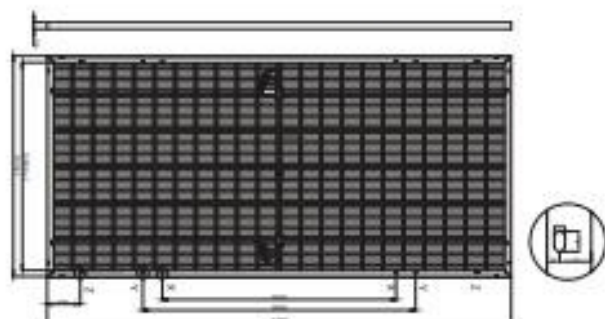


N-TOPCon G12R 600W ~ 620W

Mechanical Specifications



Size	2382 x 1134 x 35 mm
Weight	Approximately 33.5kg
Solar Cell	N-TOPCon double-sided single crystal, (182 x 105mm) 132Cell
Front	3.2mm high transmittance tempered glass (anti-reflective coating)
Back	Transparent grid backsheet
Frame	Anodized aluminum alloy
Junction Box	IP68, 3 bypass diodes
Cable	4mm ² Solar cable, 1200mm
Connector	MC4 compatible

Electrical Specifications

Items		SS-CM600TE		SS-CM605TE		SS-CM610TE		SS-CM615TE		SS-CM620TE	
		STC ¹	BNPI ²	STC ¹	BNPI ²	STC ¹	BNPI ²	STC ¹	BNPI ²	STC ¹	BNPI ²
Maximum Power Point Power (P _{max})	(W)	600	628.58	605	633.97	610	639.03	615	644.69	620	649.95
Open-Circuit Voltage (V _{oc})	(V)	47.04	47.20	47.19	47.35	47.33	47.49	47.48	47.64	47.63	47.79
Short-Circuit Current (I _{sc})	(A)	15.92	16.72	15.96	16.76	15.99	16.79	16.03	16.83	16.07	16.87
Maximum Power Point Voltage (V _{mp})	(V)	39.74	39.74	39.90	39.90	40.06	40.06	40.23	40.23	40.40	40.40
Maximum Power Point Current (I _{mp})	(A)	15.10	15.82	15.17	15.89	15.23	15.95	15.30	16.03	15.36	16.09
Efficiency (Eff)	(%)	22.21	23.27	22.40	23.47	22.58	23.66	22.77	23.87	22.95	24.06

STC¹: Irradiance 1,000W/m², Module Temperature 25°C, AM=1.5 (IEC 60904), Measurement Tolerance: ±3%

BNPI²: Irradiance 1,000W/m² + φ × 135W/m², Module Temperature 25°C, AM=1.5 (IEC 60904-1-2), Bifacial Generation may vary depending on the surrounding environment (albedo).

System Design Specifications

Maximum System Voltage	1500V	Rated Serial Fuse	30A
Maximum Test Load	5400 / 2400 Pa	Module Operating Temperature	-40 ~ +85 °C
Light Reflectance (Visible Spectrum)	Testing	LID / PID TEST	Testing
Fire Safety Classification	Class "C"		

Performance Guarantee

Product Warranty	12 years product warranty
Performance Warranty	99% output guaranteed for 1 year 87.4% of output guaranteed for 2 to 30 years Up to 0.4% degradation per year

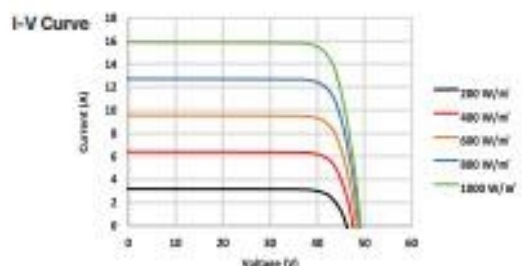
Temperature Coefficients

Short-Circuit Current (I _{sc}) [α]	0.048 % / °C	Open-Circuit Voltage (V _{oc}) [β]	-0.26 % / °C
Maximum Power Point Power (P _{max}) [γ]	-0.30 % / °C	Nominal Operating Cell Temperature (NOCT)	45 ± 3 °C

Packaging Specifications

Packaging Size	2402 x 1154 x 1110mm	Vehicle Loading (Pallets / Loading Capacity)	
Packaging Weight	868kg	5-ton truck (Long axis)	12 pallets / 300 sheets
Pallets	25 sheets	11-ton truck	14 pallets / 350 sheets
Vehicle Loading	2-stage horizontal loading	18-ton truck	16 pallets / 400 sheets

- Note**
- This product must be installed according to Shinsung E&G's official installation manual.
 - For information regarding the official installation manual, please contact Shinsung E&G.
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If you have any inquiries about Shinsung E&G, please contact us at the following address: ● AS inquiry 063-543-7811

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