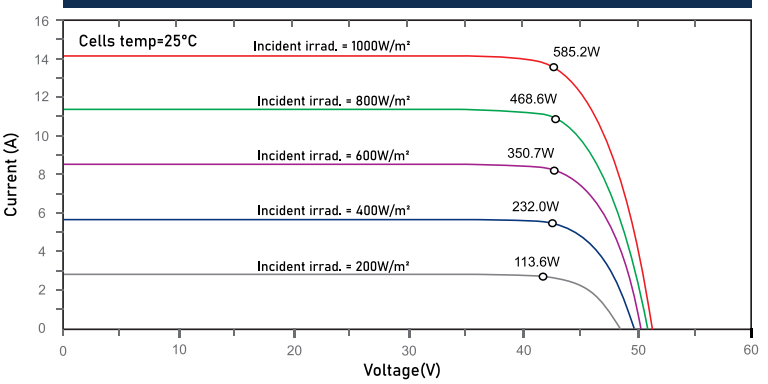
MODULE MECHANICAL DATA

SPECIFICATION DATA	
Cell Type	N-TOPCon, 144 Cells
Dimensions	2278x1134x30mm
Weight	32 Kgs
Front Cover	2.00 mm
Rear Cover	2.00 mm
Frame Material	Silver Anodized Aluminium Profile
J-Box	IP68, 3 diodes
Cable	350mm, 4mm²
Connectors	Mc4 Compatible Connector
Standard Packaging	36 Pieces/Pallet
Module Pieces per Container	720 pieces (40*HQ)

Note:
- The specifications included in this datasheet are subject to change without notice.
- The electrical data given here is for reference purpose only.
- Please confirm your exact requirements with the sales representative while placing your order.
- Refer installation Manual instructions & Saatvik warranty statement for terms & conditions.
- The dimensional tolerance for the short/long side of the module is ±2 mm, and diagonal difference ≤ 3 mm.

I-V CHARACTERISTICS AT DIFFERENT IRRADIATIONS

PV module: SGE585-144TGG



STVK/PMG/SGEXXX-144TGG-REV06