



SKYMAX^{series} VL-455W-182M/120

Monocrystalline PERC Module

1908×1134×35/30 182×91

Module dimensions (mm) Cell size (mm)

120 CELL 430-455Wp

Mono PERC module Power output

1500V DC 21.03%

Max. system voltage Max. efficiency



KEY FEATURES

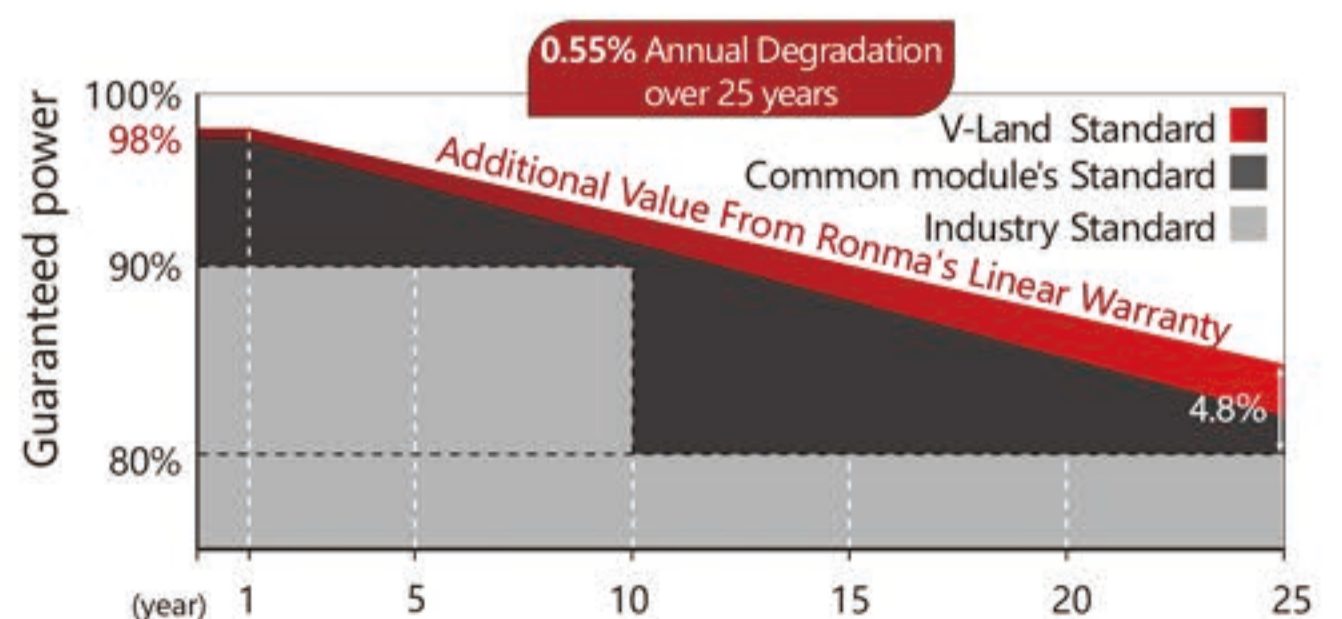
- Higher Power Output**
Module power increases by 5-25% generally, bringing significantly lower LCOE and higher IRR. 0-5w positive tolerance output warranty.
- Most Advanced Production Technologies**
Optimize module current profile, improve system-side power generation.
- Multi Busbar Technology**
By improving optical utilization rate, power increases by 2~3% and efficiency increases by 0.4~0.6%.
- PID Resistance**
Excellent Anti-PID performance guarantee via optimized mass-production process and material control.
- Low-light Performance**
Excellent performance in low light.
- Enhanced Mechanical Load**
Certified to withstand: wind load (2400 Pa) and snow load (5400 Pa).
- Durability Against Extreme Environmental Conditions**
High salt mist and ammonia resistance certified by TUV NORD.
- EL Full Inspection**
Dual stage 100% EL Inspection warranting defect-free product.

Comprehensive Products and System Certificates

- IEC61215/IEC61730/IEC61701/IEC62716
- ISO 9001: Quality Management System
- ISO 14001: Environmental Management System
- ISO14064: Greenhouse Gases Emissions Verification
- OHSAS 18001: Occupational Health and Safety Management System

LINEAR PERFORMANCE WARRANTY

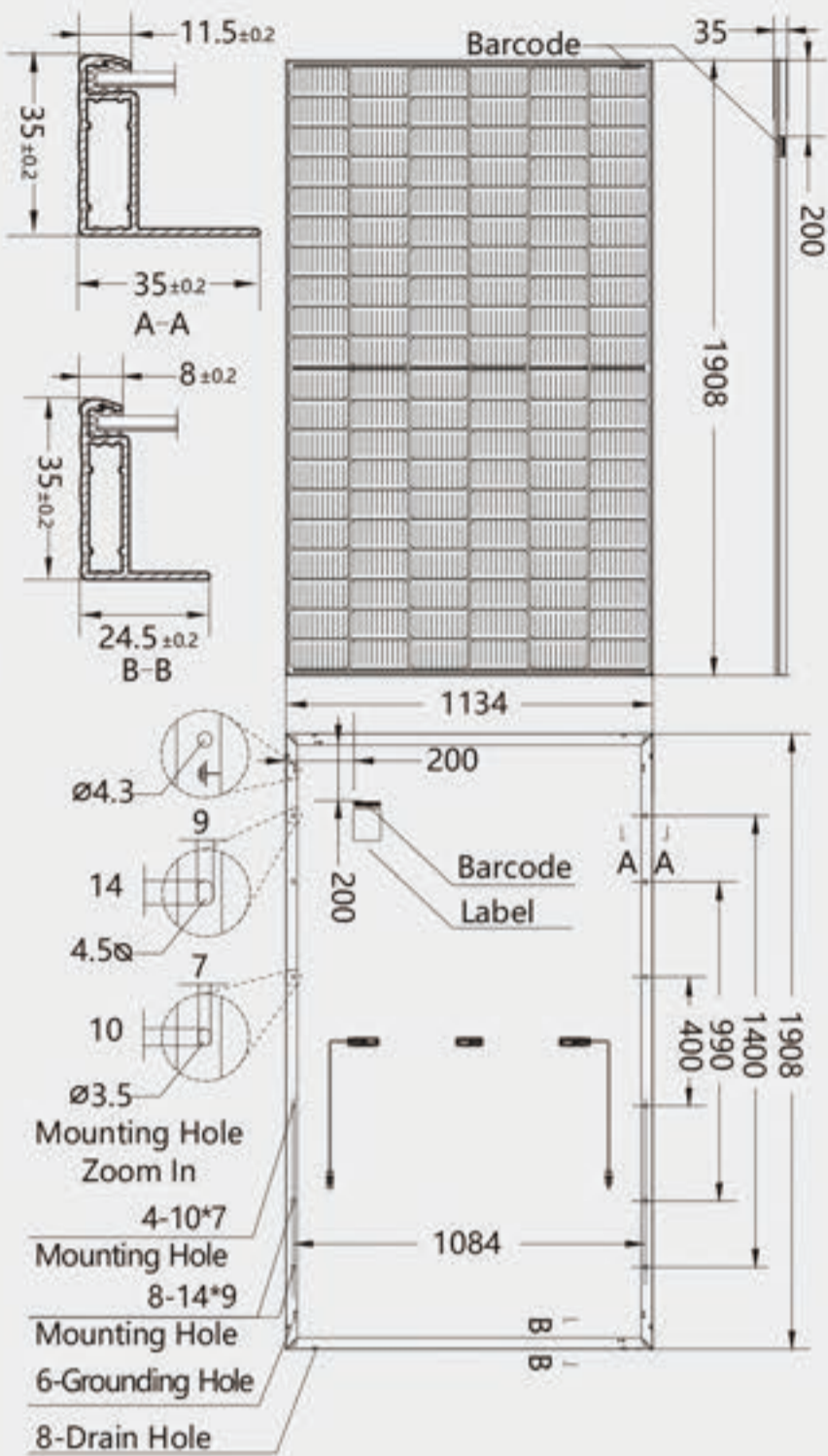
12-year product warranty / 25-year linear power warranty





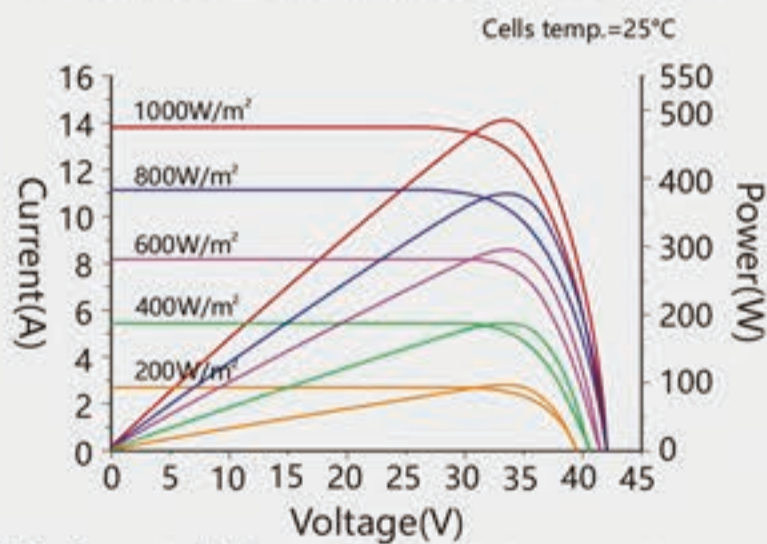
Dimensions of PV Module

Unit: mm

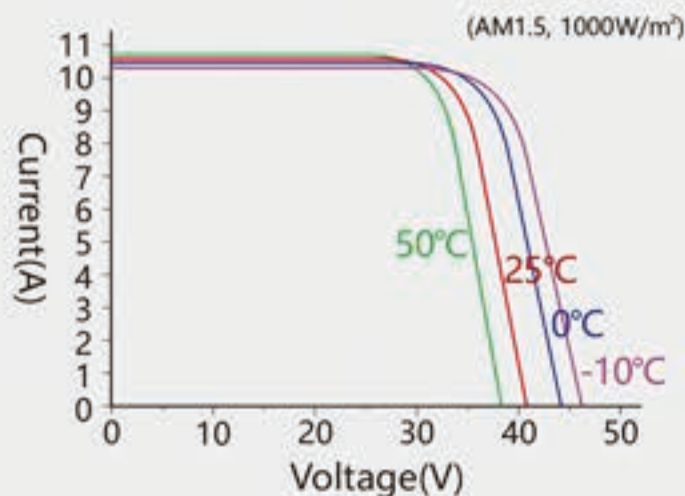


VL-450W-182M/120

I-V characteristics at different irradiances



I-V characteristics at different temperatures



ELECTRICAL DATA(STC)

Model Number	VL-430W-182M/120	VL-435W-182M/120	VL-440W-182M/120	VL-445W-182M/120	VL-450W-182M/120	VL-455W-182M/120
Rated Power in Watts-Pmax(Wp)	430	435	440	445	450	455
Open Circuit Voltage-Voc(V)	40.63	40.86	41.02	41.21	41.40	41.60
Short Circuit Current-Isc(A)	13.56	13.65	13.73	13.81	13.89	13.95
Max. Power Voltage-Vmpp(V)	33.33	33.52	33.72	33.93	34.12	34.31
Max. Power Current-Impp(A)	12.91	12.98	13.05	13.12	13.19	13.26
Module Efficiency(%)	19.87	20.10	20.34	20.57	20.80	21.03

STC: Irradiance 1000W/m², Cell Temperature 25°C, Air Mass AM 1.5,
NOCT: Irradiance at 800W/m², Ambient Temperature 20°C, Wind Speed 1m/s.

MECHANICAL DATA

Solar Cells	Monocrystalline
Cell Size	182mm×91mm
Cell Configuration	120 cells (6×10+6×10)
Module Dimensions	1908×1134×35/30mm
Weight	23.8kg
Glass	High Transmission, Low Iron, Tempered ARC Glass 3.2mm
Back Sheet	White
Frame	Anodized Aluminium Alloy type 6005 T6, Silver/Black Color
J-box	PV-RM01, IP68, 1500V DC, 3 Diodes
Cables	4.0mm ² , (+) 300mm, (-) 300mm (Connector Included)
Connector	MC4-compatible

TEMPERATURE & MAXIMUM RATINGS

Nominal Operating Cell Temperature (NOCT)	44°C ± 2°C
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Pmax	-0.36%/°C
Operational Temperature	-40°C ~ +85°C
Max. System Voltage	1500V DC
Max. Series Fuse Rating	25A

PACKAGING CONFIGURATION

	40ft(HQ)
Number of Modules Per Container	744/864
Number of Modules Per Pallet	31/36
Number of Pallets Per Container	24
Packaging Box Dimensions (l×w×h) (mm)	1940×1120×1260.
Box Gross Weight (kg)	764/883