GEM G12R/96D

430-455W

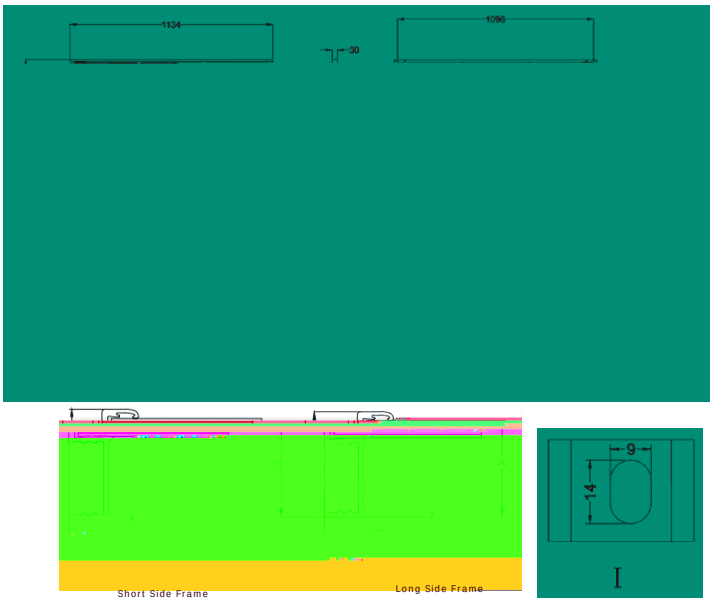


455W	22.8%	1%	0.4%
Maximum Power	Highest Conversion Efficiency	First Year Degradation	2-30 Years Annual Power Attenuation

Mechanical Parameters

Cell Type	N-Type TOPCon
No. of cells	96 (2×48)
Output Cables	TüV 1×4mm ²
	(+)300mm,(-)200mm in length or customized length
Glass	Front: 2.0mm, AR-coating, semi-tempered
	Rear: 2.0mm, semi-tempered
Frame	Anodized aluminum alloy frame
Weight	24.1 kg (53.13 lbs)
Dimension	1762×1134×30mm
Packaging	37 pcs per pallet
	222 pcs per 20' HC, 962 pcs per 40' HC
Protection Class	Class II
Fire Rating	IEC Class A

Engineering Drawings



* Length:±2mm Width:±2mm Height:±1mm Row Pitch:±2mm

Electrical Characteristics (STC Test)

Module Type	GK-4-48HTBD-430M		GK-4-48HTBD-435M		GK-4-48HTBD-440M		GK-4-48HTBD-445M		GK-4-48HTBD-450M		GK-4-48HTBD-455M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	430	323	435	327	440	331	445	335	450	338	455	342
Open-circuit Voltage (Voc/V	34.55	32.60	34.72	32.75	34.89	32.91	35.06	33.08	35.23	33.25	35.40	33.42
Short-circuit Current (Isc/A)	15.80	12.82	15.87	12.86	15.94	12.90	16.01	12.94	16.08	12.98	16.15	13.02
Maximum Power Voltage (Vmp/V)	29.18	27.27	29.36	27.49	29.54	27.66	29.72	27.83	29.90	27.96	30.08	28.15
Maximum Power Current (Imp/A)	14.74	11.85	14.82	11.90	14.90	11.97	14.98	12.04	15.05	12.09	15.13	12.15
Module Efficiency (%)	21.5		21.8		22.0		22.3		22.5		22.8	

Note: 1 STC: Irradiance 1000W/M², Cell Temperature25 , AM=1.5 2 NOCT: Irradiance 800W/M², Ambient Temperature 20 AM=1.5, Wind Speed 1M/S

Different Rearside Power Gain (Reference to 435W

Rearside Power Gain	5%	10%	20%
Maximum Power at STC (Pmax)	456.8	478.5	522.0
Open-circuit Voltage (Voc/V)	34.7	34.7	38.7
Short-circuit Current (Isc/A)	16.7	17.5	19.0
Maximum Power Voltage (Vmp/V)	29.4	29.4	29.4
Maximum Power Current (Imp/A)	15.6	16.3	17.8
Module Efficiency (%)	22.9	23.9	26.1

*The above data is for reference only. When signing a contract, the latest version of the product specification shall prevail.

Working Parameters

Operating Temperature	-40 ~ +85
Power Tolerance	0~ +5W
Maximum System Voltage	1500V(IEC)
NOCT	45±2
Maximum Series Fuse Rating	30A
Bifacial Factor	80±5%
Junction Box	IP68

Temperature Ratings (STC

Temperature coefficient of Isc	+ 0.045%/
Temperature coefficient of Voc	- 0.25%/
Temperature coefficient of Pmax	- 0.29%/

Mechanical Loading

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm hailstone at 23m/s

Gokin

Gokin Solar Co., Ltd.
https://www.gokinsolar.com
gk@gokinsolar.com
Office 1102, No. 58 Huajin Street, Hengqin Free Trade Zone, Zhuhai City, Guangdong Province, China.
Product data is updated as of May 2024. Gokin Solar Co., Ltd. reserves the right to change specifications.