

FLEXIBLE VS RIGID BC SOLAR PANELS

One cell technology. Two formats. Two different jobs.

FLEXIBLE PANEL

Ultra-light. Ultra-thin. Built to bend.



Ultra Lightweight

Up to 70% lighter than a framed glass module



Bends to Fit

Bends up to 240° to follow roofs, decks and hulls



Impact Resistant

ETFE composite absorbs shock and vibration

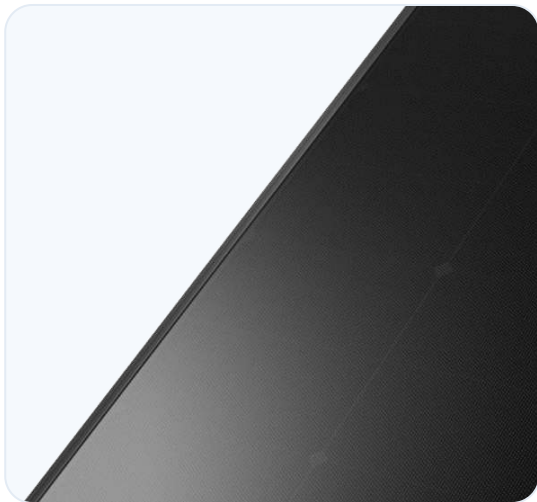


Ultra Thin

Only 2.7–3.3 mm, easy to bond and integrate

RIGID PANEL

Stable. Durable. Maximum power.



High Durability

Aluminum frame and tempered glass for a long service life



Maximum Output

Full-size cells give the highest power per panel



High Load Rating

Engineered frame handles strong wind and heavy snow



Easy to Install

Standard rails and clamps with pre-drilled holes

Structure	Frameless multi-layer composite	Aluminum frame + glass + backsheet
Thickness	2.7 – 3.3 mm	30 – 35 mm
Weight	2.4 – 3.8 kg/m²	10 – 12.5 kg/m²
Flexibility	Bendable up to 240°	Rigid, fixed plane
Impact Resistance	Excellent	Good
Installation	Adhesive / mounting tape / eyelets	Bracket / rail mounting
Wind & Snow Load	Follows the host surface	High, engineered frame
Best For	Curved surfaces, RVs, boats, tents, portable and off-grid power	Rooftops, ground mounts, commercial and residential systems

VS

KEY FEATURES — BC TECHNOLOGY

shared by both formats



Partial Shading Optimisation

BC cells break down softly under reverse bias. In TÜV NORD testing, one fully shaded cell cost ~13% of output, versus ~34% for TOPCon.



Better Temperature Coefficient

A low P_{max} coefficient ($-0.26\text{ \%/}^{\circ}\text{C}$) retains more rated power as cell temperature rises.



High Temperature Restriction

Cell-level current management limits power loss and local heating under sustained heat.



Micro-crack Resistance

Busbar-free rear interconnection cuts stress points, improving transport and cycling durability.



Higher Power Density

A contact-free front surface improves light capture, yielding more watts per square meter.



More Aesthetic Value

A clean, uniform all-black surface with no visible front grid lines.

IDEAL APPLICATIONS

FLEXIBLE



RVs & Campers



Boats & Marine



Tents & Outdoor



Portable Power



Residential



Commercial



Industrial



Solar Power Plants

RIGID

Typical values. Final specifications depend on the model, cell format and custom configuration.
Shading data: TÜV NORD partial-shading study (2026). Weight and temperature coefficient ranges: current BC module datasheets (LONGi Hi-MO X10, AIKO Neostar 2S).

OEM & ODM • LOW MOQ • CUSTOM SIZE, POWER & SHAPE • FAST SAMPLING

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