

Solar Panel

560 Wp - 590 Wp

**BIFACIAL - N TYPE TOPCON
144 CELL (G2B / G2G)**



30 Years Warranty for
Linear Performance[#]



12 Years Product Warranty on
Materials and Workmanship[#]



22.80% Rated Efficiency



Positive Power Tolerance
(-0 / +4.99%)

TRANSITION TO A BRIGHTER TOMORROW

-  PID Resistance
-  SMBB Technology
-  Auto Bussing & Soldering Technology
-  Enhanced Mechanical Load
-  High Power Output

COMPANY & PRODUCT CERTIFICATIONS

IS 14286, IEC 61215, IEC 61730, IEC 62804, IEC 61701
ISO 9001:2015 - Quality Management System
ISO 14001:2015 - Environment Management System
ISO 45001:2018 - Occupational Health and Safety



Technology Partner:
Total Solar Technologies Private Limited



ELECTRICAL DATA - STC* & NOCT**

Model	Unit	NSP144THC 560		NSP144THC 565		NSP144THC 570		NSP144TCH 575		NSP144TCH 580		NSP144TCH 585		NSP144TCH 590	
		STC	NOCT												
Capacity rating (P_{max})	Watt	560	421	565	425	570	429	575	432	580	436	585	440	590	444
Max. Power Voltage (V_{mp})	Volt	42.42	40.20	42.53	40.31	42.65	39.68	42.81	39.88	42.94	39.97	43.06	40.82	43.19	40.93
Max. Power Current (I_{mp})	Ampere	13.12	10.47	13.30	10.55	13.37	10.82	13.44	10.84	13.51	10.92	13.60	10.78	13.68	10.85
Open Circuit Voltage (V_{oc})	Volt	50.67	48.04	50.86	48.22	51.05	48.40	51.22	48.56	51.41	48.74	51.59	48.91	51.78	49.08
Short Circuit Current (I_{sc})	Ampere	13.88	11.21	13.96	11.28	14.04	11.34	14.11	11.38	14.19	11.46	14.26	11.51	14.33	11.57
Module Efficiency	%	21.68%		21.87%		22.07%		22.26%		22.45%		21.65%		22.84%	
Power Tolerance (W_p)	Watt	-0/+5													

*STC: irradiance 1000 W/m², cell temperature 25°C, Air Mass AM 1.5 according to EN 60904-3. Average efficiency reduction of 4.5 % at 200 W/m² according to EN 60904-1. Measurement uncertainty ±3%. **NOCT irradiance 800 W/m², ambient temperature 20°C, wind speed 1 m/sec.

BI-FACIAL OUTPUT - REARSIDE POWER GAIN*

Parameters		NSP-560TC	NSP-565TC	NSP-570TC	NSP-575TC	NSP-580TC	NSP-585TC	NSP-590TC
5%	Power Output (W)	588	593	599	604	609	614	620
	Module Efficiency (%)	22.76	22.96	23.17	23.37	23.57	23.78	23.98
10%	Power Output (W)	616	622	627	633	638	644	649
	Module Efficiency (%)	23.85	24.06	24.28	24.29	24.70	24.92	25.12
15%	Power Output (W)	644	650	656	661	667	673	679
	Module Efficiency (%)	24.93	25.15	25.38	25.60	25.82	26.05	26.27
20%	Power Output (W)	672	678	684	690	696	702	708
	Module Efficiency (%)	26.02	26.24	26.48	26.71	26.94	27.18	27.41

*Bifacial gain is dependent on various factors such as Ground Reflectance, Tilt Angle, Location, etc.

THERMAL CHARACTERISTICS

Temperature coefficient of Current (I_{sc}), α	0.45% / °C
Temperature coefficient of Voltage (V_{oc}), β	-0.26% / °C
Temperature coefficient of Power (P_m), γ	-0.30% / °C
NOCT	45 ± 2 °C
Operating temperature range	-40 to 85 °C

MECHANICAL CHARACTERISTICS

Cell Type	N-Topcon, 144 Cell
Dimensions	2278 * 1134 * 35mm
Weight	32 Kg
Front Cover	2.00 mm
Back Cover	2.00 mm
Frame Material	Silver Anodized Aluminum Profile
Junction Box	IP68, 3 Diodes
Cable	300 mm - 400 mm / 4 mm ²
Mechanical Load Strength	5400 Pa (Snow Load), 2400 Pa (Wind Load)

Caution: Please read safety and installation instructions before using the product.
#Warranty: Linear performance warranty for 30 years, with degradation up to 1% in 1st year and 0.4 %/year from year 2 to year 30. Please read NECON warranty documents thoroughly.
Disclaimer: Specifications included in the datasheet are subject to change without prior notice owing to continuous innovation in the Product Development and R&D Activities. NECON Solar Power Pvt. Ltd. reserves the right to make any adjustment to the information described here. Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.

DESIGN SPECIFICATIONS

