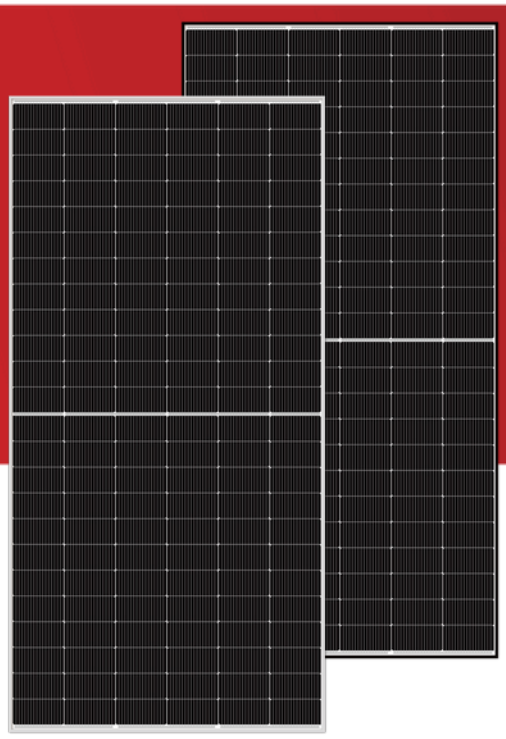
THORNOVA solar SUNOVA SOLAR | TIER 1 BloombergNEF

Tangra™ M

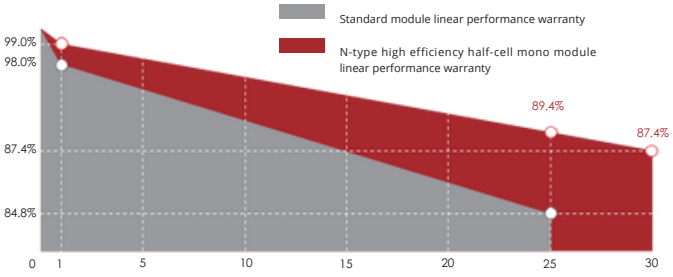
565– 585W

N-type high efficiency half-cell mono module



- *30-year lifespan delivers 10-30% more power 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*

LINEAR PERFORMANCE WARRANTY



15	30	0.40
years	years	%
Product quality & process guarantee	*Linear power guarantee*	*Annual degradation*

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*

WARRANTY INSURANCE

Ariel Re LLOYD'S Underwriters Munich RE 中国平安 PING AN P&C INSURANCE CO CN SZN

Make it happen!

144 cells

ELECTRICAL CHARACTERISTICS

Model of modules	SS-565-72MDH(T)	SS-570-72MDH(T)	SS-575-72MDH(T)	SS-580-72MDH(T)	SS-585-72MDH(T)
	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT
Maximum power— Pmp (W)	565 421	570 425	575 428	580 432	585 436
Open-circuit voltage—Voc (V)	51.45 48.57	51.60 48.71	51.75 48.85	51.90 48.99	52.09 49.17
Short-circuit current—Isc (A)	13.46 10.87	13.51 10.92	13.56 10.96	13.61 11.00	13.68 11.05
Maximum power voltage —Vmp (V)	44.10 41.28	44.23 41.41	44.35 41.52	44.48 41.64	44.61 41.76
Maximum power current — Imp (A)	12.81 10.19	12.89 10.26	12.96 10.31	13.04 10.38	13.12 10.44
Module efficiency— ηm (%)	21.9	22.1	22.3	22.5	22.6
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
NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m2, Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2278 x 1134 x 30 mm
Weight	27.2 kg
Number of cells	144 cells
Cell	N-type monocrystalline
Glass	Tempered, 3.2 mm AR, high transmittance, low iron
Frame	Anodized aluminum alloy (Silver/Black)
Junction box	IP68, 3 bypass diodes
Output wire	4.0 mm2, wire length: 300mm/1200mm/customized
Connector	MC4 Compatible
Mechanical load	Snow load: 5400 Pa / Wind load: 2400 Pa

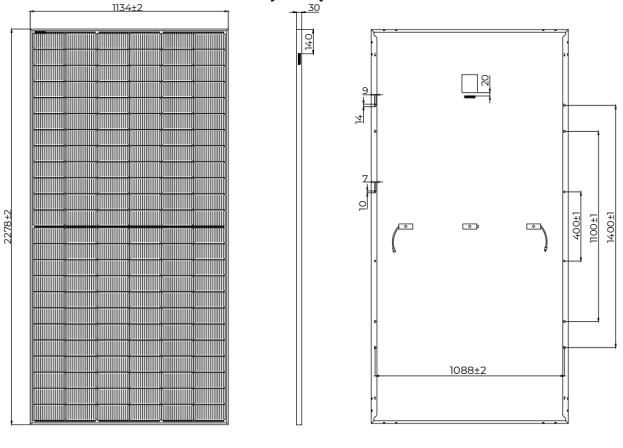
TEMPERATURE PERFORMANCE RATINGS

TANGRA temperature coefficient (P^{max})	-0.30 %/°C
Temperature coefficient (Voc)	-0.28 %/°C
Temperature coefficient (Isc)	+0.04 %/°C
Nominal operating cell temperature	43±2 °C

PACKAGING CONFIGURATION

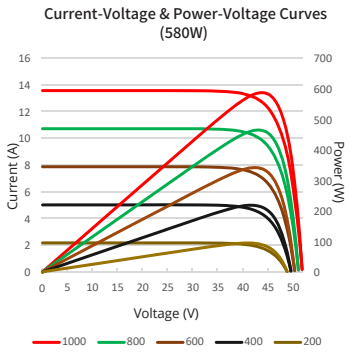
Container	40HQ
Quantity/pallet	36
Pallets/container	20
Quantity/container	720

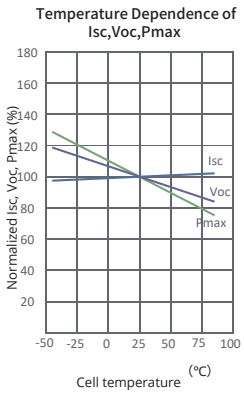
MODULE DIMENSIONS (MM)



Front Side Back

* The unmarked tolerance is ±1 mm
Length shown in mm





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