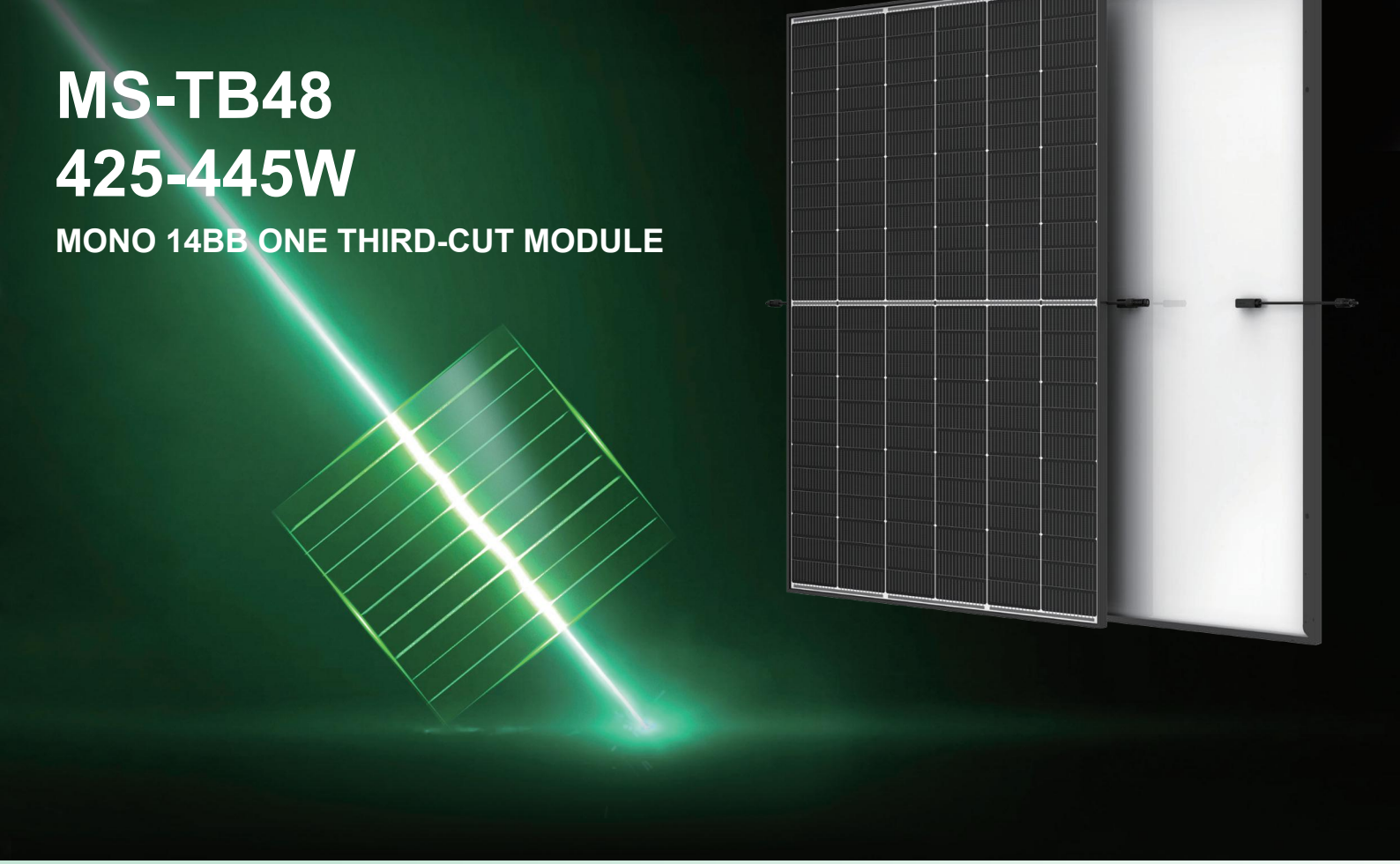
MS-TB48
425-445W
MONO 14BB ONE THIRD-CUT MODULE



1.6℃
It's temperature is 1.6°C lower than that of the conventional module

4%
4% more energy generation

One Third-Cut technique leads to increased power output
When the cells are cut into halves, the current are also halved, which enables less internal loss. Series-parallel wiring improves power performance. The working temperature of module and junction box are lower than that of conventional types, which effectively reduces the hot spot risk and reduces overall module damage.

Series-parallel wiring mode results in reduced shading loss
Series-parallel wiring will not only reduce power lows from shade but also improves the effective use of supports and space.

Excellent temperature performance
The temperature of HC module is 1.6 °C lower than that of the conventional module under the same working condition, which results less power loss.

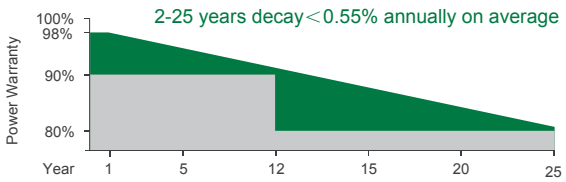
Reduced encapsulation loss due to reduced current
HC module is of lower current and lower CTM loss at around 0.2%, while the CTM loss of conventional module is 1%.

1500V high system voltage design

LINEAR PERFORMANCE WARRANTY

12 years — Product warranty on materials and workmanship

25 years — Linear power output warranty



CERTIFICATES

ISO 9001: 2015
Quality Management System

ISO 14001: 2015
Environmental Management System

IEC 61215 / IEC 61730

OHSAS 18001: 2007
Occupational Health & Safety Managemnet System

*Certification requirements vary in different markets, please consult with Maysun Optronics sales team for appropriate certification.

RACHIDA

All black / Black frame module

Appealing Exterior

MONO 14BB ONE THIRD-CUT MODULE

MS-TB48 425-445W

MONO 14BB ONE THIRD-CUT MODULE

ELECTRICAL PARAMETERS @ STC

Max. Power Output Pmax (W)	425	430	435	440	445
Power Tolerance	0 ~ +5	0 ~ +5	0 ~ +5	0 ~ +5	0 ~ +5
Max. Power Voltage Vmp (V)	42.9	43.2	43.6	44.0	44.3
Max. Power Current Imp (A)	9.92	9.96	9.99	10.01	10.05
Open Circuit Voltage Voc (V)	50.9	51.4	51.8	52.2	52.6
Short Circuit Current Isc (A)	10.56	10.59	10.64	10.67	10.71
Module Efficiency (%)	21.3	21.5	21.8	22.0	22.3

*STC (Standard Test Condition): Irradiance 1000W/m² , Cell Temperature 25℃, Air Mass 1.5
*Measurement Tolerance (±3.0%)

ELECTRICAL PARAMETERS @ NOCT

Max. Power Output Pmax (W)	324	328	332	335	339
Max. Power Voltage Vmp (V)	40.0	40.4	40.7	41.0	41.3
Max. Power Current Imp (A)	8.09	8.11	8.15	8.17	8.20
Open Circuit Voltage Voc (V)	48.2	48.7	49.1	49.4	49.8
Short Circuit Current Isc (A)	8.51	8.53	8.57	8.60	8.63

*NOCT(Nominal Operating Cell Temperature): Irradiance 800W/m² , Ambient Temperature 20 ℃ , Wind Speed 1m/s

TEMPERATURE COEFFICIENTS

Temperature Coefficients of Pmp	-0.30%/ ℃
Temperature Coefficients of Voc	-0.24%/ ℃
Temperature Coefficients of Isc	+0.040%/ ℃

MECHANICAL PARAMETERS

Cell Type	Mono 182x210mm
Number of Cells	144pcs(6x24)
Dimensions (L*W*H)	1762x1134x30mm
Weight	21.1kg
Frame	Anodised Aluminum
Junction Box	IP68, 3 bypass diodes
Cable, Length	4.0mm² , 300mm

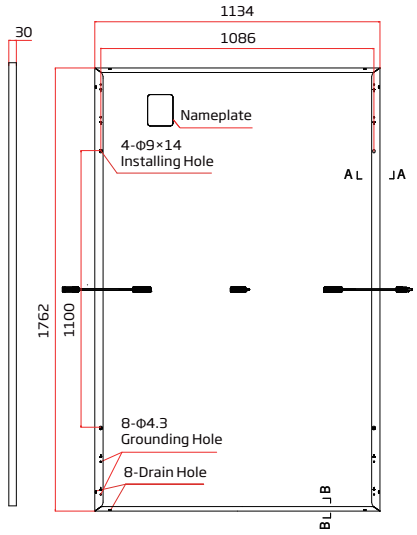
OPERATING CONDITION

Maximum System Voltage(V)	1000(DC)	1500(DC)
Operating Temperature(℃)	-40~+85	
Max. Wind Load / Snow Load(pa)	2400/5400	
Max. Series Fuse Rating(A)	20	
Fire Rating	Class C	
NOCT(℃)	45±2	

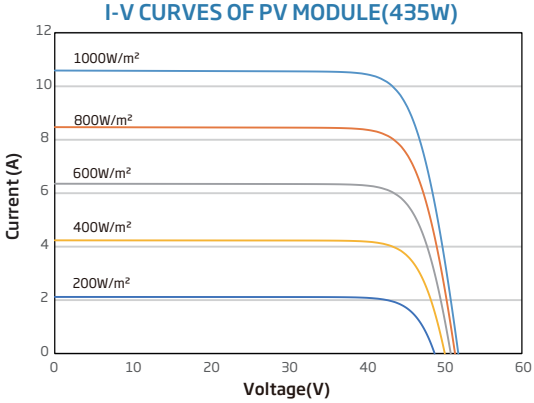
PACKAGE INFORMATION

Container 40'HQ	936pcs
Quantity / Pallet	CTNR: 36pcs

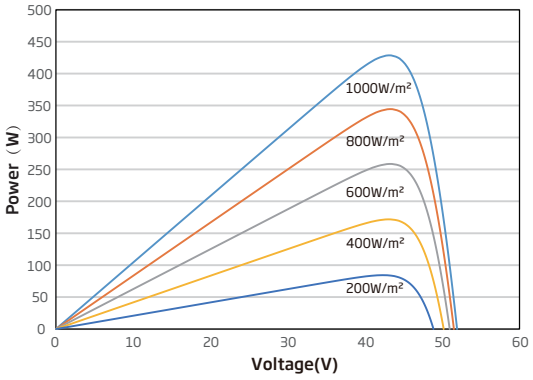
ASSEMBLY DRAWING (Unit:mm)



I-V CURVES OF PV MODULE(435W)



P-V CURVES OF PV MODULE(435W)



RACHIDA