

N-type

TSxxxS8E-132GANT

xxx=590-615 in step of 5W

**BIFACIAL MODULE WITH
DUAL GLASS**

N-Type Black Frame

Positive power tolerance of 0~+3%

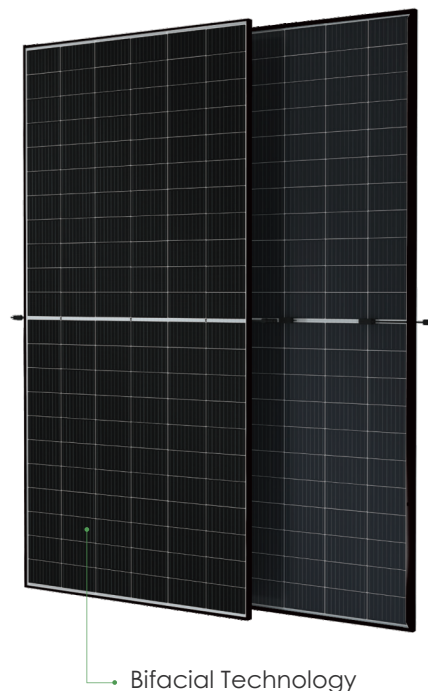
IEC61215(2016), IEC61730(2016)

ISO9001:2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018

Occupational health and safety management systems



Key Features



Multi Busbar Technology

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



Longer Life-time Power Yield

0.45% annual power degradation and 30 year linear power warranty.



PID Resistance

Excellent Anti-PID performance guarantee via optimized mass-production process and materials control.



Enhanced Mechanical Load

Certified to withstand: wind load (2400 Pascal) and snow load (5400 Pascal).



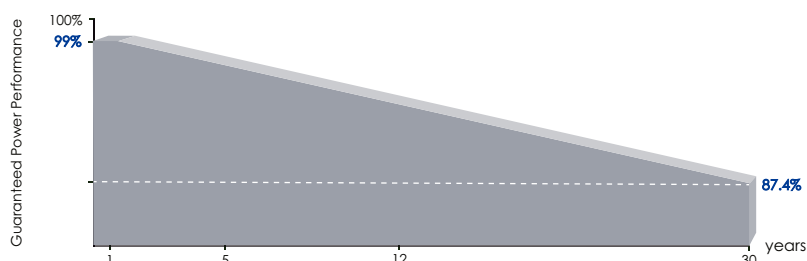
Higher Power Output

Module power increases 5-25% generally, bringing significantly lower LCOE and higher IRR.



POSITIVE QUALITY™
Continuous Quality Assurance

LINEAR PERFORMANCE WARRANTY

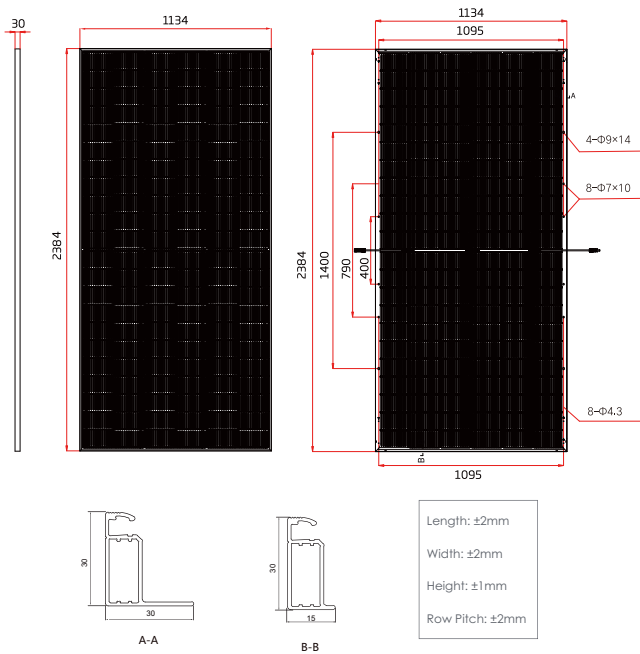


12 Year Product Warranty

30 Year Linear Power Warranty

0.45% Annual Degradation Over 30 years

Engineering Drawings



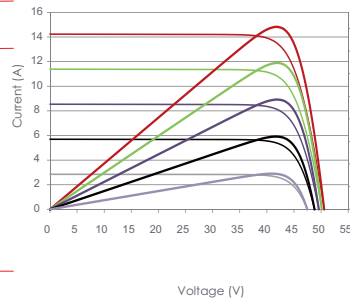
Packaging Configuration

(Two pallets = One stack)

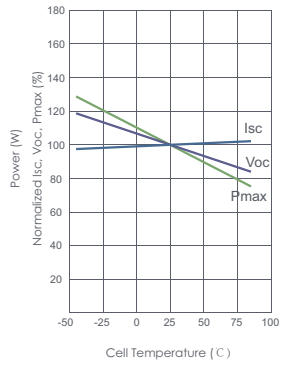
37pcs/pallets, 74pcs/stack, 740pcs/ 40'HQ Container

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (600W)



Temperature Dependence of Isc, Voc, Pmax



Mechanical Characteristics

Cell Type	N. type Mono-crystalline
No. of cells	132 (6×22)
Dimensions	2384×1134×30mm (93.86×44.65×1.18 inch)
Weight	33.3 kg
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Polyurethane Frame
Junction Box	IP68 Rated
Output Cables	TUV 1×4.0mm (+): 400mm , (-): 200mm or Customized Length

SPECIFICATIONS

Module Type	TS590S8E-132GANT		TS595S8E-132GANT		TS600S8E-132GANT		TS605S8E-132GANT		TS610S8E-132GANT		TS615S8E-132GANT	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax)	590W	445W	595W	449W	600W	453W	605W	457W	610W	461W	615W	464W
Maximum Power Voltage (Vmp)	39.88V	37.28V	40.02V	37.44V	40.16V	37.60V	40.31V	37.76V	40.46V	37.92V	40.60V	38.10V
Maximum Power Current (Imp)	14.80A	11.95A	14.87	12.00A	14.94A	12.05A	15.01A	12.10A	15.08A	12.15A	15.15A	12.19A
Open-circuit Voltage (Voc)	47.88V	45.48V	48.08V	45.67V	48.28V	45.86V	48.48V	46.05V	48.60V	46.24V	48.88V	46.43V
Short-circuit Current (Isc)	15.72A	12.71A	15.78A	12.75A	15.84A	12.79A	15.90A	12.83A	15.96A	12.88A	16.02A	12.93A
Module Efficiency STC (%)	21.8%		22.0%		22.2%		22.4%		22.6%		22.8%	
Operating Temperature(°C)	-40°C~+85°C											
Maximum system voltage	1500VDC (IEC)											
Maximum series fuse rating	35A											
Power tolerance	0~+3%											
Temperature coefficients of Pmax	-0.29%/°C											
Temperature coefficients of Voc	-0.25%/°C											
Temperature coefficients of Isc	0.045%/°C											
Nominal operating cell temperature (NOCT)	45±2°C											
Refer. Bifacial Factor	80±5%											

*STC: Irradiance 1000W/m²

Cell Temperature 25°C

AM=1.5

NOCT: Irradiance 800W/m²

Ambient Temperature 20°C

AM=1.5

Wind Speed 1m/s



Specifications included in this datasheet are subject to change without notice.