



AMERICAN LED. GLOBALLY PERFECTED.

MANUFACTURING A UNITED FUTURE

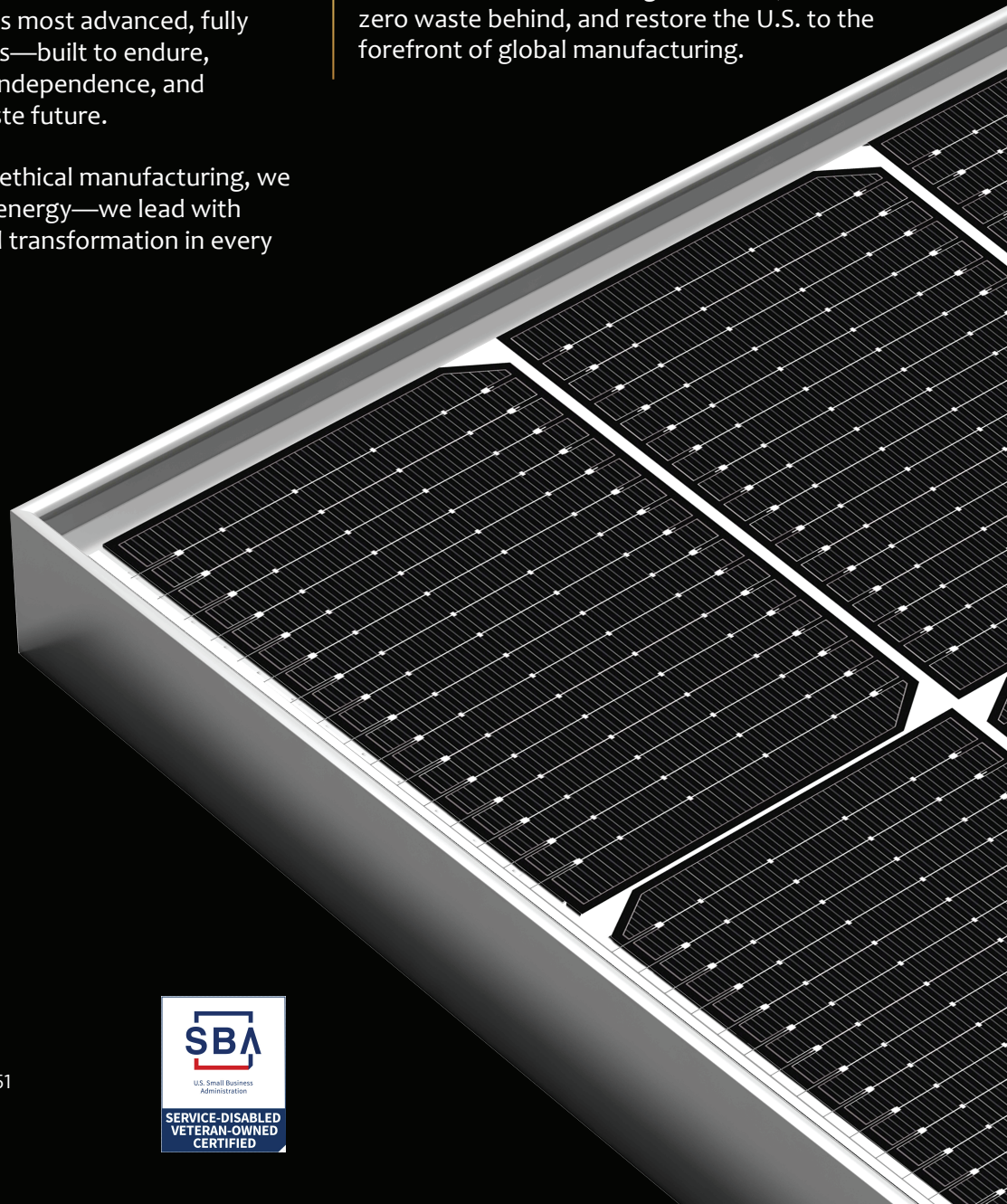
Mission

At Solarix, we power a brighter tomorrow through integrity, American-made excellence, and deep commitment to our communities. We manufacture the world's most advanced, fully recyclable solar modules—built to endure, engineered for energy independence, and designed for a zero-waste future.

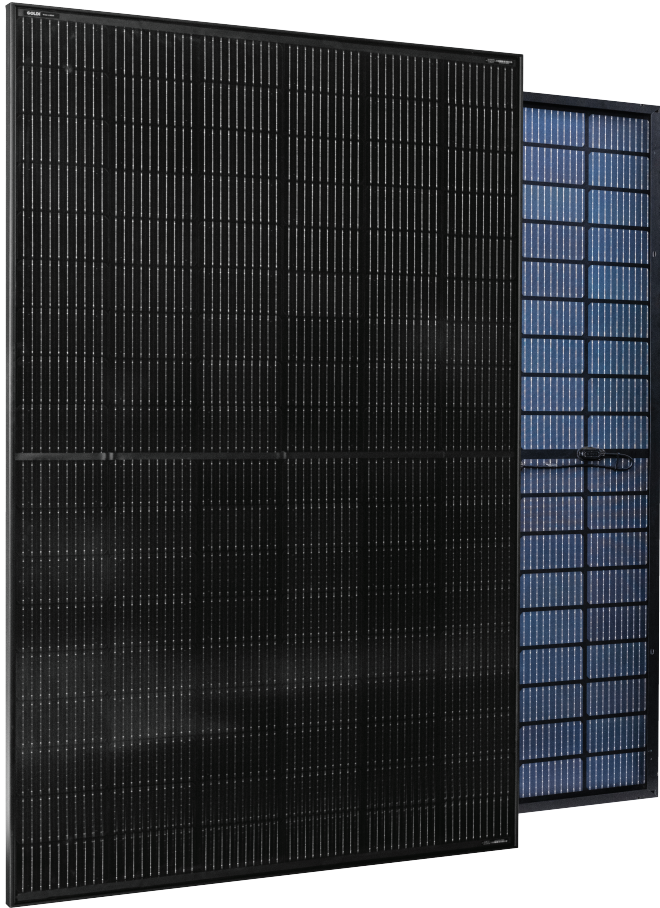
As the gold standard in ethical manufacturing, we don't just deliver clean energy—we lead with trust, transparency, and transformation in every watt we produce.

Vision

To lead a clean energy revolution rooted in American resilience—delivering solar solutions that endure for generations, leave zero waste behind, and restore the U.S. to the forefront of global manufacturing.



 **430Wp - 455Wp**



High Saving Lower LCOE, reduced BOS cost, shorter payback time.



High Efficiency
Excellent module conversion efficiency of up to 23.03%



Superior Low-Light Performance
Optimized to deliver high power output even in low-irradiance conditions such as cloudy, foggy, or early morning environments.



Minimal Light-Induced Degradation (LID)
Engineered with advanced N-type cell technology to significantly reduce both LID and LeTID, ensuring long-term performance stability and reliability.



Exceptional PID Resistance
Built to prevent potential-induced degradation (PID), ensuring minimal power loss and consistent performance across large-scale installations.



Increased Energy Yield (10–30%)
Bifacial design and high-efficiency cell technology enable greater energy generation versus conventional mono-facial modules under optimal conditions.



Versatile Deployment Capabilities
Optimized for BIPV, vertical installations, and extreme conditions including snowfields, high humidity, coastal zones, and high-wind or dust-prone areas. Certified for 5400 Pa front load and 2400 Pa back load (±5%) for exceptional durability.



Designed & Engineered in the U.S, Globally Sourced.
Geopolitically Compliant.

Certifications:



Intertek



UL 61730 / IEC 61730-1 / IEC 61215



MATERIAL & PROCESSING



PERFORMANCE WARRANTY

Headquarter address:

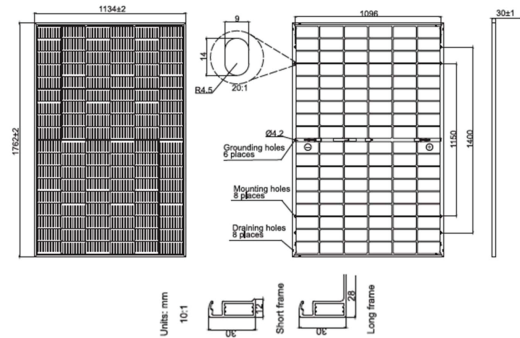
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MECHANICAL SPECIFICATIONS

Cell Type	N-Type Monocrystalline
Weight	22 kg
Dimension	1762 x 1134 x 30mm (L x W x T)
Cables	4 mm , Solar Cable 400mm/1400mm Length or Customized Length
No. of Cells	108 (6x18)
Front Glass	2.0 mm, High Transmisson, AR Coated, Tempered Glass
Back Glass	2.0 mm, Heat Strengthened Glass, High Transmission, AR Coated
Junction Box	IP68 Certified, 3 Bypass Diodes
Packing	36 pcs/pallet, 936 pcs/40 HQ
Connector Type	MC4/MC4 Compatible/Staubli Electrical connectors
Encapsulation	PID & UV resistance
Frame	Anodized Aluminium Alloy

ENGINEERING DRAWINGS



Remark: Customized frame color and cable length available upon request

ELECTRICAL SPECIFICATIONS

Module Type	MGS-N-430W-M54H	MGS-N-435W-M54H	MGS-N-440W-M54H	MGS-N-445W-M54H	MGS-N-450W-M54H	MGS-N-455W-M54H
Testing Condition	STC	STC	STC	STC	STC	STC
Open Circuit Voltage (c/V)	38.50	38.70	38.90	39.10	39.30	39.50
Maximum Power Voltage (Vmp/V)	32.12	32.29	32.47	32.65	32.82	33.00
Short Cucurit Current (Isc/A)	14.14	14.23	14.31	14.40	14.48	14.56
Maximum Power Current (Imp/A)	13.39	13.47	13.55	13.63	13.71	13.79
Maximum Power (Pmax/W)	430.00	435.00	440.00	445.00	450.00	455.00
Module Efficiency (%)	21.50	21.80	22.00	22.30	22.50	22.8
Power Tolerance	0~+5W					
Tolerance of Rating Voc, Vmp, Isc, Imp	±3%					
Irradiance 1000W/m2, Cell Temperature 25°C, AM1.5C						

ELECTRICAL SPECIFICATIONS WITH 10% REAR SIDE POWER GAIN#

Open Circuit Voltage (c/V)	30.50	38.70	38.90	39.10	39.30	39.50
Maximum Power Voltage (Vmp/V)	32.11	32.29	32.47	32.65	32.82	32.99
Short Cucurit Current (Isc/A)	15.27	15.36	15.46	15.55	15.64	15.73
Maximum Power Current (Imp/A)	14.46	14.55	14.63	14.72	14.81	14.89
Maximum Power (Pmax/W)	465	470	475	481	486	491

Additional Power Gain From Rear Side Compared to Power of Front Side at STC Depends on Mounting Structure (Height, Tilt Angle Etc.) and Reflectivity of Ground. Bi-Faciality: 80±10%

MAXIMUM RATINGS

Maximum system Voltage	1500V DC
Operating Temperature	- 40°C to 85°C
Maximum Series Fuse	30A
Electrical Safety	Class II
Fire Rating	Class C (Type 1)
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Hail resistance	Max. diameter of 25 mm with velocity 23 m/s
NOCT Temperature	45°C +/- 2°C

TEMPERATURE COEFFICIENTS

Temperature Coefficient (Pmax)	-0.30% /°C
Temperature Coefficient (Voc)	-0.26 %/°C
Temperature Coefficient (Isc)	0.046%/°C

PERFORMANCE WARRANTY

- 1% 1st-year Degradation
- 0.4% Annual Degradation Over 30 Years

ELECTRICAL PERFORMANCE

