THORNOV

Tangra[™]L HD C 600-620W

Composite Frame

N-Type High efficiency Monofacial Single Glass Module



30 years lifespan brings 10-30% more power generation compared with conventional P-type modules



The natural lack of LID in the N-type solar cell can increase power generation



Excellent low irradiance performance



Better light trapping and current collection to improve module power output and reliability



Industry-leading, lowest thermal coefficient



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature



Certified to withstand 2400 Pa of wind load and 5400 Pa of snow load



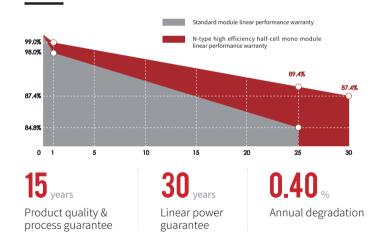
100% triple EL test, which greatly reduces the hidden cracks rate

WARRANTY INSURANCE



 Optional performance warranty insurance. Please contact our local sales staff for more information.

LINEAR PERFORMANCE WARRANTY



COMPREHENSIVE CERTIFICATES



ISO 9001:	Quality Management System				
ISO 14001:	Environmental Management System Standard				
ISO 45001:	International Occupational Health and Safety Assessment System Standard				
SA8000:	2014 Social Accountability Management System				
* Different markets have different certification requirements. Also, the products are under rapid innovation.					

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ELECTRICAL CHARACTERISTICS

Model of modules	TS-SWT66(600)-G11		TS-SWT66(605)-G11		TS-SWT66(610)-G11		TS-SWT66(615)-G11		TS-SWT66(620)-G11	
	STC	NMOT								
Maximum power — $P_{mp}(W)$	600	459	605	462	610	466	615	470	620	474
Open-circuit voltage — V_{oc} (V)	48.40	46.00	48.70	46.20	49.00	46.50	49.30	46.80	49.60	47.10
Short-circuit current — I _{sc} (A)	15.80	12.73	15.83	12.75	15.86	12.78	15.89	12.81	15.92	12.84
Maximum power voltage — $V_{mp}(V)$	40.30	37.90	40.50	38.10	40.80	38.30	41.00	38.60	41.22	38.88
Maximum power current — I_{mp} (A)	14.91	12.11	14.94	12.13	14.96	12.16	14.99	12.18	15.03	12.20
Module efficiency $-\eta_m$ (%)	22.2		22.4		22.6		22.8		23.0	
Power tolerance (W)	(0,+5)									
Maximum system voltage (V)	1500									
Maximum rated fuse current (A)	25									
Current operating temperature (°C)	-40~+85 °C									

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C , Spectra at AM1.5 NMOT (Nominal Module Operating Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2382x 1134 x 30 mm
Weight	28.5±1kg
Number of cells	132 cells
Cell	N-type monocrystalline
Glass	Tempered, 3.2 mm AR, high transmittance, low iron
Frame	Black GFRP(Glass Fiber Reinforced Polymer) (Multiple colors available)
Junction box	IP68, 3 bypass diodes
Output wire	4.0 mm ² , wire length: 300mm/1200mm/customized length
Connector	MC4 Compatible
Mechanical load	Snow load: 5400 Pa 🛠 / Wind load: 2400 Pa 🥹

TEMPERATURE PERFORMANCE RATINGS

Temperature coefficient (P _{max})	-0.30%/°C
Temperature coefficient (V _{oc})	-0.28 %/°C
Temperature coefficient (I_{sc})	+0.04 %/°C
Nominal Module Operating Temperature	43±2℃

PACKAGING CONFIGURATION

Container	40HQ
Quantity/pallet	36
Pallets/container	20
Quantity/container	720

180

160 (%) 140

120

100

80

60 40 20

> -50 -25 0 25 50

Normalized Isc, Voc, Pmax

Temperature Dependence of Isc,Voc,Pmax

Cell temperature (°⊂)

Isc

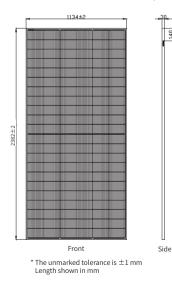
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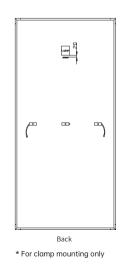
MODULE DIMENSIONS (MM)

140



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Scan the OR code to get more information



Web: www.thornovasolar.com

E-mail: info@thornovasolar.com

- 600 - 550 - 450 - 450 - 450 - 150 - 150 - 250 - 250

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* The parameters delineated within this datasheet, both technical and monetary, may exhibit variations contingent upon the region. Thornova Solar provides no warranty as to their absolute accuracy. Owing to our unceasing commitment to innovation, research, development, and product enhancement, Thornova Solar retains the discretion to amend any information encapsulated in this datasheet without any preceding notification. Clients are urged to procure the most recent treatation of this datasheet and incorporate it as an intrinsic component of the legally binding agreement ratified by both parties. The English restaint lack precedeng notification. Clients are urged to procure the most recent iteration of this datasheet and incorporate it as an intrinsic component of the legally binding agreement ratified by both parties. The English restaint ball take precedeng notifications of the English version shall take precedend in other languages, the stipulations of the English version shall take precedend on their actuations of the English version shall take precedend on their languages.

Characteristic curves (615W)

Voltage (V)





Current (A)

132 cells