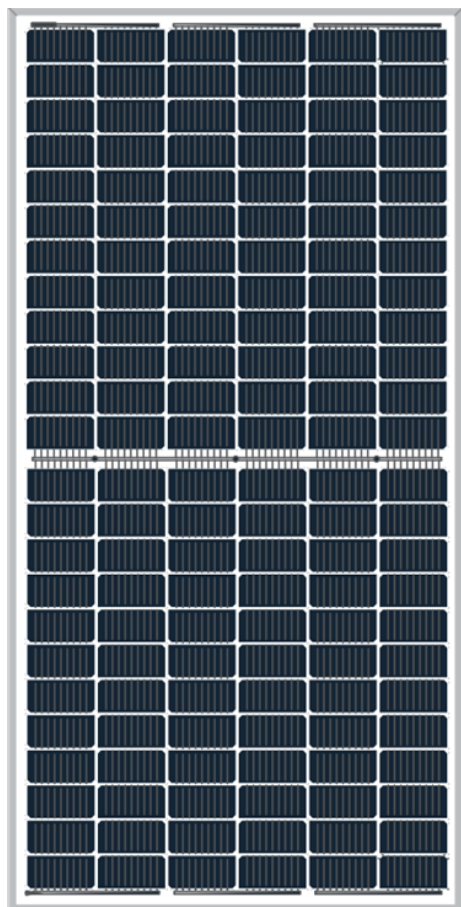


MONOCRYSTALLINE SILICON MODULE



GSI CORPORATION
Global Solutions Integrated



POWER 440-450W MONOCRYSTALLINE SILICON MODULE

Products Characteristics



Widely using of most popular and mature type of modules for on-grid system.



Leading manufacturing technology in PV industry, strictly controlling the quality of raw materials and the process of producing.

EL

100% EL inspection, ensures modules are defects free.



Cells binned by current to improve module performance.



Anti-reflective glass. Not only to increase the light absorption, but also to make the module has the function of self-cleaning in water environment, effectively reducing the power loss caused by dust.



Outstanding performance in low-light irradiance environments.



Excellent mechanical load resistance: Certified to withstand high wind loads (2400pa) and snow loads (5400pa).



High salt and ammonia resistance.



Positive power tolerance: $0 \pm 5\text{W}$



10 years
products
warranty

25 year
power output
warranty

Warranty

- 10 years product warranty.
- 10-years 90% of Min. rated output and 25-years 80% of Min. rated output power warranty

Comprehensive Certificates

- ISO Certificate
- IEC61215, IEC61730 Certificate
- TUV-SUD Certificate
- CE Certificate

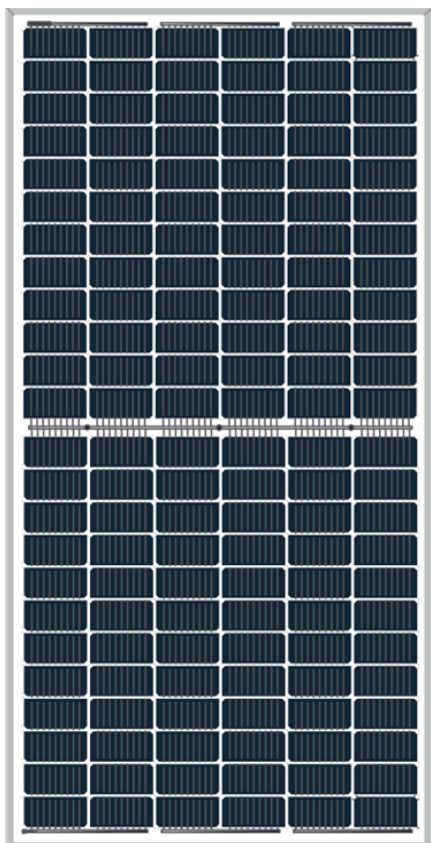
Specifications subject to technology and test conditions.

POWER 440-450W

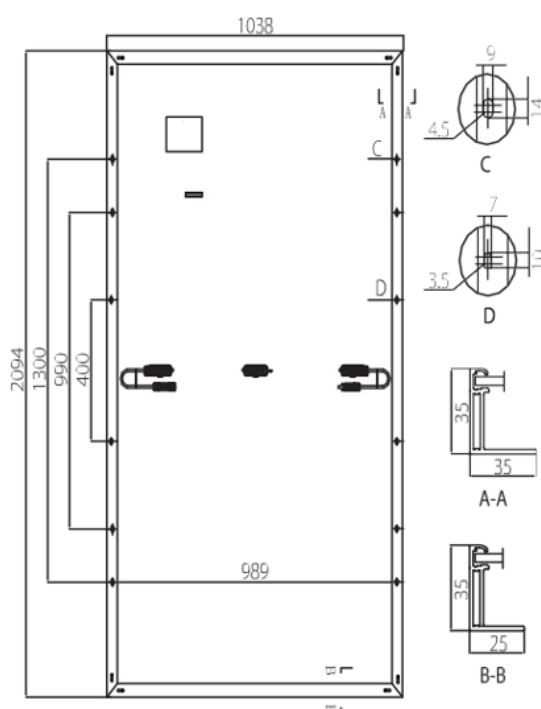


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Engineering Drawings (Front Side)



Engineering Drawings (Back Side)



RAW MATERIALS AND MECHANICAL PARAMETERS

POWER	440-450W
NO. of Cells and Connections	6 x 24 = 144
Dimensions (mm) (L*W*H)	2094 x 1038 x 35
Weight (kg)	23.5
Glass	3.2mm Tempered Glass
Encapsulation	EVA
Backsheet	Multilayer Composite
Aluminium-Frame	Silvery/Black Anodized aluminum alloy
Junction-Box	IP68
Cable	4mm ² , 300mm (legth can be customized)
Connector	MC4 and MC4 Compatible
20HQ	150 pcs
40HQ	660 pcs

PERFORMANCE PARAMETERS

POWER	440-450W
Maximum System Voltage	1500 V
Operating Temperature	-40±80°C
Maximum Series Fuse	20A
Maximum Static Load, Front Side (ex. Snow, Wind)	5400 Pa
Maximum Static Load, Back Side (ex. Snow, Wind)	2400 Pa
Application Grade	Classe A

RAW MATERIALS AND MECHANICAL PARAMETERS

POWER	440W	445W	450W
Rated Maximum Power (Mp)	440W	445W	450W
Power Tolerance		0±5w	
Module Efficiency	20.2%	20.5%	20.7%
Open Circuit Voltage (Voc)	48.9V	49.1V	49.3V
Maximum Power Voltage (Vmp)	41.1V	41.3V	41.5V
Short Circuit Current (Isc)	11.46A	11.53A	11.6A
Maximum Power Current (Imp)	10.71A	10.78A	10.85A
Temperature Coefficient of Isc		+0.048%	
Temperature Coefficient of Voc		-0.27%	
Temperature Coefficient of Pmp		-0.35%	

Standard Test Condition

Irradiance: 1000W/m², Cell Temperature: 25°C,
Spectrum AM: 1.5

The Electrical Parameters of the module are the average theory figure under the standard test condition, each one exists difference. Cannot be treated as the basis of module delivery