# GMAsolar 1/2





## 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 120-36
Peak Power	Pmax (W)	120
Maximun Power Voltage	Vmp (V)	17.4
Maximun Power Current	Imp (A)	6.9
Open-circuit voltage	Voc (V)	22
Short-circuit current	Isc (A)	8.03
Module Efficiency	η(%)	12.2

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

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Solar Cell (type / dimension)	Poly-crystalline solar cells / 156 x 124 mm	
Cell (quantity / orientation)	36 cells / 4 x 9	
Module Dimension (L x W x H)	1186 x 675 x 35 mm	
Weight	9 kg	
Frame (material / colour)	Anodized aluminum / Black	
Front Glass (material / thickness)	High transmission low-iron tempered glass / 3.2mm	
Backsheet (material)	Fluoropolymer coating / PET / polyolefin	
Mechanical Load	50 psf, 245Kg/sqm, 2400 Pa, 0.34 psi, front and back	
Junction Box (protection degree)	≥IP 65	
Junction Box (diode)	Two (2) bypass diodes	
Output Cables (Length/cross-sectonal area)	900 mm length, 10 AWG PV cable, UV protected	
Connector (type / protection degree)	MC4 / IP68 rated	
TEMPERATURE COEFFICIENTS		

Nominal Operating Cell Temp. (NOCT)	45 +/- 2 °C
Voltage Temperature Coefficient (VOC)	-0.31% / °C
Current Temperature Coefficient (Isc)	0.033% / °C
Power Temperature Coefficient (Pmax)	-0.42% / °C

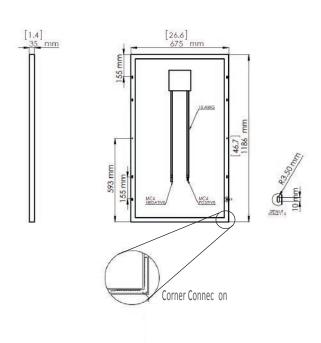
### **MAXIMUM RATINGS**

Operatonal Temperature	-40°C to +85°C
Maximun System Voltage	1000V DC (IEC) - 600V DC (UL)
Max Series Fuse Rating	10A

### **WARRANTY & CERTIFICATIONS**

Certfication	Tested to UL 1703 / IEC 61215 / IEC 61730 CE .
Fire Rating	Class C
Warranty	12 years workmanship, 12 years 90%, 25 years 80% Power Warranty

#### **MECHANICAL DRAW (Back View)**



#### I-V CURVE OF PV MODULE GMA 120W 36c-P

