

440W MCS certified semi-flexible solar panel with top junction box



www.photonicuniverse.com

Datasheet

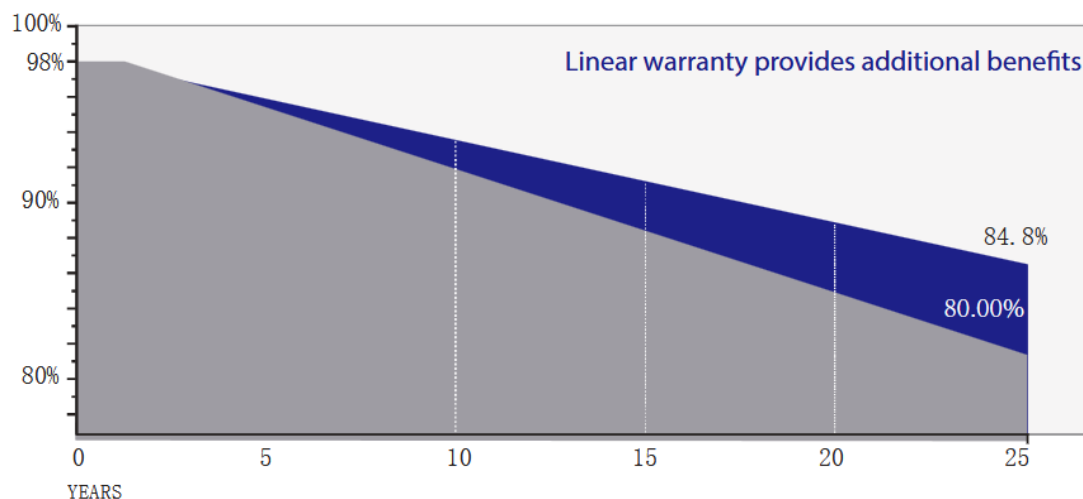
Product features

- Lightweight with ultra-high flexibility, making installation easy.
- 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 test:
 - Sand and dust resistance
 - Acid and alkali-resistance
 - Salt mist resistance
 - Anti-PID
 - Hail shock resistance

Quality System

- ISO9001
- ISO14001
- ISO45001

Product warranty



5-year (for vehicle/boat installations) or 10-year (for permanent roof installations) workmanship warranty
25 years linear power output performance guarantee

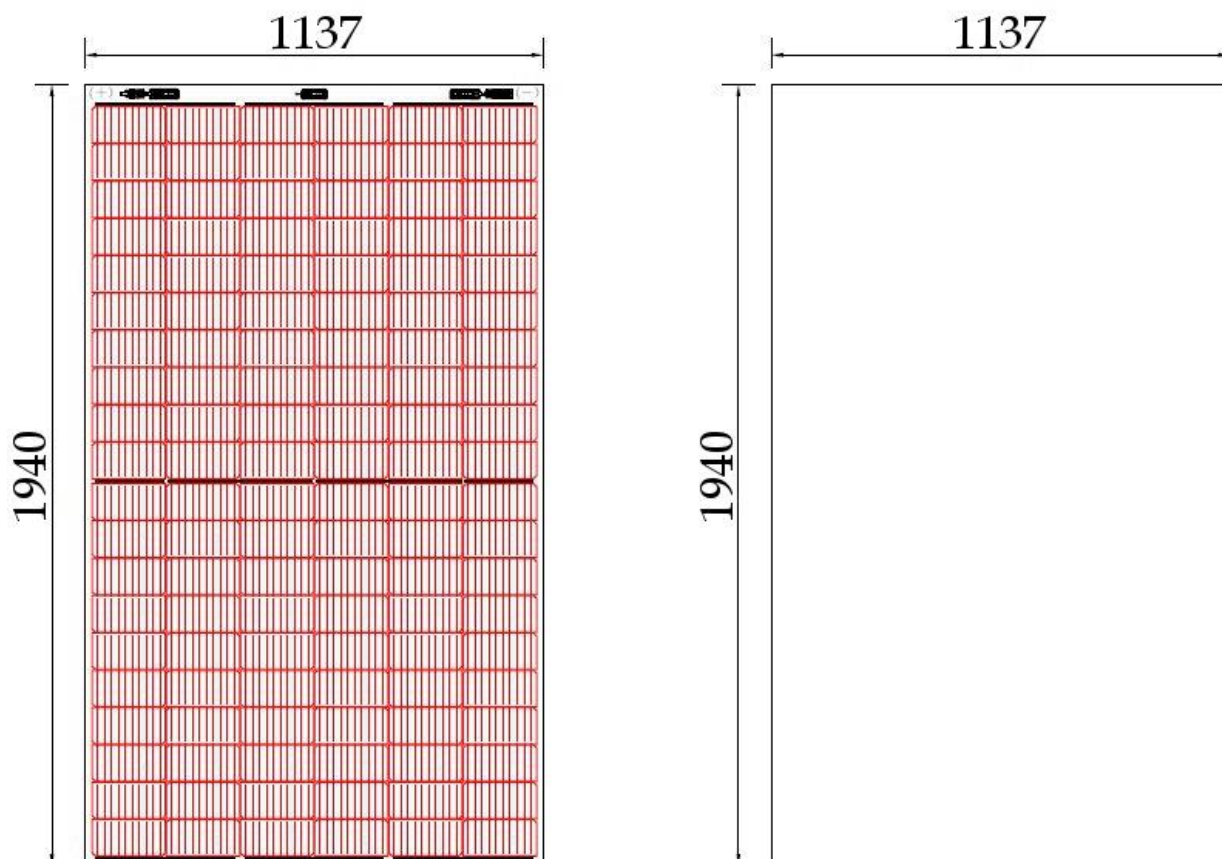
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Electrical parameters

Model	FMCS-440M
Peak power (P_{mp})	440W
Maximum power voltage (V_{mp})	34.48V
Maximum power current (I_{mp})	12.77A
Open circuit voltage (V_{oc})	41.73V
Short circuit current (I_{sc})	13.76A
Power tolerance	0~5W
Maximum system voltage	1500VDC
Maximum series fuse rating	25A

STC: irradiance 1000W/m² module temperature 25°C AM=1.5

NMOT: irradiance of 800W/m², ambient temperature 20°C, and wind speed 1m/s

The uncertainty of P_{max} , V_{oc} , I_{sc} is $\pm 3\%$

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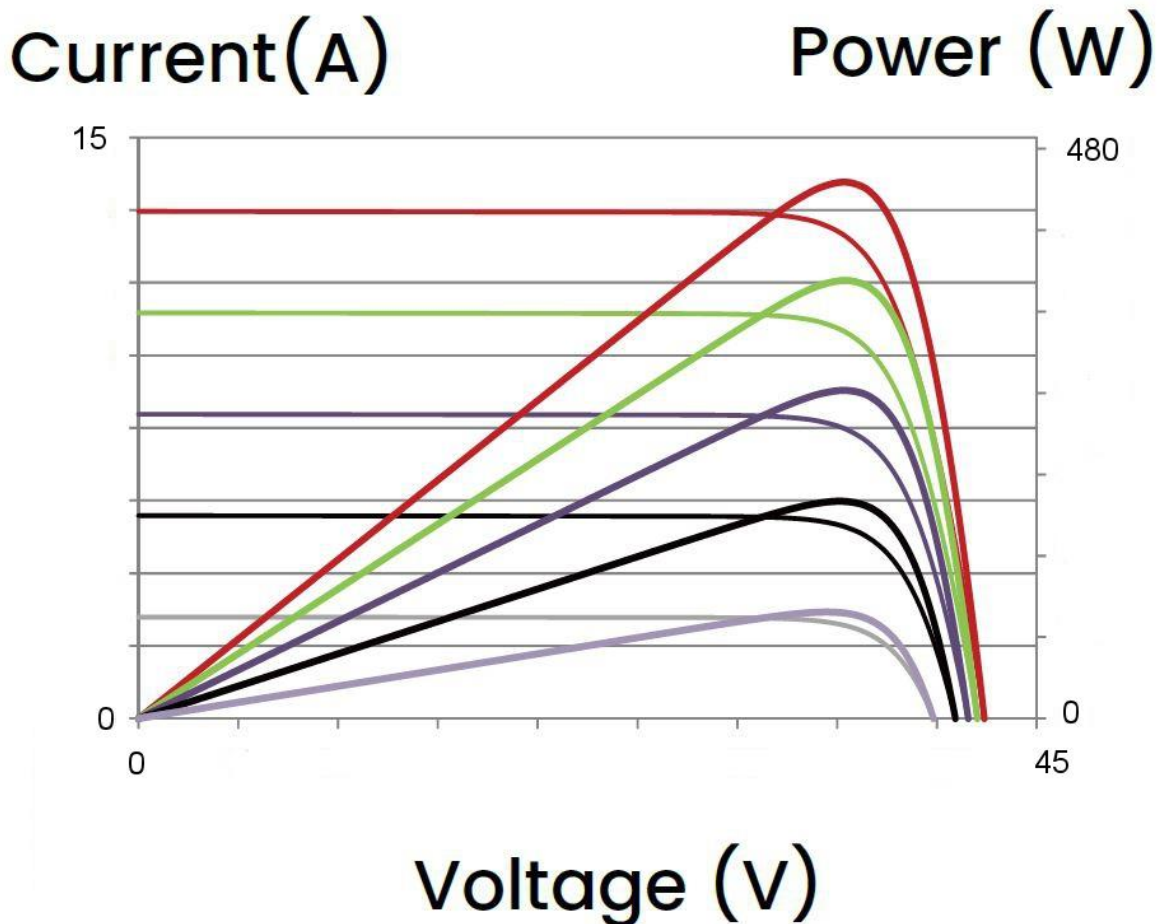
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Mechanical specifications

External dimensions	1940 x 1137mm
Thickness	3.4mm
Weight	9.0kg
Solar cell	Mono crystalline (182 x 91mm)
Junction box	IP68 with 3 diodes
Output cables	2 x 0.3m of 4.0mm ² solar cable

Temperature characteristic

P _{max} temperature coefficient	-0.35%/°C
V _{oc} temperature coefficient	-0.26%/°C
I _{sc} temperature coefficient	+0.047%/°C
Operating temperature	From -40°C to +85°C
Nominals module operation temperature	45 ± 2°C



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