

N-Type GSD8R48T [440-465W]

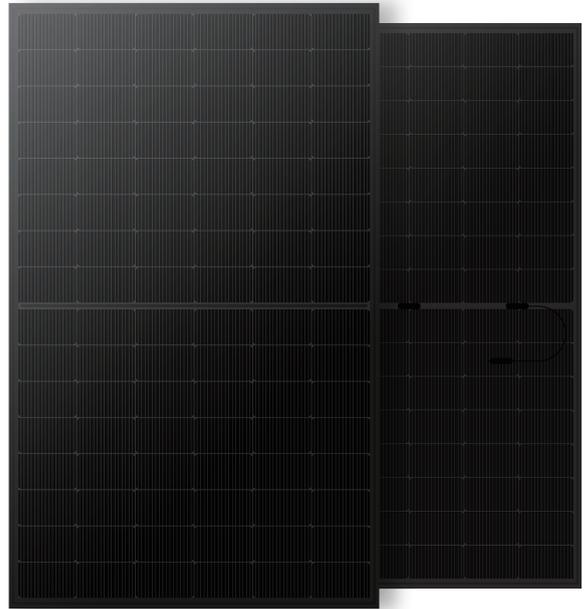
Bifacial Dual Glass Half-cut Mono TOPCon

IEC 61215 / IEC 61730 / UL 61730

ISO9001: 2015: Quality Management System

ISO14001:2015: Environment Management System

ISO45001:2018: Occupational Health And Safety Management System



KEY FEATURES



SMBB Technology

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



Lower Attenuation

Modules have better reliability and lower LID/LETID attenuation



Double Power Output

For higher power output, backside power output can be increased 5-25%



Wider Application

No water-permeability and high wear-resistance, can be widely used in high-humid, windy and dusty area



PID Resistance

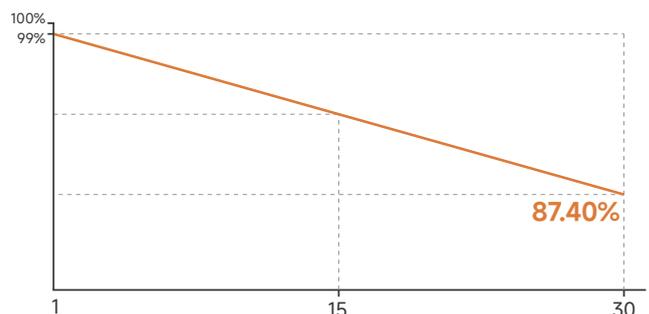
Excellent Anti-PID performance guarantee via optimized mass-production process and materials control

Guaranteed Power Performance

15 Years Product Warranty

30 Years Linear Power Warranty

0.40% Annual Degradation Over 30 Years



As different markets have different certification requirements, please consult our G-Star sales group to obtain the corresponding certification for the local market. If any special requirements are needed for the specific installing environment, please feel free to contact G-star technical support department anytime.

GSD8R48T

440-465W

Bifacial Dual Glass Half-cut Mono TOPCon

Weight

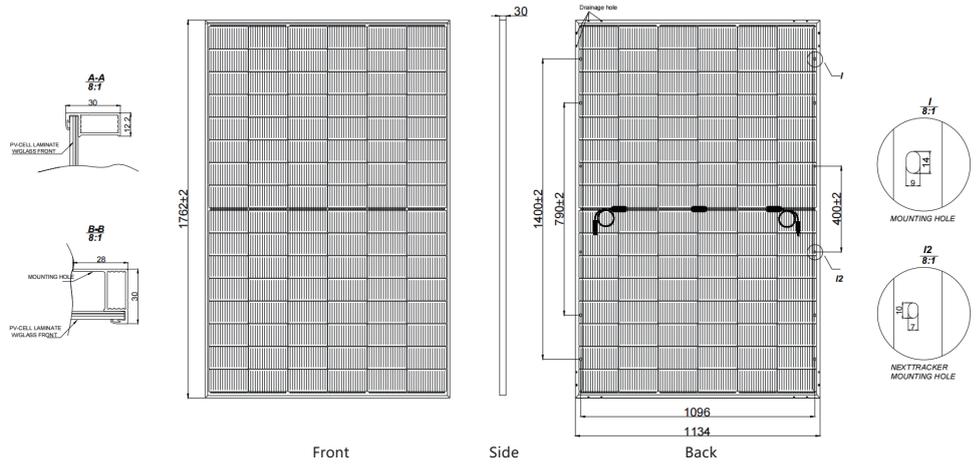
25 kg

Dimensions

1762*1134*30mm

Packaging

36pcs/pallet,936pcs/40'HQ Container



OPERATING CONDITIONS

Operating Temperature	-40°C~+85°C
Maximum System Voltage	1500V/DC
Maximum Series Fuse Rating	30A
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 Module Operating Temperature(NMOT)	43±2°C
*Under STC :BACKside Output Ratio =Pmax(rear)/Pmax(front) 80%±5%	

MECHANICAL CHARACTERISTICS

Cell Type	N type Monocrystalline 182.3*105mm
No. Of Cells	96 pcs in series (6x16)
Front Glass	2.0mm, Anti-Reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	Anodized Aluminium Alloy, black
Junction Box	IP68, 3Bypass Diodes
Output Cables	300mm in legh or Customized Length
Connectors	MC4/MC4-EVO2
Mechanical Load	5400Pa(Front)/2400Pa(Back)

ELECTRICAL PARAMETERS AT STC

Module Type	GSD8R48T-440BT	GSD8R48T-445BT	GSD8R48T-450BT	GSD8R48T-455BT	GSD8R48T-460BT	GSD8R48T-465BT
Maximum Power(Pmax)	440	445	450	455	460	465
Maximum Power Voltage (Vmp)	29.42	29.65	29.89	30.12	30.35	30.58
Maximum Power Current (Imp)	14.96	15.01	15.06	15.11	15.16	15.21
Open-Circuit Voltage (Voc)	35.15	35.36	35.57	35.78	35.99	36.20
Short-Circuit Current (Isc)	15.73	15.78	15.83	15.88	15.93	15.98
Module Efficiency STC (%)	22.02%	22.27%	22.52%	22.77%	23.02%	23.27%

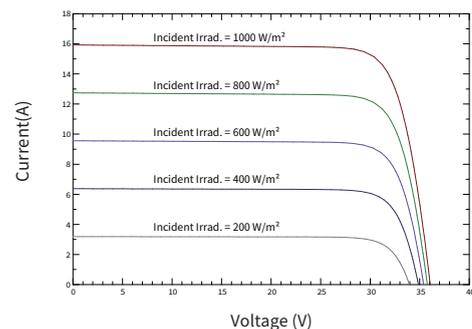
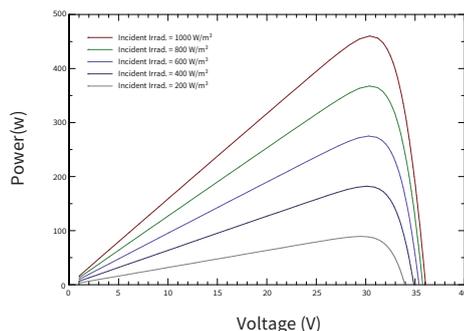
STC: Irradiance 1000W/m²,AM=1.5, Cell temperature 25°C.

ELECTRICAL PARAMETERS AT BSTC**

Maximum Power(Pmax)	487	492	498	503	509	514
Maximum Power Voltage (Vmp)	29.42	29.65	29.89	30.12	30.35	30.58
Maximum Power Current (Imp)	16.56	16.60	16.67	16.70	16.78	16.81
Open-Circuit Voltage (Voc)	35.15	35.36	35.57	35.78	35.99	36.20
Short-Circuit Current (Isc)	17.39	17.45	17.50	17.56	17.61	17.67
Module Efficiency BSTC (%)	24.37%	24.62%	24.92%	25.17%	25.47%	25.72%

**BSTC: Front side irradiation 1000W/m², Back side reflection irradiation 135W/m²,AM=1.5, Cell temperature 25°C.

IV-CURVE



E-mail: info@gstar-solar.com
Website: www.gstarsolar.com

Due to ongoing innovation, R&D enhancement, the specification and key features described in this datasheet may deviate slightly and are not guaranteed. G-Star reserves the right to make any adjustment to the information described herein at any time without notice. Please always obtain the most recent version of the datasheet which shall be duly incorporated into the binding contract made by the parties governing all transactions related to the purchase and sale of the products described herein.