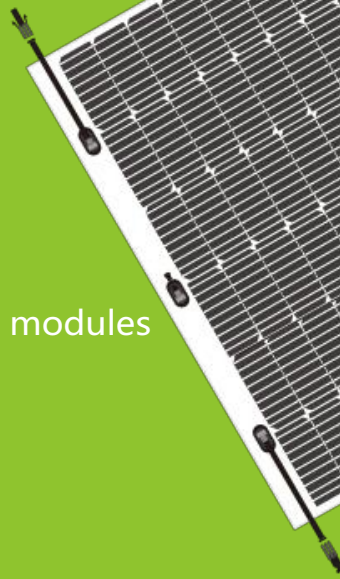


# TOENERGY

## Flex-390~410

The efficiency can be as high as 23%

Lightweight flexible PV modules



### Product Characteristics



#### Lightweight and ultra-thin design

The component weight is as light as 4.6kg in weight and as thin as 3mm, meeting the requirements of various low load projects.



#### Customization

can be customized to meet the needs of different application scenarios.



#### Ultra high flexibility

With ultra-thin silicon chip and advanced organic polymer materials, the component can perfectly fit various curved roofs.



#### Easy installation

Due to convenience and quickness, the costs of installation and transport are greatly reduced.



#### Efficient and reliable

It is improving the battery conversion efficiency. The power generation performance is excellent under low light conditions.



#### Plumbum free environmental protection

Base on the concept of green environmental protection, the production process and materials achieve plumbum free

### Long lasting quality

- Pass various long-term reliability tests

- El test is carried out before and after lamination to ensure the reliability of components

- Adopt strict international standard management system ISO9001, ISO14001 and ISO 45001

- Fully automatic production line and leading photovoltaic technology

### Electrical performance parameters (STC)

Parameter name	unit	TN-390	TN-395	TN-400	TN-405	TN-410
Maximum power (Pm)	W	390W	395W	400W	405W	410W
Power tolerance	W	0~+5w	0~+5w	0~+5w	0~+5w	0~+5w
Optimum operating voltage(Vm)	V	77.22	77.616	78.012	78.408	86.196
Optimum working current(I <sub>m</sub> )	A	5.155	5.23	5.255	5.305	4.892
Open-circuit voltage(Voc)	V	89.892	90.288	90.684	91.08	98.208
Short Circuit Current(I <sub>sc</sub> )	A	5.52	5.545	5.545	5.57	5.179

Standard testing condition(STC): Irradiance 1000W/m<sup>2</sup>, Temperature 25°C, AM 1.5

## Mechanical properties

Cell array	22(166/2)*6
Component dimensions	1940*1040*3mm
Size of 46 pieces for outer case	2120*1680*1260mm
Anterior membrane	Lightweight high light transmittance polymer material
Wind/snow pressure	2400Pa/5400Pa

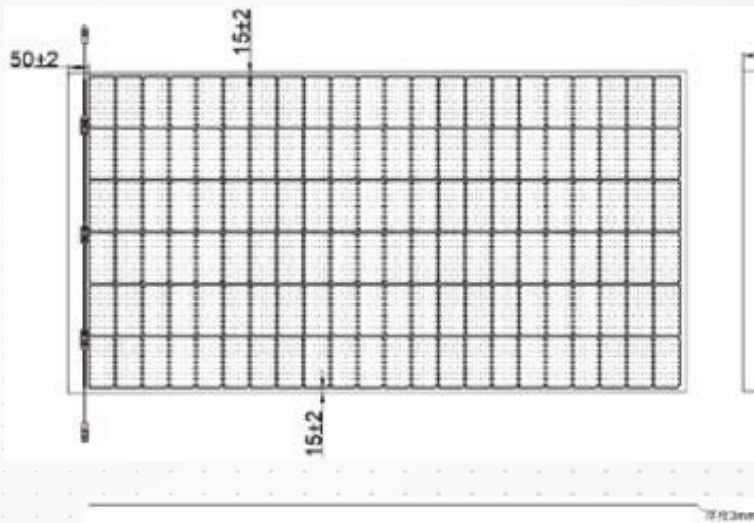
Back board colour	White/black
Terminal block	Protection grade IP67
Cable	4mm <sup>2</sup>
Diode	3
Weight	6.40KG

## Temperature coefficient

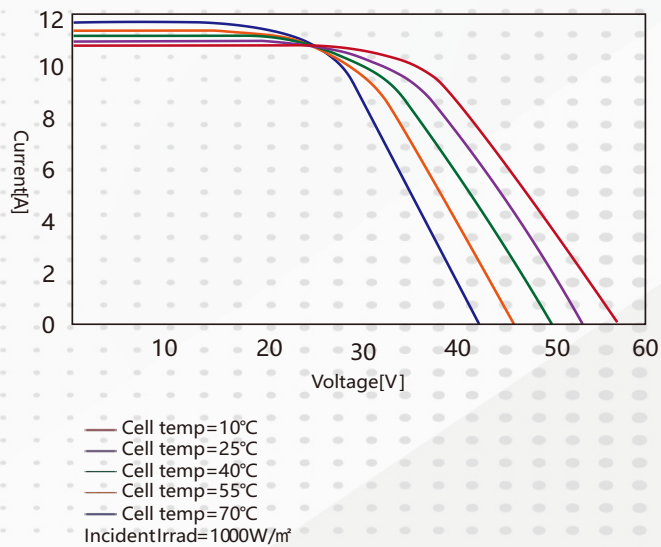
Battery nominal operating temperature	25±2°C
Current temperature coefficient (Isc)	+0.05%/°C
Voltage temperature coefficient	-0.32%/°C
Power factor (Pm)	-0.40%/°C

## Working conditions

The largest system voltage	DC1500V(IEC)
The largest fuse rated current	20A
Operating temperature range	-40~+120°C
Connector	MC Compatible



Current and voltage curves at different temperatures



Current and voltage curves/power and voltage curves under different irradiance

