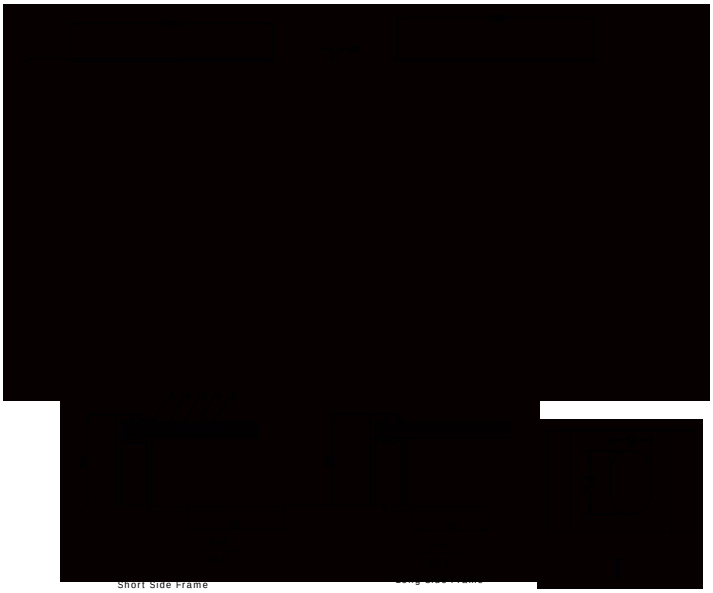
GEM G12R/96D

430-455W

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: 1.6mm, AR-coating, semi-tempered
	Rear: 1.6mm, semi-tempered
Frame	Anodized aluminum alloy frame
Weight	20.1 kg (44.31 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 C

Engineering Drawings



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

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

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.

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

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

Gokin

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Product data is updated as of May 2024. Gokin Solar Co., Ltd. reserves the right to change specifications.