

440~465M

STM-440-465/144-S2

Durability Against Extreme Environmental Conditions

High salt mist and ammonia resistance certified by TUV NORD.



PID Resistance

Excellent Anti-PID performance guarantee limited power degradation for mass production.(Potential Induced Degradation) under the test conditions.



High Efficiency

Higher module conversion efficiency(up to 21.30%) benefit from half cell structure(low resistance characteristic).



Low-light Performance

Advanced glass and cell surface textured design ensure excellent performance in low-light environment.



Severe Weather Resilience

Certified to withstand:Wind load(2400 pascal) and snow load(5400 pascal).



12-year Warranty for Materials and Processing



25-year Warranty for Extra Linear Power Output



IEC61215, IEC61730, IEC61701, IEC62716, IEC62804
ISO 9001:2015: ISO Quality Management System
ISO 14001: 2015: ISO Environment Management System



STM-440-465/144-S2

440-465W

Half-Cell High Efficiency PV Module

Weight

22.5kgs±3%

Cells Type

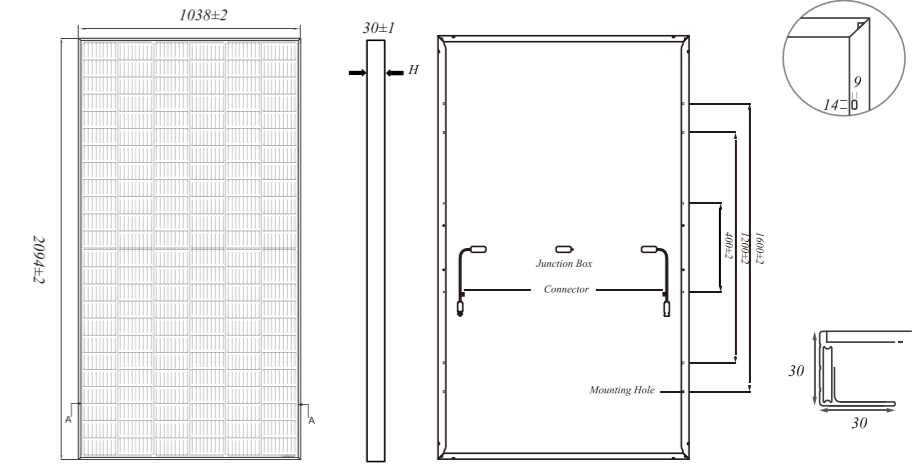
Mono 166x83mm

Dimension(LxWxT)

2094±2mmx1038±2mmx30±1mm

Packaging

36pcs/pallet, 836pcs/40HQ container



Front Side Back
Remark: customized frame color and cable length available upon request

MECHANICAL SPECIFICATION

Cell	Mono
No.of cells	144(6x24)
Cable Length	300mm(+)/300mm(-)
Cable Cross Section Size	4mm ² (IEC)
Junction Box	IP67,3 diodes
Connector	MC4 Compatible

OPERATING PARAMETERS

Maximum System Voltage	1500VDC
Operating Temperature	-40°C~+85°C
Maximum Series Fuse	20A
Maximum StaticLoad,Front	5400Pa(112lb/ft ²)
Maximum StaticLoad,Back	2400Pa(50lb/ft ²)
Safety Class	ClassII

ELECTRICAL CHARACTERISTICS

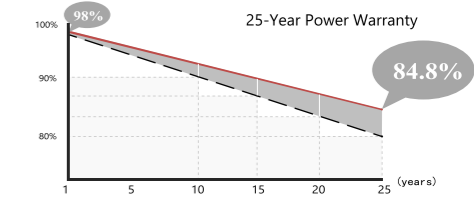
STC:AM1.5 1000W/m² 25°C NOCT:AM1.5 800W/m² 20°C 1m/s Test uncertainty for Pmax ±3%

Module Type	STM-440/144-S2		STM-445/144-S2		STM-450/144-S2		STM-455/144-S2		STM-460/144-S2		STM-465/144-S2	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum Power(Pmax/W)	440	333	445	336	450	340	455	344	460	348	465	352
Open Circuit Voltage(Voc/V)	49.40	46.40	49.56	46.65	49.70	46.90	49.85	47.15	50.01	47.38	50.15	47.61
Short Circuit Current(Isc/A)	11.28	9.16	11.32	9.20	11.36	9.25	11.41	9.29	11.45	9.33	11.49	9.38
Voltage at Maximum Power(Vmp/V)	40.90	38.70	41.21	38.95	41.52	39.19	41.82	39.44	42.13	39.68	42.43	39.90
Current at Maximum Power(Imp/A)	10.76	8.60	10.80	8.64	10.84	8.68	10.88	8.72	10.92	8.76	10.96	8.81
Module Efficiency(%)	20.13		20.36		20.58		20.81		21.04		21.30	

TEMPERATURE RATINGS

Norminal Operating Cell Temperature(NOCT)	45±2 C
Temperature Coefficient of Isc	+0.044%/ C
Temperature Coefficient of Voc	-0.272%/ C
Temperature Coefficient of Pmax	-0.350%/ C

ADDITIONAL VALUE



I-V CURVE(STM-440-465/144-S2)

