

440W MCS certified semi-flexible solar panel

Photonic Universe

Product features

Semi-flexible solar panels allow installation on curved surfaces and uniquely designed roof structures.

Application with adhesive enables easy and safe installation without penetrating the waterproofing layer.

80% lighter on the roof compared to standard rigid frame solar panels as these panels don't need mounting hardware.

MCS certification ensures the panels meet strict UK quality and safety standards, offering trusted performance and durability.

PERC and half-cut cell technology, achieves superior energy conversion efficiency, ensuring maximum power generation in a compact and lightweight form.

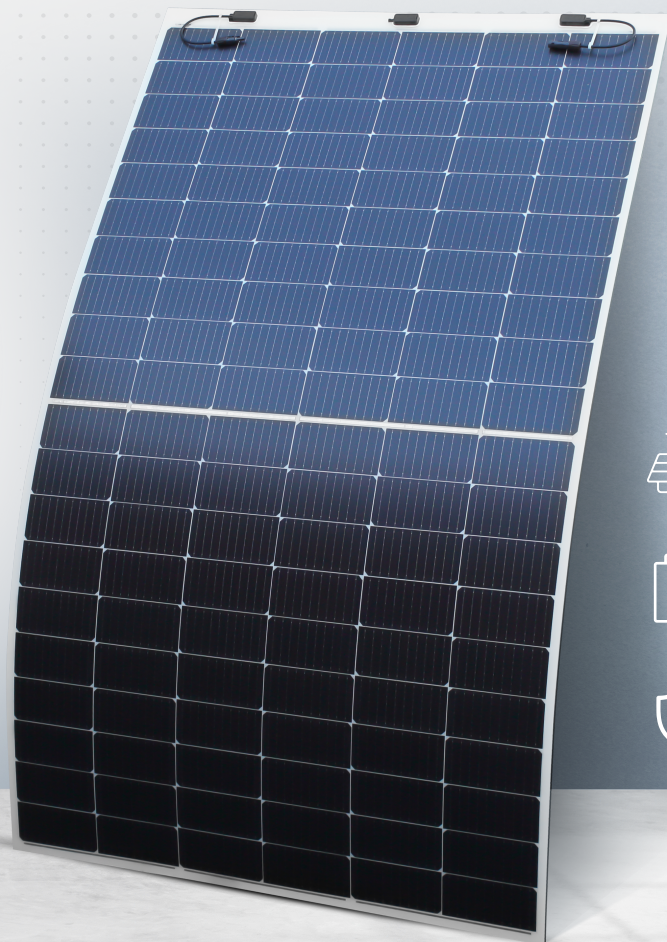
Superior performance in low-light conditions, ensuring efficient energy generation even during cloudy days, early mornings, or late afternoons.

Minimises shading impact to reduce power loss, providing a more stable energy production even when parts of the panel are shaded.

The superior reliability has been proven throughout **rigorous weathering tests:**

- Sand and dust resistance
- Acid and alkali-resistance
- Salt mist resistance
- Anti-PID
- Hail shock resistance

Factory quality system



Product warranty

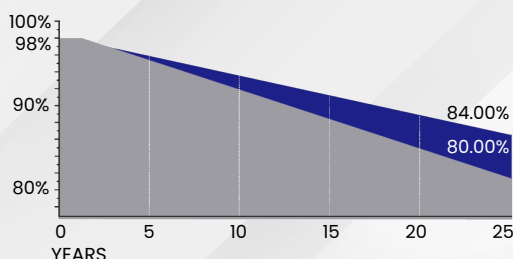
Workmanship warranty

5-year for vehicle/boat installations

10-year for permanent roof installations

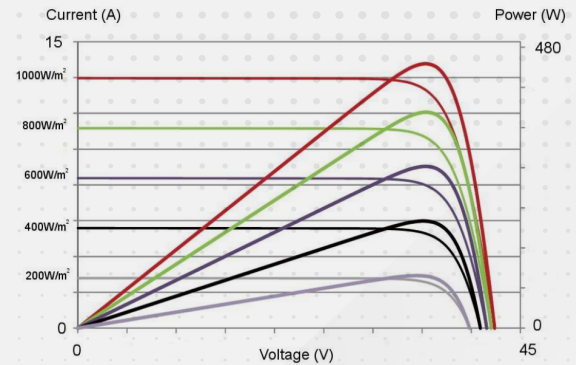
Linear power output

performance guarantee **25 years**



Electrical specifications

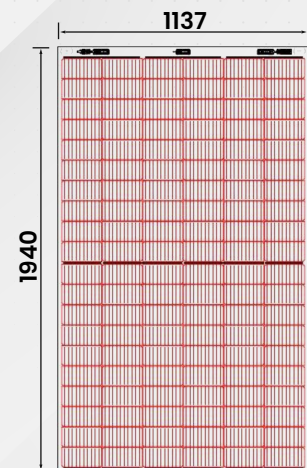
Model	FMCS-440M
Peak power (Pmp)	440W
Maximum power voltage (Vmp)	34.48V
Maximum power current (Imp)	12.77A
Open circuit voltage (Voc)	41.73V
Short circuit current (Isc)	13.76A
Power tolerance	0-5W
Maximum system voltage	1500VDC
Maximum series fuse rating	25A



Standard Test Conditions (STC): irradiance 1,000 W/m², 1.5 air mass, cell temperature 25°C

Temperature specifications

Model	FMCS-440M
Pmax temperature coefficient	-0.35%/°C
Voc temperature coefficient	-0.26%/°C
Isc temperature coefficient	+0.047%/°C
Operating temperature	From -40°C to +85°C
Nominals module operation temperature	45 ± 2°C



Mechanical specifications

Model	FMCS-440M
External dimensions	1940 x 1137mm
Thickness	3.4mm
Weight	9.0kg
Solar cells	Monocrystalline (182 x 91mm)
Junction box	IP68 with 3 diodes
Output cables	2 x 0.3m of 4.0mm ² solar cable with MC4-compatible connectors

