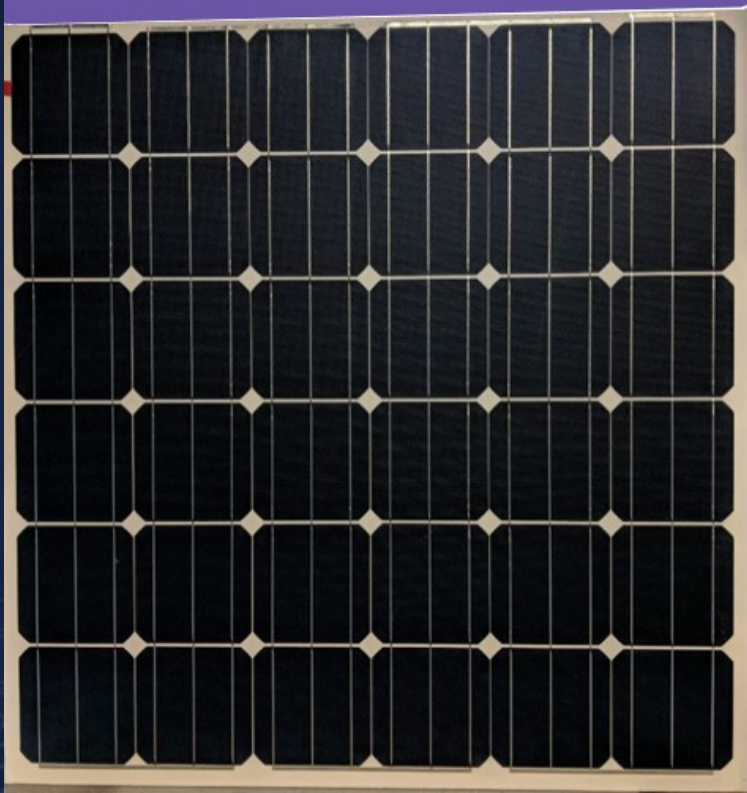


RFUSION

TOMORROWS TECHNOLOGY TODAY



**160 W lightweight Solar
RPower module**

IP 67

UL1703 certified

IEC61215 Resistance Tested

R Power when you need it

R Power is one of the world's first integrators to use a non-glass, UL certified crystalline PV modules. The module's multi-layered structure provides excellent resistance to harsh environmental conditions and the fluoropolymer front sheet protects the module from all chemicals.

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Multi-Functional Design

The 160W panel is designed to fit countless applications. The patented design is ideal for both flat and vertical applications. The panel is designed to generate power in the most extreme environments where other power sources would not survive.

Impact Resistance and Shatterproof

When a glass solar module is hit with a hammer, it shatters, and the entire module will lose power. Rfusion's solar module will only lose power at the point of impact if the solar cell is damaged, but not from the entire module. These Solar modules are impact resistant and shatterproof as the modules are IEC 61215 certified for hail impact resistance

Built with Lightweight Advanced Materials

Our solar modules are 40-50% lighter than glass panels. This makes easier for shipping, handling and installation. The light weight material helps save on overall weight to cost ratio. The panel is covered with a fluoropolymer film that lasts for years, holds up in harsh weather conditions and reduces glare. The R Power solar modules are rugged and built to last with carbon/glass fibre rigid composite materials.

Minimal Glare and High Absorption Rate

These solar modules utilise the advanced material property to reduce the reflection and glare. This makes the solar modules perfect for applications where glare becomes a critical safety issue such as in military, airports and in traffic areas. With a lower reflection rate the solar module has a better light absorption rate than a glass solar module.

High efficiency solar module

Rfusion's Solar modules are made with high efficiency mono crystalline silicon cells. Individual cells are over 20.0% efficient. IP67 rated, no Potential-induced degradation (PID) phenomenon. UL1703 certified.

Customize modules for our customers

Rfusion develops customised solar modules for each of our customer needs. The modules range from 20w to 400W power outputs. There are different colour and fabrics available for behind the cells instead of the standard white. Ask for details about colour and camouflage options.

R Power Module	160W
Maximum Power (W)	160W
Optimum Power Voltage (Vmp)	20.38 V
Optimum Operating Current (Imp)	9.16 A
Open Circuit Voltage (Voc)	24.1 V
Short Circuit Current (Isc)	9.54 A
Solar Cell Efficiency (%)	>21.3%
# Diodes Embedded in Panel	5
# Diodes in Junction Box	3
Number of Cells / Panel	36
Module Weight	5.9kg
Power per Weight Ratio	27.1 W/kg
Panel Configuration	6 x 6 Cells
Dimension (m)	1.0 m x 1.0 m x3mm
Module Area	1.0m ²
Power per Area Ratio	160 W/m ²
Module Efficiency	18.00%
Nominal Operating Cell Temperature	45 +/-2 °C
Temperature Coefficient: Power	-0.391 %/K
Operational Temperature Range	-40°C to +90° C
Anti-Glare / Anti-Reflection	Yes
Impact resistant	Yes

