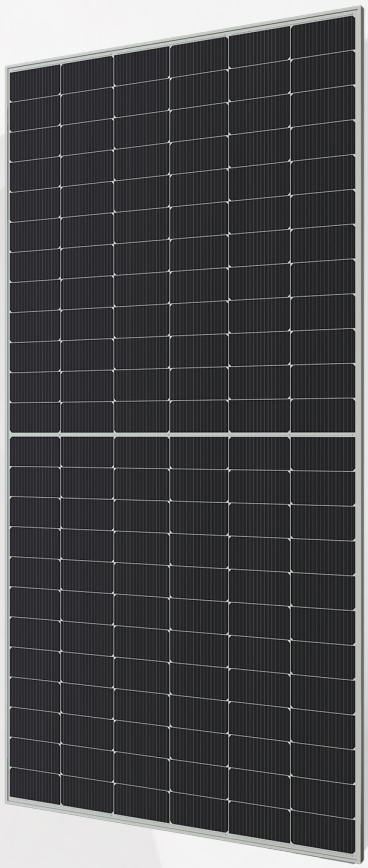
GS ENERGY SYSTEMS
(PRIVATE) LIMITED

WOLF M10/144D

575-605W



Supreme Quality

HIGH EFFICIENCY

Module efficiency up to 23.0% based on N-Type wafer and TOPCon technology

EXCELLENT ENERGY YIELD

More power output in field operation due to better thermal behaviors, weak-light performance and bifaciality

ANTI-DEGRADATION

Unsusceptible to LID, LeTID and less annual degradation due to special charateristics of N-Type

QUALITY GUARANTEE

High module quality ensures long-term reliability

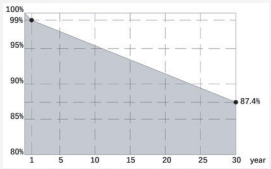
Module Characteristics

12 -Year
Product Warranty

30-Year
Linear Power Warranty

1%
First Year Degradation

0.4%
Annual Power Degradation



At least 87.4% of nominal power up to 30 years



CLEAN ENERGY COUNCIL MEMBER

IEC 61215(2021) / IEC 61730(2023)
ISO 9001: 2015: ISO Quality Management System
Anti-PID / Ammonia / Salt-mist / Dust and sand
Made in China

605W
Maximum Power

23.3%
Highest Conversion Efficiency

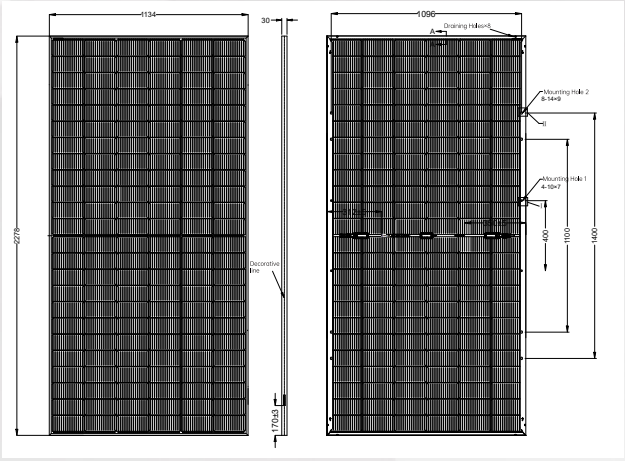
1%
First Year Degradation

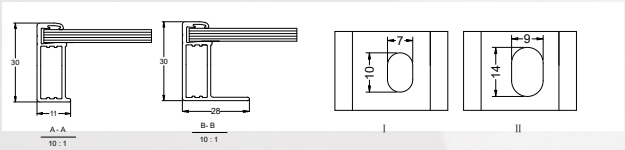
0.4%
2-30 Years Annual Power Attenuation

Mechanical Parameters

Cell Type	N-Type TOPCon
No. of cells	144 (2×72)
Output Cables	TüV 1×4mm²
	(+)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	31.0kg (68.34lbs)
Dimension	2278×1134×30mm
Packaging	37 pcs per pallet
	148 pcs per 20' HC, 740 pcs per 40' HC
Protection Class	Class II
	IEC Class C

Engineering Drawings





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

Electrical Characteristics (STC Test)

Module Type	GK-1-72HTBD-575M		GK-1-72HTBD-580M		GK-1-72HTBD-585M		GK-1-72HTBD-590M		GK-1-72HTBD-595M		GK-1-72HTBD-600M		GK-1-72HTBD-605M	
Testing Condition	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power (Pmax/W)	575	434	580	438	585	442	590	446	595	450	600	454	605	458
Open-circuit Voltage (Voc/V)	51.27	48.56	51.47	48.73	51.67	48.92	51.87	49.12	52.07	49.26	52.27	49.44	52.47	49.62
Short-circuit Current (Isc/A)	14.31	11.54	14.37	11.59	14.43	11.64	14.49	11.69	14.55	11.74	14.61	11.79	14.67	11.84
Maximum Power Voltage (Vmp/V)	42.44	40.14	42.59	40.30	42.74	40.45	42.89	40.58	43.04	40.72	43.19	40.86	43.36	41.00
Maximum Power Current (Imp/A)	13.55	10.81	13.62	10.87	13.69	10.93	13.76	10.99	13.83	11.06	13.90	11.12	13.96	11.17
Module Efficiency (%)	22.3		22.5		22.7		22.8		23.0		23.2		23.4	

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 585W)

Rearside Power Gain	5%	10%	20%
Maximum Power at STC (Pmax)	614.3	643.5	702.0
Open-circuit Voltage (Voc/V)	51.7	51.7	51.7
Short-circuit Current (Isc/A)	15.2	15.9	17.3
Maximum Power Voltage (Vmp/V)	42.7	42.7	42.7
Maximum Power Current (Imp/A)	14.4	15.1	16.4
Module Efficiency (%)	23.8	24.9	

*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)
NMOT	45±2℃
Maximum Series Fuse Rating	35A
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

www.gsenergysystems.com
info@gsenergysystems.com

