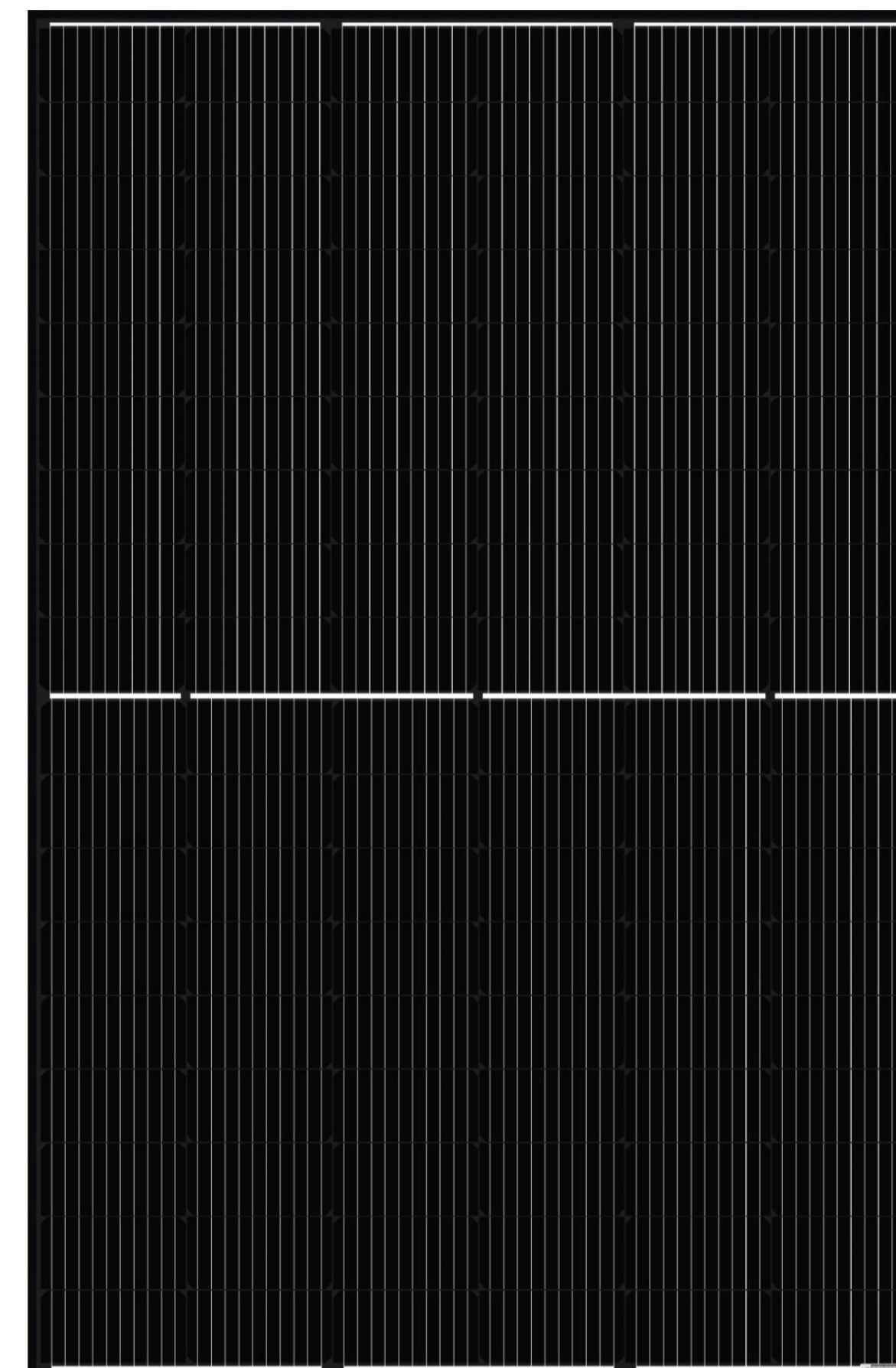


## 182 Series MONOCRYSTALLINE

## 108 Half-Cells Solar Modules

## 400-415W BLACK



### ➤ Key Features

- Ⓡ Advanced production equipment, International first-class production technology, Achieved high module conversion efficiency 21.25%
- Ⓡ Excellent performance for resist wind pression and snow load. Full module passed wind pression (2400Pa) and snow load (5400Pa) test
- Ⓡ Excellent weak light performance, Resistant to salt spray and ammonia corrosion
- Ⓡ Passing the certification test of photovoltaic standards
- Ⓡ Application grade: A grade, Safe class: II, Fireproofing grade: C



#### High Power Output

- \* Reduce BOS cost with higher power bin and 1000V/1500V system voltage
- \* Back surface field
- \* Selective emitter



#### Half-cell design brings higher efficiency

- New cell string layout and split J-box location to reduce the energy loss caused by shading between modules
- \* Low thermal coefficients for greater energy production at high operating temperatures
- \* Low cell connection power loss due to half-cell layout (108cells) Monocrystalline



#### Highly reliable due to stringent quality control

- \* In-house testing goes well beyond certification requirements (UV, TC, HF, and many more)
- \* PID resistant



#### Certified to withstand the most challenging environmental conditions

- \* 2400 Pa wind load
- \* 5400 Pa snow load

### ➤ Comprehensive Products And System Certificates

IEC61215/IEC61730/UL1703/IEC61701 /IEC62716

ISO 9001: Quality Management System

ISO 14001: Enviromental Management System

OHSAS 18001

GB/T 23001 -2017



### Industry-leading linear warranty

\*15 Year Product Warranty \*25Year Linear Power Warranty





## ELECTRICAL CHARACTERISTICS AT STC

Maximum Power ( $P_{max}$ )	400W	405W	410W	415W
Open Circuit Voltage ( $V_{oc}$ )	37.2V	37.4V	37.6V	37.8V
Short Circuit Current ( $I_{sc}$ )	13.70A	13.76A	13.82A	13.88A
Voltage at Maximum Power ( $V_{mp}$ )	31.0V	31.2V	31.4V	31.6V
Current at Maximum Power ( $I_{mp}$ )	12.91A	12.99A	13.06A	13.14A
Module Efficiency (%)	20.49	20.74	21.00	21.25
Operating Temperature	-40°C to +85°C			
Maximum System Voltage	1000V DC/ 1500V DC			
Fire Resistance Rating	Class C (IEC61730)			
Maximum Series Fuse Rating	25A			

STC: Irradiance 1000W/m<sup>2</sup>, Cell temperature 25°C, AM1.5; Tolerance of P<sub>max</sub>: ±3%; Measurement Tolerance: ±3%

## ELECTRICAL CHARACTERISTICS AT NOCT

Maximum Power ( $P_{max}$ )	300W	304W	308W	312W
Open Circuit Voltage ( $V_{oc}$ )	34.2V	34.4V	34.6V	34.8V
Short Circuit Current ( $I_{sc}$ )	11.10A	11.15A	11.20A	11.25A
Voltage at Maximum Power ( $V_{mp}$ )	28.2V	28.4V	28.6V	28.8V
Current at Maximum Power ( $I_{mp}$ )	10.64A	10.71A	10.77A	10.84A

NOCT: Irradiance 800W/m<sup>2</sup>, Ambient temperature 20°C, Wind Speed 1 m/s

## MECHANICAL CHARACTERISTICS

Cell type	Monocrystalline PERC 182*91mm
Number of cells	108 (6x18)
Module dimensions	1722x1134x30mm (67.80x44.65x1.18inches)
Weight	21.5kg (47.4lbs)
Front cover	3.2mm (0.13inches) tempered glass with AR coating
Frame	Anodized aluminum alloy
Junction box	IP68, 3 diodes
Cable	4mm <sup>2</sup> (0.006inches <sup>2</sup> ), Portrait: 300mm (11.81inches); Landscape: 1200mm (47.24inches)
Connector	MC4 or MC4 compatible

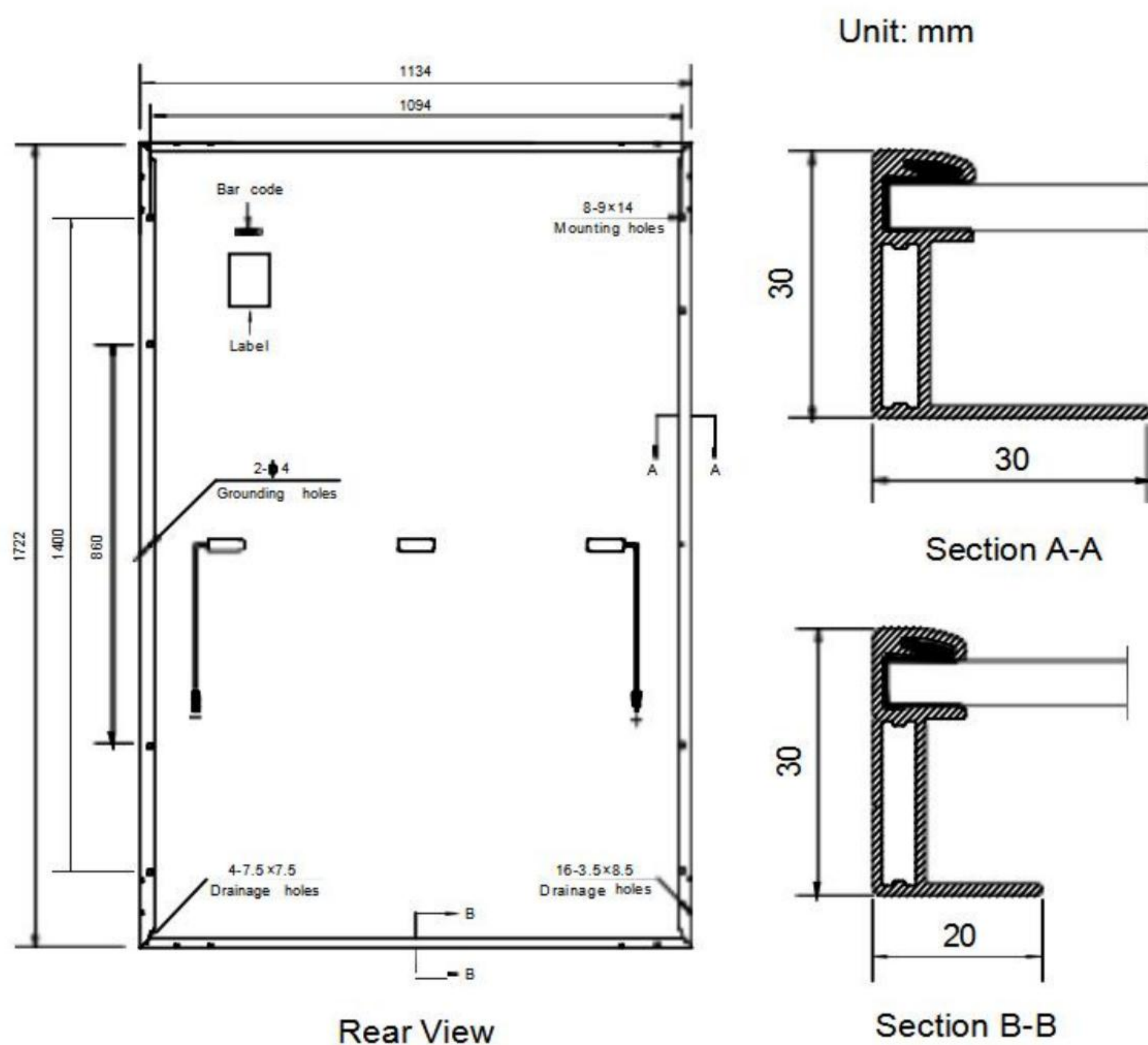
## TEMPERATURE CHARACTERISTICS

Nominal Operating Cell Temperature (NOCT)	43°C±2°C
Temperature Coefficients of $P_{max}$	-0.36%/°C
Temperature Coefficients of $V_{oc}$	-0.28%/°C
Temperature Coefficients of $I_{sc}$	0.05%/°C

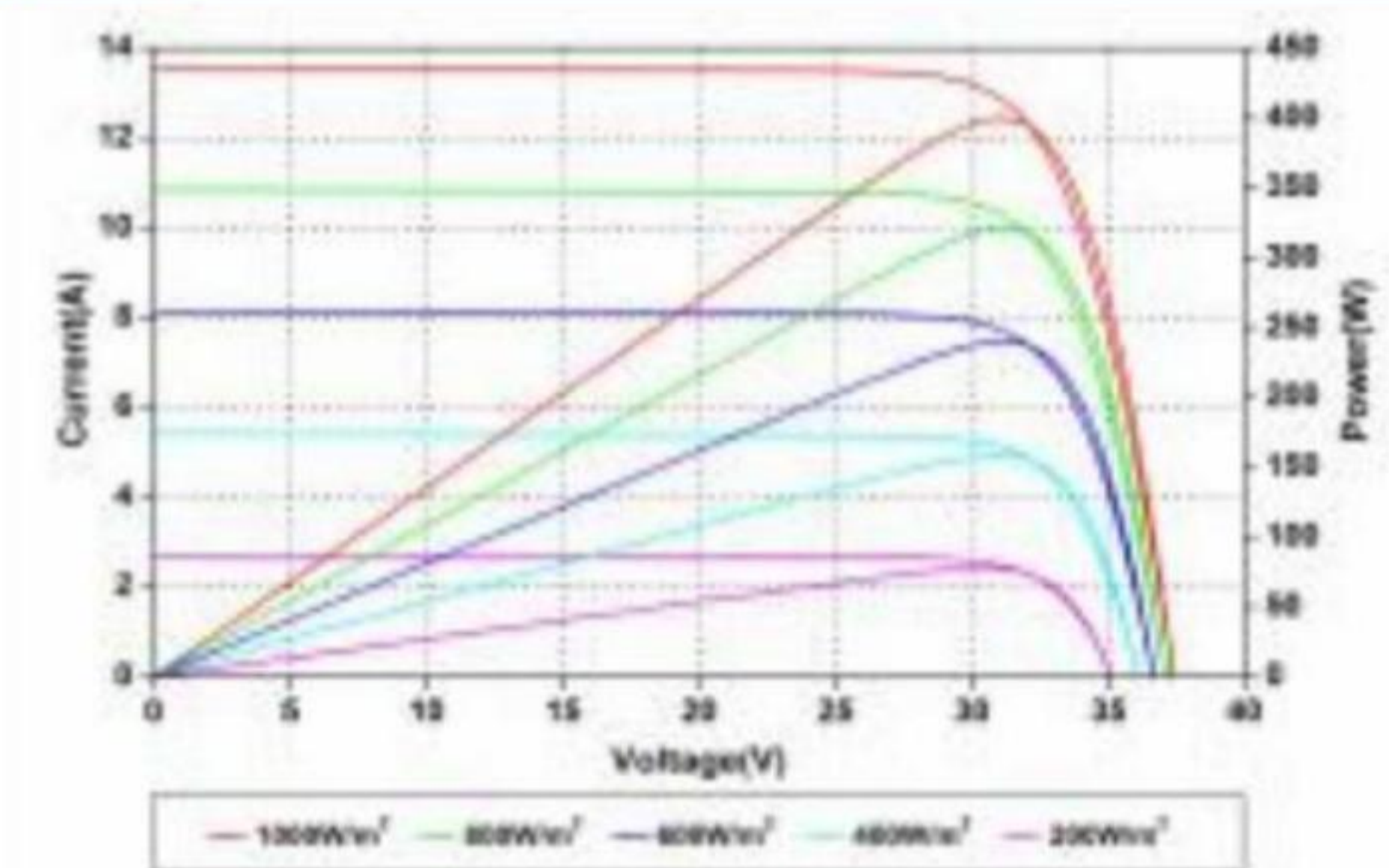
## PACKAGING

Standard packaging	36pcs/pallet
Module quantity per 20' container	216pcs
Module quantity per 40' container	936pcs (HQ)

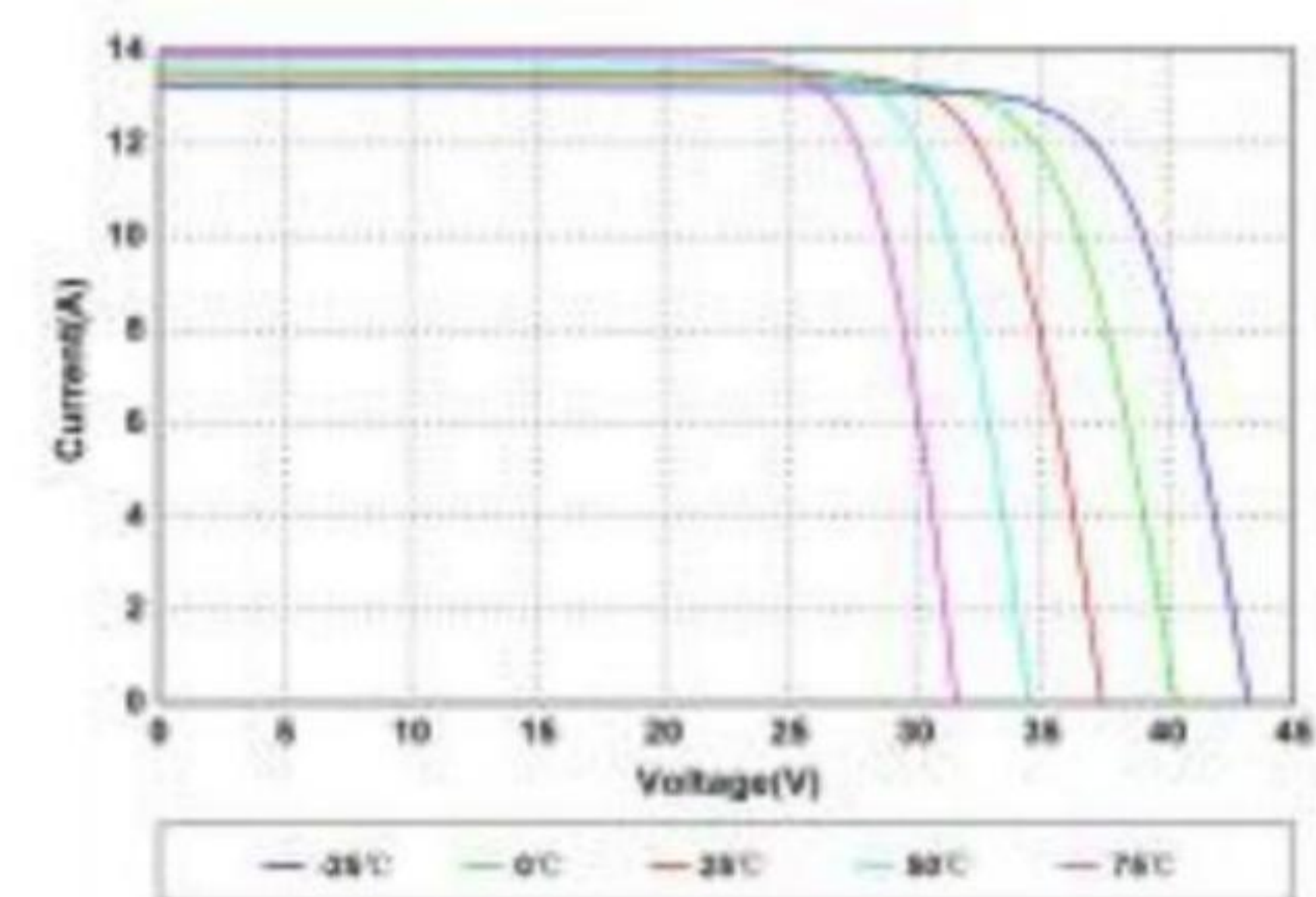
## ENGINEERING DRAWINGS



## IV CURVES



Current-Voltage and Power-Voltage Curves at Different Irradiances



Current-Voltage Curves at Different Temperatures