



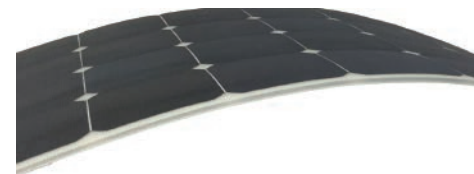
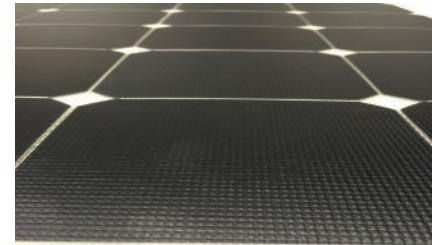
POWERFUL PERFORMANCE FOR A CLEANER PLANET

- ◆ MANUFACTURED IN MONTREAL, CANADA
- ◆ 25 YEAR LINEAR POWER WARRANTY
- ◆ 12 YEAR WORKMANSHIP WARRANTY
- ◆ OUTSTANDING LOW LIGHT PERFORMANCE
- ◆ MC4 CONNECTORS
- ◆ POSITIVE TOLERANCE 0/+3%

GMASOLAR introduces the new generation of solar modules. Providing more power by utilizing high efficiency solar cells. Ideal for off grid systems thanks to their robust design proving reliability and high quality performance in isolated areas.

GMASOLAR Reliability. All our solar modules are manufactured according to UL and IEC standards. Each solar module is passed through several strict quality control tests before and after the lamination process. One of the many tests which include the Solar Cell and Module EL (Electroluminescence) Tester. The EL tester provides valuable information and overall the quality of the production process. With EL imaging, it detects every hidden defect and thus ensures an effective, accurate and high performance solar module.

GMASOLAR Flexibility. Our solar modules are designed to offer worry free use in the harshest weather climates. Our frame allows installation in multiple configurations, making an easy, safe and faster installation. The water drain holes prevent frame breakage due to freezing temperatures.



ELECTRICAL PARAMETERS @ STC

Module Type		GMA 100-32
Peak Power	P _{max} (W)	100
Maximum Power Voltage	V _{mp} (V)	17.8
Maximum Power Current	I _{mp} (A)	5.62
Open-circuit voltage	V _{oc} (V)	21.6
Short-circuit current	I _{sc} (A)	5.97
Module Efficiency	η(%)	17.60

Values at standard test conditions STC (Air mass AM1.5, Irradiance 1000W/sqm, Cell temperature 25°C)
Power Measurement Tolerance: 0 / +3%

MECHANICAL DATA

Solar Cell (type / dimension)	High efficiency cells -Mono silicon / 125 x 125 mm
Cell (quantity / orientation)	32 cells / 4 x 8
Module Dimension (L x W x H)	1050 X 540 X 3 mm (41.34 x 21.26 x 0.12 inches)
Weight	1.35 kg
No. of Holes in Frame	4 installation holes
Front Material	ETFE (Ethylene Tetrafluoroethylene)*
Junction Box (protection degree)	IP 65 Rated
Output Cables (Length)	900 mm length for positive (+) and negative (-)
Connector (type / protection degree)	MC4 / IP68 rated

*With a lifespan of over 20 years and excellent weathering properties

TEMPERATURE COEFFICIENTS

Nominal Operating Cell Temp. (NOCT)	45 +/- 2 °C
Voltage Temperature Coefficient (VOC)	-0.28% / °C
Current Temperature Coefficient (Isc)	0.033% / °C
Power Temperature Coefficient (Pmax)	-0.38% / °C

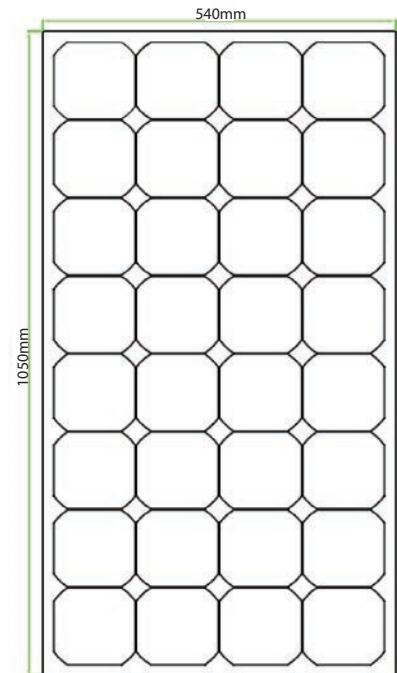
MAXIMUM RATINGS

Operational Temperature	-40°C to +85°C
Maximum System Voltage	600V DC
Max Series Fuse Rating	10A

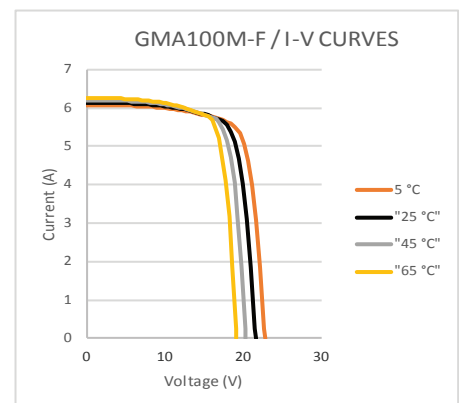
WARRANTY & CERTIFICATIONS

Certification	CE
Warranty	2 years workmanship, 10 years 90% Power Warranty

MECHANICAL DRAW (Front View)



I-V CURVE OF PV MODULE GMA Flex 32-M (High Efficiency) / 100W



APPLICATIONS

Application Any off-grid solar power station

Note: The specifications are subject to change without notice.