

# DE-144M10RHC430W-460W

### Small in size, bigger on power

- Up to 460W, 23.0% module efficiency with high density interconnect technology
- Reduce installation cost with higher power bin and efficiency
- Boost performance in warm weather with low temperature coefficient and operating temperature

### High customer value

- Lower LCOE, reduced BOS cost, better ROI
- Lowest guaranteed first year and annual degradation
- Optimized compatibility with existing mainstream system components

### High output power

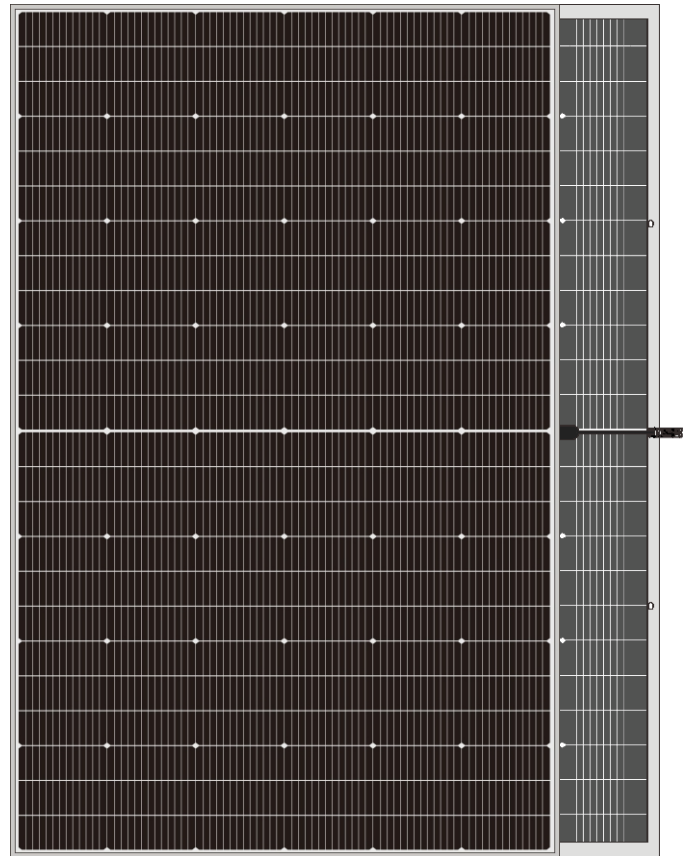
- Based on M10R-182mm solar cells with N-type TopCon technology
- High density interconnection provides improved power density
- MBB technology improves light-trapping effect and current-collection, while lowering series resistance

### High reliability

- Minimized micro-cracks with innovative non-destructive cutting technology minimizes micro-cracking
- Ensured PID resistance through improved cell process and module material control
- Resistant to harsh environments
- Mechanical performance up to +5400/-2400 Pa

### Longer warranty

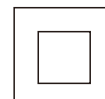
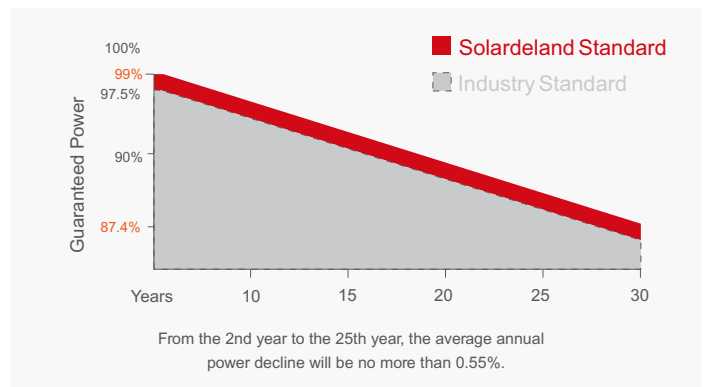
- First-year degradation 1% and annual degradation at 0.4%
- Up to 12 years product warranty and 30 years power warranty



## PRODUCT Warranty

**12 YEARS** Product Warranty

**30 YEARS** Performance guarantee



# M10R-BIFACIAL 430W-460W

## MECHANICAL PARAMETERS

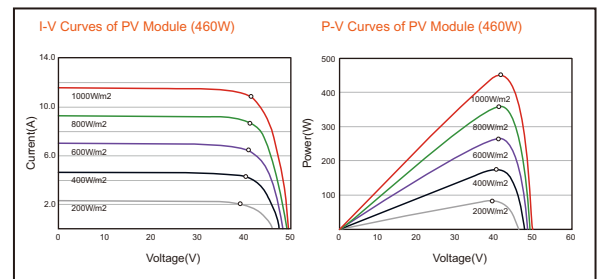
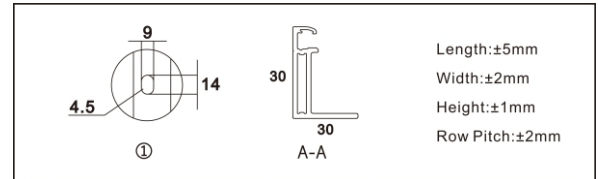
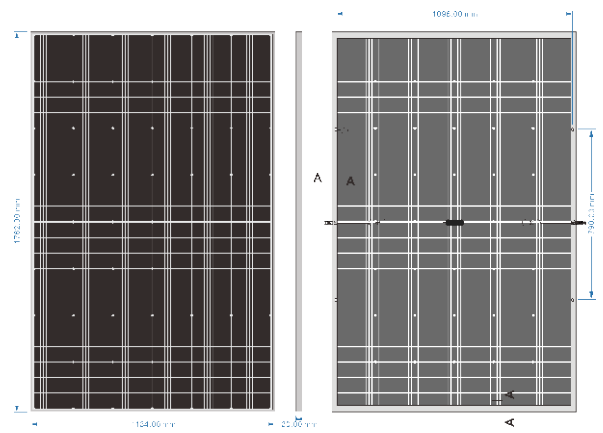
Cell Orientation	6*24(144)solar half cells
Junction Box	IP 68 3 diodes
Output Cable	Output Cable
Front Glass	2.0mm, Anti-reflection Coating
Back Glass	2.0mm, Heat Strengthened Glass
Frame	30mm Anodized Aluminium Alloy
Weight	24.5Kg(+/-0.5kg)
Dimension	1762*1134*30mm
Packaging	36pcs/pallet, 936pcs/40HQ Container

## OPERATING PARAMETERS

Operational Temperature	-40~+85°C
Power Output Tolerance	0~5W
Voc and Isc Tolerance	±3%
Maximum System Voltage	1000/1500VDC(IEC)
Maximum Series Fuse Rating	25A
Nominal Operational Cell Temperature	45±2°C
Protection Class	Class II
Fire Rating	UL type 1 or 2 IEC Class C

## PRODUCT WARRANTY

Warranty for Materials and Processing	12 Years
Warranty for Extra Linear Power Output	30 Years



## ELECTRICAL CHARACTERISTICS STC AM1.5 1000W/m² 25°C NOCT:AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax: ±3%

Module Type	DE-144M10RHC430W	DE-144M10RHC435W	DE-144M10RHC440W	DE-144M10RHC445W	DE-144M10RHC450W	DE-144M10RHC455W	DE-144M10RHC460W
Testing Condition	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT	STC NOCT
Maximum Power(Pmax/W)	430W 327W	435W 330W	440W 334W	445W 337W	450W 340W	455W 344W	460W 347W
Voltage at Maximum Power(Vmp/V)	42.20 39.40	42.40 39.60	42.60 39.80	42.80 40.00	43.00 40.20	43.20 40.40	43.40 40.60
Current at Maximum Power(Imp/A)	10.19 8.30	10.26 8.33	10.33 8.39	10.40 8.43	10.47 8.46	10.54 8.52	10.60 8.55
Open Circuit Voltage(Voc/V)	50.20 47.40	50.40 47.60	50.60 47.80	50.80 48.00	51.00 48.20	51.20 48.40	51.40 48.60
Short Circuit Current(sc/A)	10.76 8.76	10.83 8.80	10.91 8.86	10.98 8.90	11.06 8.93	11.12 8.99	11.19 9.03
Module Efficiency(%)	21.50%	21.80%	22.00%	22.30%	22.50%	22.80%	23.00%

## MECHANICAL LOADING

Front Side Maximum Static Loading	5400Pa
Rear Side Maximum Static Loading	2400Pa
Hailstone Test	25mm Hailstone at the speed of 23m/s

## TEMPERATURE RATINGS(STC)

Temperature Coefficient of Isc	0.04%/°C
Temperature Coefficient of Voc	-0.24%/°C
Temperature Coefficient of Pmax	-0.30%/°C

## Bifacial Output-Rearside Power Gain

5%	Maximum Power (Pmax)	452W	457W	462W	467W	473W	478W	483W
	Module Efficiency STC (%)	22.58%	22.89%	23.10%	23.42%	23.63%	23.94%	24.15%
10%	Maximum Power (Pmax)	473W	479W	484W	490W	495W	501W	506W
	Module Efficiency STC (%)	23.65%	23.98%	24.20%	24.53%	24.75%	25.08%	25.30%

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