



# Foldable solar panel

FRb-16 / FRb-24 / FRb-32 / FRb-51 / FRb-96

ENERGY IN FREEDOM



## More energy each day

Thanks to the use of the last generation IBC monocrystalline solar cells, which amplify the absorption spectrum.



## Foldable

To take it away easily wherever you want.



## Ultra resistance

Encapsulated with military quality technopolymers and the absence of rigid component such as glass.



## Flexibility

One degree of flexibility, which enable robustness in its daily handling.



## Light and thin

1/8 weight respect to standard glass panels. Just 1.5 mm thin.



## High resistance to marine environment and outdoor



## Easy to be integrated

Hook up everywhere such as at a tent using eyelets.



## Lowlight performance

Its revolutionary technology enable to receive lots more energy in the infrared and ultraviolet band.



**eneá** has developed a revolutionary technology thanks to IBC cells which enable better characteristics than traditional solar cells:

To receive energy in an enlarged light spectrum, which acts in favor of lowlight conditions.

A better efficiency facing high temperatures.

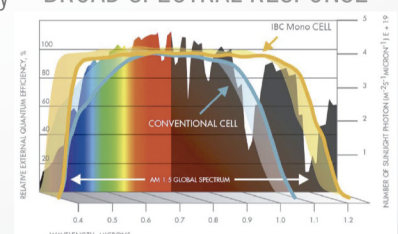
No degradation induced by the first exposure of the solar cells to the sun, which avoid the initial 3% efficiency loss at the first use.

A longer lifetime thanks to the cells lower degradation year after year.

These products are made with technopolymers, which give them a high technology robustness, and a weight of about 1/8 compared to traditional glass solar panel.

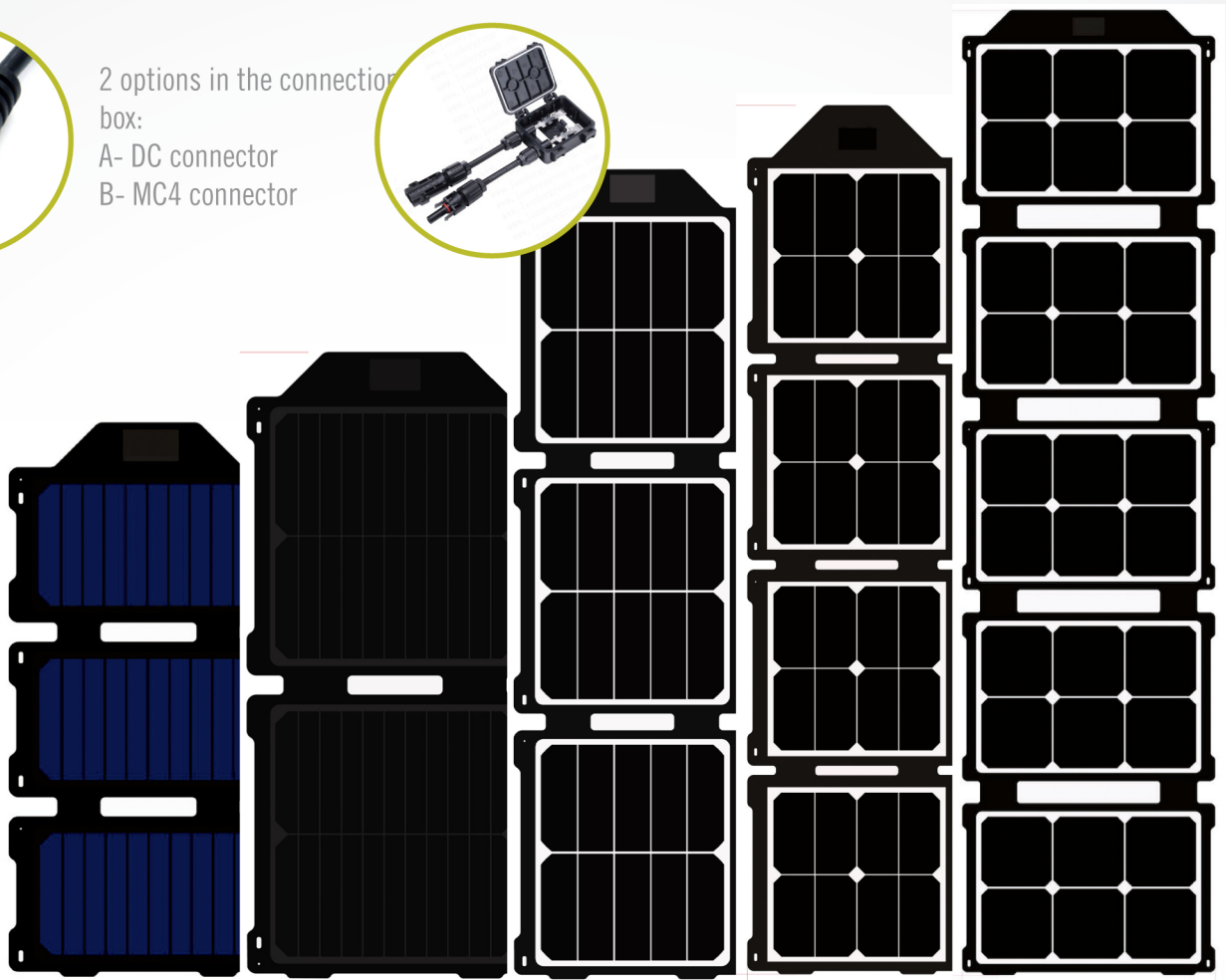
**eneá** solar panels have one of the best efficiencies of the market reaching 24% in a very compact size.

### BROAD SPECTRAL RESPONSE





2 options in the connector box:  
A- DC connector  
B- MC4 connector



TECHNICAL SPECIFICATIONS	Model FRb-16	Model FRb-24	Model FRb-32	Model FRb-51	Model FRb-96
P <sub>MAX</sub>	16W	23.5W	32W	51.2W	96W
V <sub>MPP</sub>	16.8V	24.20V	16.8V	17.92V	16.8V
I <sub>MPP</sub>	0.95A	0.97A	1.90A	2.85A	5.71A
V <sub>OC</sub>	20.1V	28.60V	20.1V	21.1V	19.5V
I <sub>SC</sub>	1.09A	1.07A	2.19A	3.10A	6.28A
UNFOLDED SIZE	568x215x2 mm	645x305x2 mm	952x278.5x2 mm	1335x336x2 mm	1717x449x2 mm
FOLDED SIZE	215x287x30 mm	325x305x30 mm	338x280x30 mm	336x391x30 mm	450x360x30 mm
WEIGHT	0.29 Kg	0.48 Kg	0.65 Kg	1 Kg	1.95 Kg
OUTPUT	DC	DC	DC	DC	DC
EFFICIENCY	23%	23%	23%	23%	23%
COLORS	BLACK / RED / OLIVE / KHAKI / CAMOUFLAGE				

### TEMPERATURE COEFFICIENTS

V <sub>CA</sub> (V)	-0,330%/°C
P <sub>OT</sub> (WP)	-0,38%/°C
I <sub>CC</sub> (A)	+0,036%/°C
NOCT	45°C

### LIMIT VALUES

SYSTEM VOLTAGE	600 V DC
PROTECTIVE DIODE	15 A
TEMPERATURE RANGE	-40° TO +90° C

## Fixing options



Tenax buttons



Stainless steel eyelets

