

# 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**

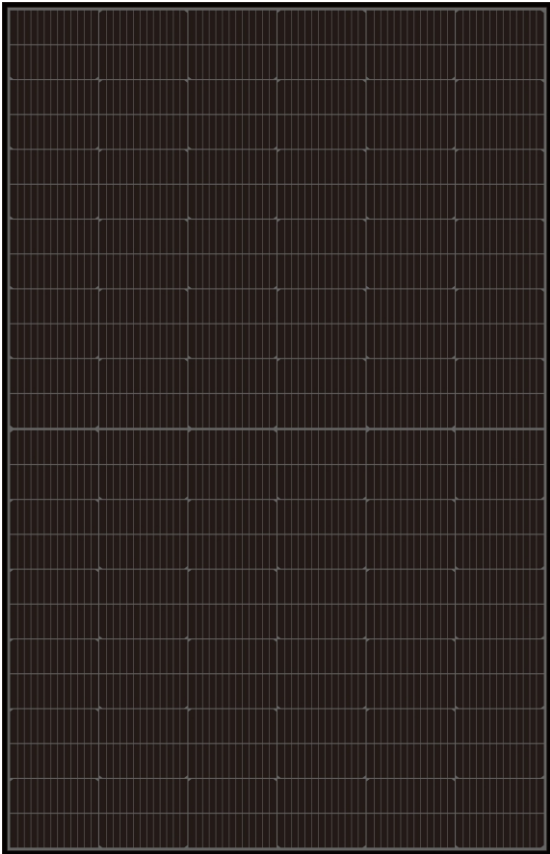
- Based on M10R-182mm solar cells with N-type TopCon technology
- High density interconnection provides improved power density
- MBB technology improves light-trapping effect and current-collection, while lowering series resistance

**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**

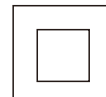
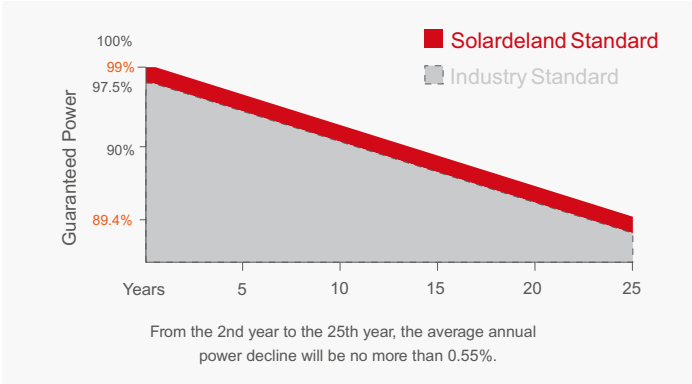
- First-year degradation 1% and annual degradation at 0.4%
- Up to 12 years product warranty and 25 years power warranty



## PRODUCT Warranty

**12 YEARS** Product Warranty

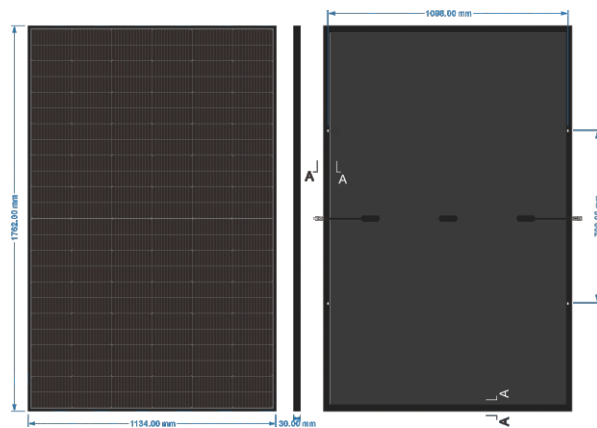
**25 YEARS** Performance guarantee



# M10R-FULL BLACK 430W-460W

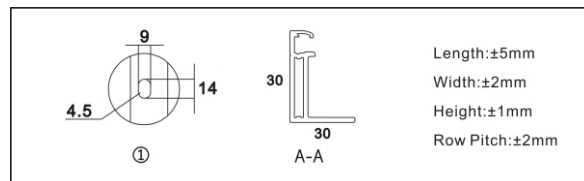
## MECHANICAL PARAMETERS

Cell Orientation	6*24(144)solar half cells
Junction Box	IP 68 3 diodes
Output Cable	Output Cable
Front Glass	3.2 mm, Anti-reflection Coating, High Transmission, Low Iron, Fully Strengthened Glass
Frame	30mm Anodized Aluminium Alloy
Weight	21Kg(+/-0.5kg)
Dimension	1762*1134*30mm
Packaging	36pcs/pallet,936pcs/40HQ Container



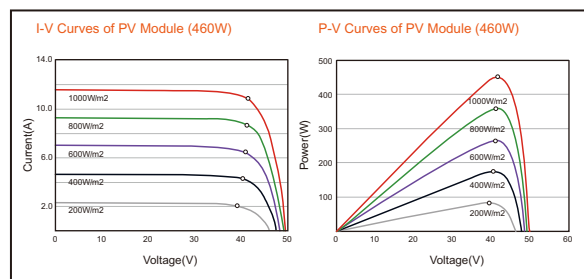
## OPERATING PARAMETERS

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	25 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	
	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

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