

# EL<sup>®</sup>MARK

The Brand of Electricity

## MONOCRYSTALLINE HALF CUT CELL SOLAR PANEL



## SOLAR PANELS

Mono half cut cells Solar Panel that are cut in half. That improves the module's performance and durability. When solar cells are halved, their current is also halved, so resistive losses are lowered and the cells can produce a little more power. Smaller cells experience reduced mechanical stresses, so there is a decreased opportunity for cracking. Half-cell modules have higher output ratings and are more reliable than traditional panels.

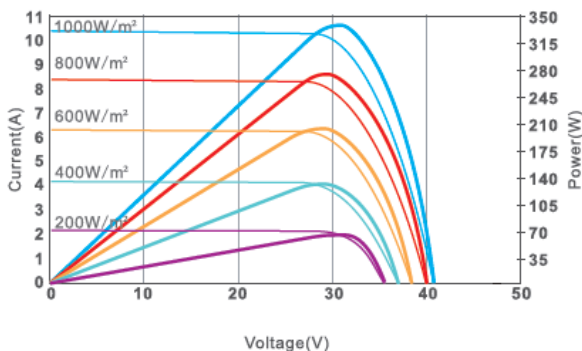
### SPECIFICATION:

- Irradiance 1000 W/m<sup>2</sup>, AM 1.5, and cell temperature of 25°C
- Peak power (P<sub>max</sub>): 410
- Maximum power voltage (V<sub>mp</sub>): 34.89
- Maximum power current (I<sub>mp</sub>): 11.76
- Open circuit voltage (V<sub>oc</sub>): 41.90
- Short circuit current (I<sub>sc</sub>): 12.47
- Module efficiency (%): 21.3
- Maximum system voltage (V): 1500
- Number of cells: 120 (5x12+5x12)
- Dimensions HxWxD (mm): 1754x1096x30
- Weight (kg): 21
- Max. load (Pa): 5400
- EC Declaration of conformity
- **Catalogue number: 98SOL410M**

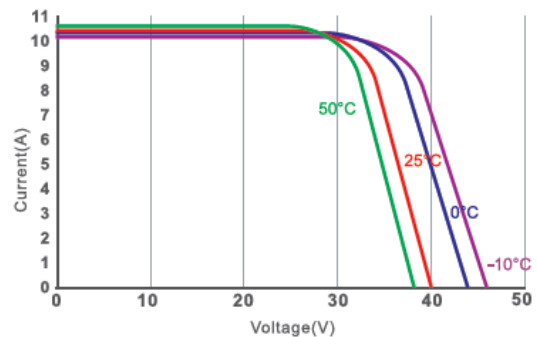
\*Note: the specifications are obtained under the Standard Test Conditions (STCs): 1000W/m<sup>2</sup> solar irradiance, 1.5 Air Mass, and cell temperature of 25°C.

### CHARACTERISTICS AT DIFFERENT IRRADIATIONS:

CHARACTERISTICS AT DIFFERENT IRRADIATIONS



CHARACTERISTICS AT DIFFERENT TEMPERATURES



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### MECHANICAL DATA:

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- Cell Type: 158.75mm, 9BB
- Number of Cells: 120 cells (5x12+5x12)
- Weight: 21kg
- Dimension: 1754x1096x30mm
- Max Load: 5400 Pascals
- Junction Box: IP68 rated
- Connector: MC4 Compatible
- Wire Type: PV Wire
- Frame: Anodized aluminium alloy type

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### TEMPERATURE CHARACTERISTICS:

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- Nominal module operating temperature (NMOT): 44° C±2° C
- Temp. Coeff. of Voc (TK Voc): -0.25% /°C
- Temp. Coeff. of Isc (TK Isc): 0.04% /°C
- Temp. Coeff of Pmax (TK Pmax): -0.34% /°C
- Operating temperature: -40°C+85°C

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### FEATURES:

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- High conversion efficiency: High module efficiency to guarantee power output.
- Self-cleaning glass: Coating glass for self-cleaning, reduce surface dust.
- Outstanding low irradiation performance: Excellent module efficiency even in the weak light conditions, such as morning or cloudy.
- Excellent loading capability: 2400Pa wind loads, 5400Pa snow loads.

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### ADVANTAGES OF HALF CELL SOLAR PANELS:

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- It is superior in low sunlight performance.
- It is not affected by shade as much as standard panels.
- It is more durable for long life performance
- It is less susceptible to micro cracking. (cracks that develop in cells over time)

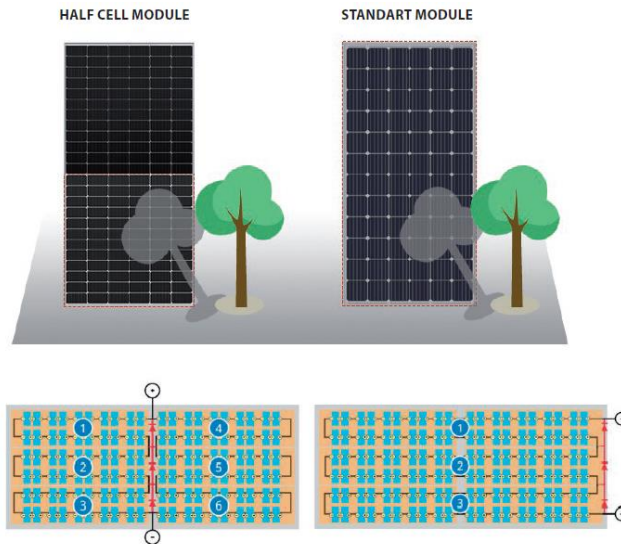
# TECHNICAL SPECIFICATION

# ELMARK®

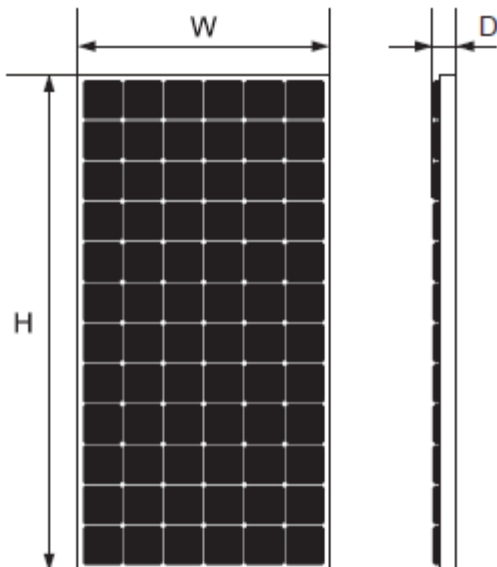
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## SOLAR PANELS

- They perform better under high heat conditions than standard solar panels.
- They are less susceptible to hot spots, a major cause of panel failure.
- They are much higher efficiency than standard panels.



## DIMENSIONS:



Catalogue number	Barcodes
98SOL410M	3800131245304

Dimensions 410W (mm)

H	W	D
1754	1096	30



[www.elmarkholding.eu](http://www.elmarkholding.eu)