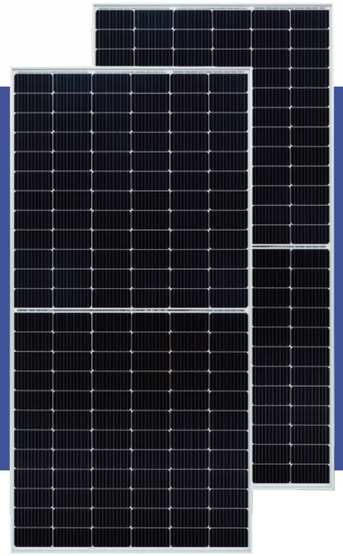
MANYU SOLAR®



MY-S144/M10H
182mm Half Cell Series
530-550W

144-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE

21.2% Module efficiency

550W Highest power output

12 Years Material & Workmanship warranty

25 Years Linear power output warranty

Product Advantages

10BB half-cut cell technology

New circuit design, lower internal current, lower Rs loss
Ga dopped wafer, attenuation＜2% (1st year) / ≤0.55% (Linear)

Significantly lower the risk of hot spot

Special circuit design with much lower hot spot temperature

Lower LCOE

2% more power generation, lower LCOE

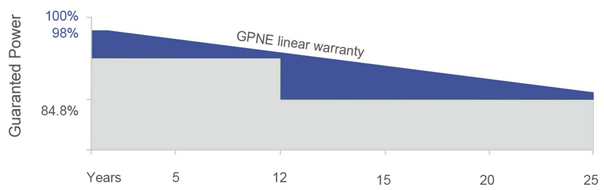
Excellent Anti-PID performance

2 times of industry standard Anti-PID test by TUV SUD

IP68 junction box

High waterproof level

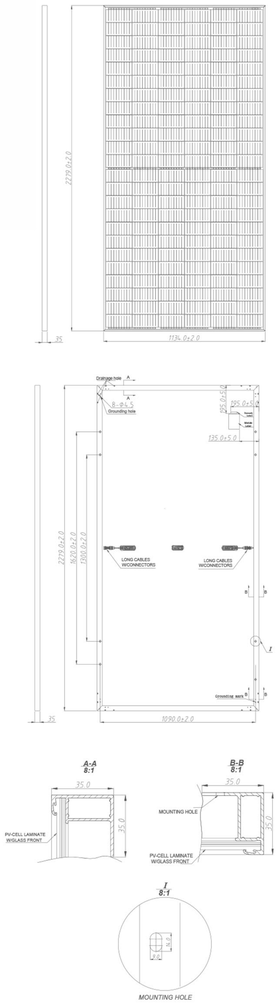
Product Guarantee



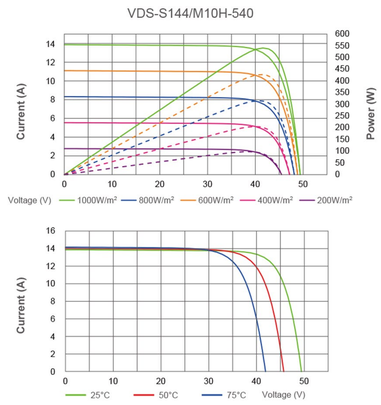
Product Certification

MY-S144/M10H

TECHNICAL DRAWINGS



I-V CURVE



ELECTRICAL PARAMETERS

Performance at STC (Power Tolerance 0 ~ +3%)

Maximum Power (Pmax/W)	530	535	540	545	550
Operating Voltage (Vmpp/V)	40.8	41.0	41.2	41.4	41.6
Operating Current (Impp/A)	13.00	13.05	13.11	13.17	13.23
Open-Circuit Voltage (Voc/V)	49.0	49.2	49.4	49.6	49.8
Short-Circuit Current (Isc/A)	13.76	13.81	13.87	13.93	13.99
Module Efficiency η m(%)	20.4	20.6	20.8	21.0	21.2

Performance at NMOT

Maximum Power (Pmax/W)	395	398	402	406	410
Operating Voltage (Vmpp/V)	38.0	38.2	38.4	38.6	38.8
Operating Current (Impp/A)	10.40	10.44	10.49	10.54	10.58
Open-Circuit Voltage (Voc/V)	45.9	46.1	46.3	46.4	46.6
Short-Circuit Current (Isc/A)	11.09	11.13	11.18	11.23	11.28

STC: Irradiance 1000W/m², Cell Temperature 25˚C, Air Mass AM1.5 NMOT: Irradiance at 800W/m², Ambient Temperatue 20˚C, Air Mass AM1.5, Wind Speed 1m/s

MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	182*182mm
Cell Arrangement	144 (6*24)
Weight	29kg
Module Dimensions	2279*1134*35mm
Cable Length	Portrait 300mm/Landscape 1200mm/Customized
Cable Cross Section Size	TÜV: 4mm²
Front Glass	3.2mm AR Coating Tempered Glass
No. of Bypass Diodes	3/6
Packing Configuration	31pcs/Carton, 620pcs/40HQ
Frame	Anodized Aluminium Alloy
Junction Box	IP68

OPERATING CONDITIONS

Maximun System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40˚C ~ +85˚C
Maximun Series Fuse	25A
Static Loading	Snow Loading: 5400Pa/ Wind Loading: 2400Pa
Conductivity at Ground	≤0.1Ω
Safety Class	II
Resistance	≥100MΩ
Connector	MC4 compatible

TEMPERATURE COEFFICIENT

Temperature Coefficient Pmax	-0.36%/˚C
Temperature Coefficient Voc	-0.26%/˚C
Temperature Coefficient Isc	+0.043%/˚C
NMOT	43±2˚C