

CLM-130MF — Infinite Technology

Ultra-light ETFE Back Contact (BC) flexible module engineered for curved surfaces, RVs, marine decks, and portable 12 V systems

HPBC standard · ABC optional | OEM / ODM ready



KEY FEATURES — BC TECHNOLOGY



Partial Shading Optimisation

A single shaded BC cell loses only ~13% of power, versus ~34% for comparable TOPCon.¹



Better Temperature Coefficient

Low Pmax coefficient (−0.26%/°C) retains more rated power as cell temperature rises.



High Temperature Restriction

Built to limit power loss under sustained heat and close-mount conditions, rated to +70°C.



Micro-crack Resistance

Busbar-free rear interconnection reduces front-side stress, improving durability in flexing and transport.



Higher Power

A clear, contact-free front surface improves light utilization within the same footprint.



More Aesthetic Values

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

Purpose-built for flexible, off-grid power. Designed for RVs, caravans, boats, agricultural equipment, remote monitoring, and portable battery charging — where curved surfaces, low weight, and limited space rule out rigid glass panels.

Electrical Characteristics — STC

Maximum Power (Pmax)	130 W
Power Tolerance	0 to +3%
Max Power Voltage (Vmp)	20.13 V
Max Power Current (Imp)	6.46 A
Open Circuit Voltage (Voc)	23.45 V
Short Circuit Current (Isc)	6.77 A
Module Efficiency	20.2%
Max System Voltage	600 V DC
Max Series Fuse Rating	15 A

STC: irradiance 1000 W/m², AM1.5 spectrum, cell temperature 25°C.

Temperature

Operating Temp.	−40 to +70°C
Coeff. Pmax	−0.26%/°C
Coeff. Voc	−0.22%/°C
Coeff. Isc	+0.05%/°C

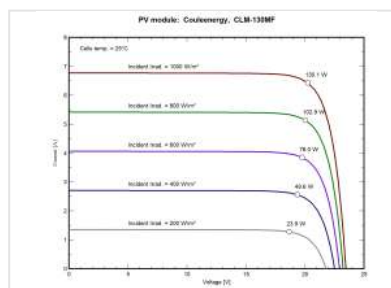
Safety

Protection Class	Class II
Bypass Diodes	1
Junction Box	≥IP67
Fire Rating	Class C

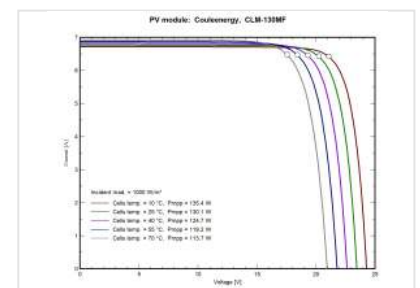
Mechanical

Cell Type	Back Contact Mono · HPBC std / ABC opt.
Cell Array	3 × 11
Dimensions (L×W×H)	1090 × 590 × 2.7 mm (5-layer) / 3.3 mm (9-layer)
Net Weight	2.4 kg (5-layer) / 2.7 kg (9-layer)
Min. Bend Radius	~ 300 mm
Construction	Frameless flexible laminate
Front Sheet	ETFE, self-cleaning
Cable & Connector	90 cm or customizable · MC4
Mounting	Corner grommets / adhesive

I-V PERFORMANCE CURVES



I-V at varying irradiance (25°C)



I-V at varying cell temperature (1000 W/m²)

OEM / ODM: cell layout · size · voltage · frame colour · private-label · low-MOQ trials

Email info@couleenergy.com · Tel +1 737 702 0119
<https://couleenergy.com>

IEC
61215
DESIGN QUAL.

IEC
61730
SAFETY QUAL.

ISO
9001:2015
QUALITY SYS.

Request a Quote

¹ TÜV NORD partial-shading simulation, reported by pv magazine (Jul 2026). The BC advantage applies under mild shading (≤3 shaded cells) and narrows toward parity under heavier shading. Values at STC; specifications subject to change — confirm at time of order.