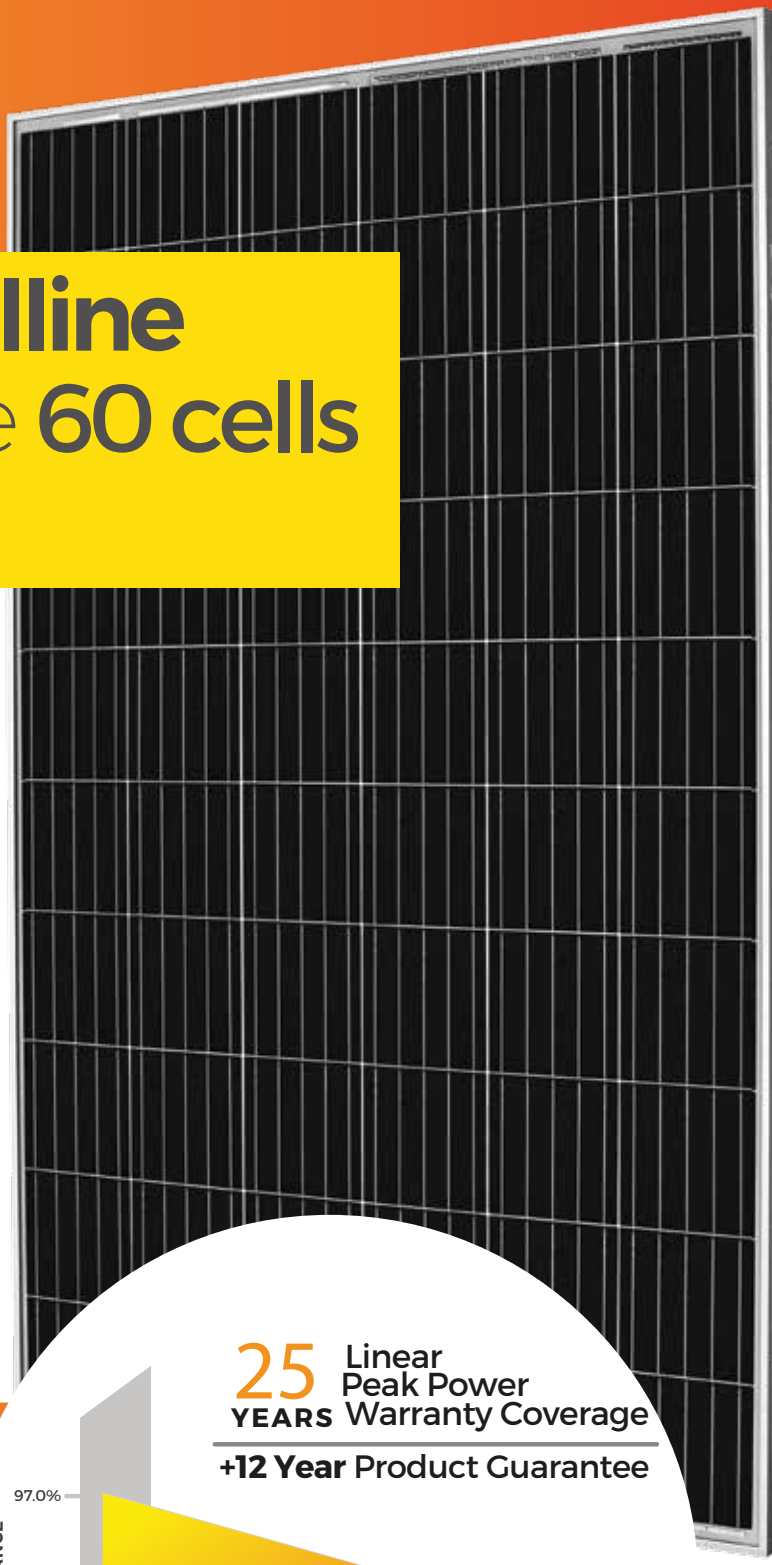
Upsolar

6” | Polycrystalline PV module 60 cells

Power Output: **285 Watt**
Max. Efficiency: **17.5%**



High Mechanical Load
Certified to withstand high wind and snow loads up to 5400Pa

Outstanding Temperature Coefficients
Reduces power loss for solar modules operating in high temperature climates

Anti-reflective Surface
Increases the panel's exposure and efficiency of converting sunlight into energy

Universal Design
Compatible with residential, commercial and ground-mounted installations

Excellent Low-Light Performance
Tier 1 certified solar cells allows better performance in low-light environments

Salt Mist and Ammonia Resistant
Certified by Bureau Veritas to withstand usage near coastal environments

PID resistant
Designed to minimise cell degradation in extreme environments

IEC 61215 61730 · CE · TÜV · ETL Intertek

Secure Investment

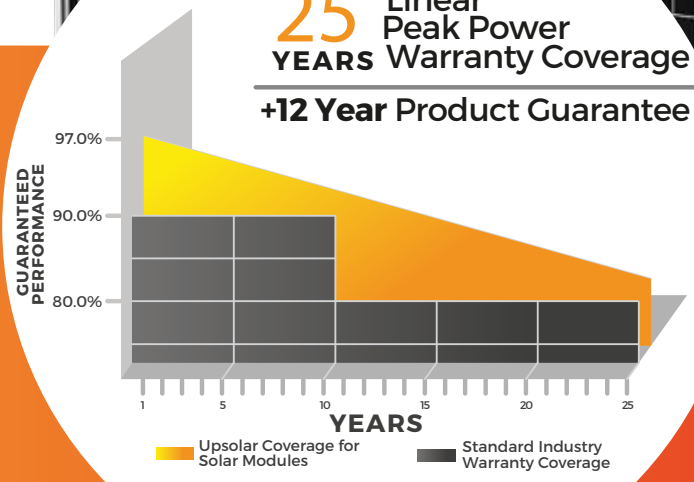
Upsolar provides exceptional product coverage for all modules to ensure our customers achieve superior long-term value from their solar installations. To further improve our product warranty, which covers unanticipated module damage, we've recently expanded our terms from a 10-year period to a 12-year period.

In addition, Upsolar offers a 25-year performance guarantee known as the Linear Module Warranty. Whereas traditional policies feature a single trigger point leading to drastic coverage reductions after just 10 years, Upsolar's coverage more accurately corresponds to system performance, providing coverage for over 25-years.

Overall, our goal is to deliver not only top-notch modules, but also peace of mind, for decades to come.

25 YEARS Linear Peak Power Warranty Coverage

+12 Year Product Guarantee



MALMBERGS
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Poly Series | 6” PV Module 60 cells

Electrical Characteristics

MODEL	UP-M285P
Max Power Pm (Wp)	285
Max Power Voltage Vm (V)	32.0
Max Power Current Im (A)	8.91
Open-Circuit Voltage Voc (V)	39.0
Short-Circuit Current Isc (A)	9.20
Module Efficiency	17.5%
Maximum System Voltage (V)	1000(IEC)/1000(UL) or 1500(IEC)/1500(UL)
Power Tolerance	0/+3%
Series Fuse Rating (A)	20A

STC: Irradiance 1000 W/m², Module temperature 25°C, AM=1.5

Components & Mechanical Data

Front Glass	High Transparency Tempered Glass 0.125” // 3.2 mm
Junction Box	IP 65 or above
Bypass Diode	3 diodes
Output Cables	1.0 m // IEC, UL approved (4 mm², 12AWG) (PV Wire Type)
Connectors	MC4 compatible (IP67, IEC and UL approved)
Frame	Anodized aluminium alloy type 6063-T5
Encapsulation Material	EVA (0.018" // 0.45 mm ± 0.001" // 0.03 mm thickness)
Back Sheet	White multilayer polymer film
Temperature Range	-40˚F to +194˚F // -40˚C to +90˚C
Max Load	75 lbs / ft² (UL Standard) // 5400 Pa (IEC Standards)
Impact Resistance	Steel ball - 1.18 lbs // 535 g dropped from 51” // 1.3 m high

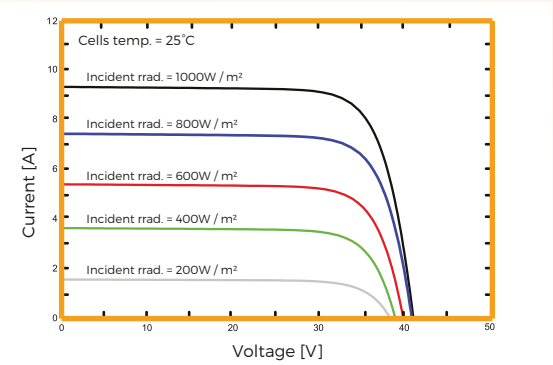
Specifications

Cells	Polycrystalline silicon solar cells 6” x 6” // 156 mm x 156 mm
Number of Cells	60 (6 x 10)
Dimensions (in // mm)	64.57 x 39.06 x 1.38 // 1640 x 992 x 35
Weight (lb // kg)	40.8 // 18.5

Temperature Coefficients

NOCT (˚C)	45 ± 2
Temperature Coefficients of Isc (% / ˚C)	0.05 ± 0.01
Temperature Coefficients of Voc (% / ˚C)	-0.30 ± 0.02
Temperature Coefficients of Im (% / ˚C)	-0.02 ± 0.02
Temperature Coefficients of Vm (% / ˚C)	-0.42 ± 0.03
Temperature Coefficients of Pm (% / ˚C)	-0.40 ± 0.05

IV Curves



Rear View