

EPOCH

GSN7S54T-415BB

FULL-BLACK MODULE
N-Type



KEY FEATURES



SMBB Technology

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



PID Resistance

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



Higher Power Output

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



Hot 2.0 Technology

The N-type module with Hot 2.0 technology has better reliability and lower LID/LETID.



Enhanced Mechanical Load

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

LINEAR PERFORMANCE WARRANTY



IEC61215(2016) IEC61730(2016)

ISO9001:2015:

Quality Management System

ISO14001:2015:

Environment Management System

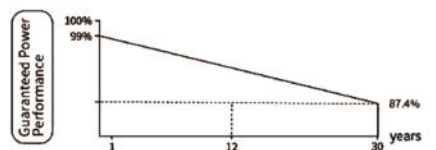
ISO45001:2018

Occupational health and safety management systems

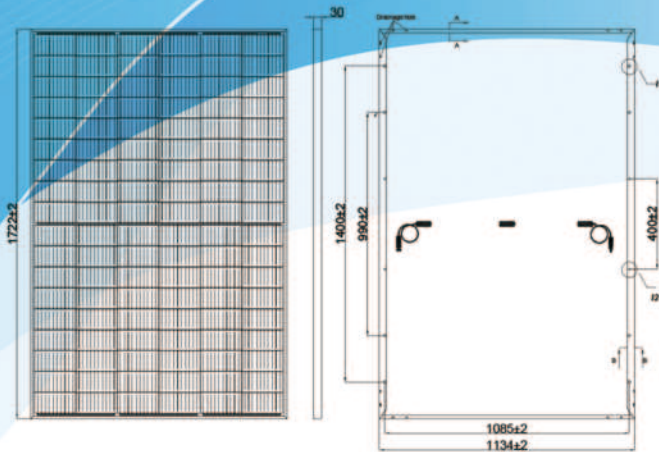
12 Year Product Warranty

30 Year Linear Power Warranty

0.40% Annual Degradation Over 30 years



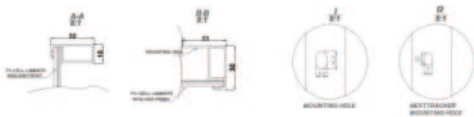
KEY FEATURES



Front

Side

Back



*This tolerance range applies only to the four-angle distance of the module as indicated above.

Packaging Configuration

(Two pallets = One stack)

36pcs/pallets,72pcs/stack,936pcs/ 40'HQ Container

SPECIFICATIONS

Module Type	GSN7S54T-395BB		GSN7S54T-400BB		GSN7S54T-405BB		GSN7S54T-410BB		GSN7S54T-415BB	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax)	395Wp	297Wp	400Wp	301Wp	405Wp	305Wp	410Wp	308Wp	415Wp	312Wp
Maximum Power Voltage (Vmp)	31.08V	28.70V	31.28V	28.89V	31.47V	29.08V	31.66V	29.59V	31.85V	29.78V
Maximum Power Current (Imp)	12.71A	10.24A	12.79A	10.30A	12.87A	10.36A	12.95A	10.42A	13.03A	10.48A
Open-circuit Voltage (Voc)	37.18V	35.31V	37.38V	35.50V	37.58V	35.69V	37.77V	35.88V	37.96V	36.06V
Short-circuit Current (Isc)	13.47A	10.88A	13.55A	10.94A	13.62A	11.00A	13.68A	11.04A	13.74A	11.09A
Module Efficiency STC (%)	20.23%		20.48%		20.74%		21.00%		21.25%	
Operating Temperature(C)	-40°C~+85°C									
Maximum system voltage	1000VDC(IEC)									
Maximum series fuse rating	25A									
Power tolerance	0~+3%									
Temperature coefficients of Pmax	-0.30%/°C									
Temperature coefficients of Voc	-0.25%/°C									
Temperature coefficients of Isc	0.046%/°C									
Nominal operating cell temperature (NOCT)	45±2°C									

*STC: Irradiance 1000W/m²

Cell Temperature 25°C

AM=1.5

NOCT: Irradiance 800W/m²

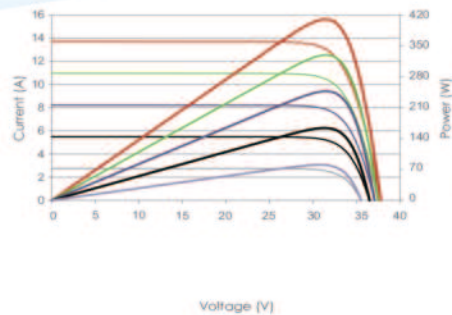
Ambient Temperature 20°C

AM=1.5

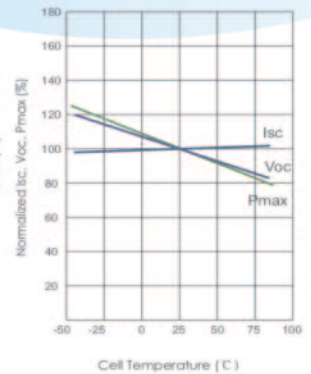
Wind Speed 1m/s

Electrical Performance & Temperature Dependence

Current-Voltage & Power-Voltage Curves (41°C)



Temperature Dependence of Isc, Voc, Pmax



Mechanical Characteristics

Cell Type	N type Mono-crystalline
No. of cells	108 (6 X 18)
Dimensions	1722X1134X30mm(67.79X44.65X1.18inch)
Weight	22 kg (48.50 lbs)
Front Glass	3.2mm, Anti-Reflection Coating High Transmission, Low Iron, Tempered Glass
Frame	Anodized Aluminium Alloy
Junction Box	IP68 Rated
Output Cables	300mm in length or Customized Length