

# VDS-S150/M12H 210mm 1/3 Cell Series

## 485-510W

150-CELL 1/3 CUT MONOCRYSTALLINE SOLAR MODULE



### Product Advantages



#### 10BB 1/3-cut cell technology

New circuit design, lower internal current, lower Rs loss  
Ga doped wafer, attenuation <2% (1st year) /  $\leq 0.55\%$  (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

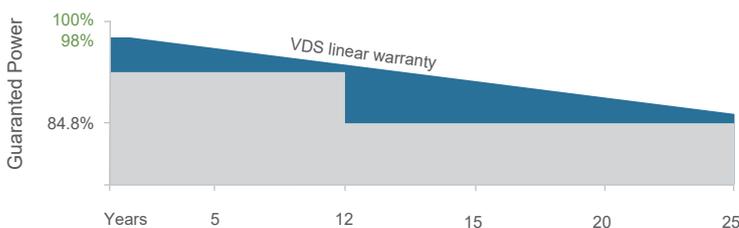
2 times of industry standard Anti-PID test by TUV SUD



#### IP68 junction box

High waterproof level

### Product Guarantee



### 510W

Highest power output



### 12 Years

Material & Workmanship warranty



### 21.2%

Module efficiency



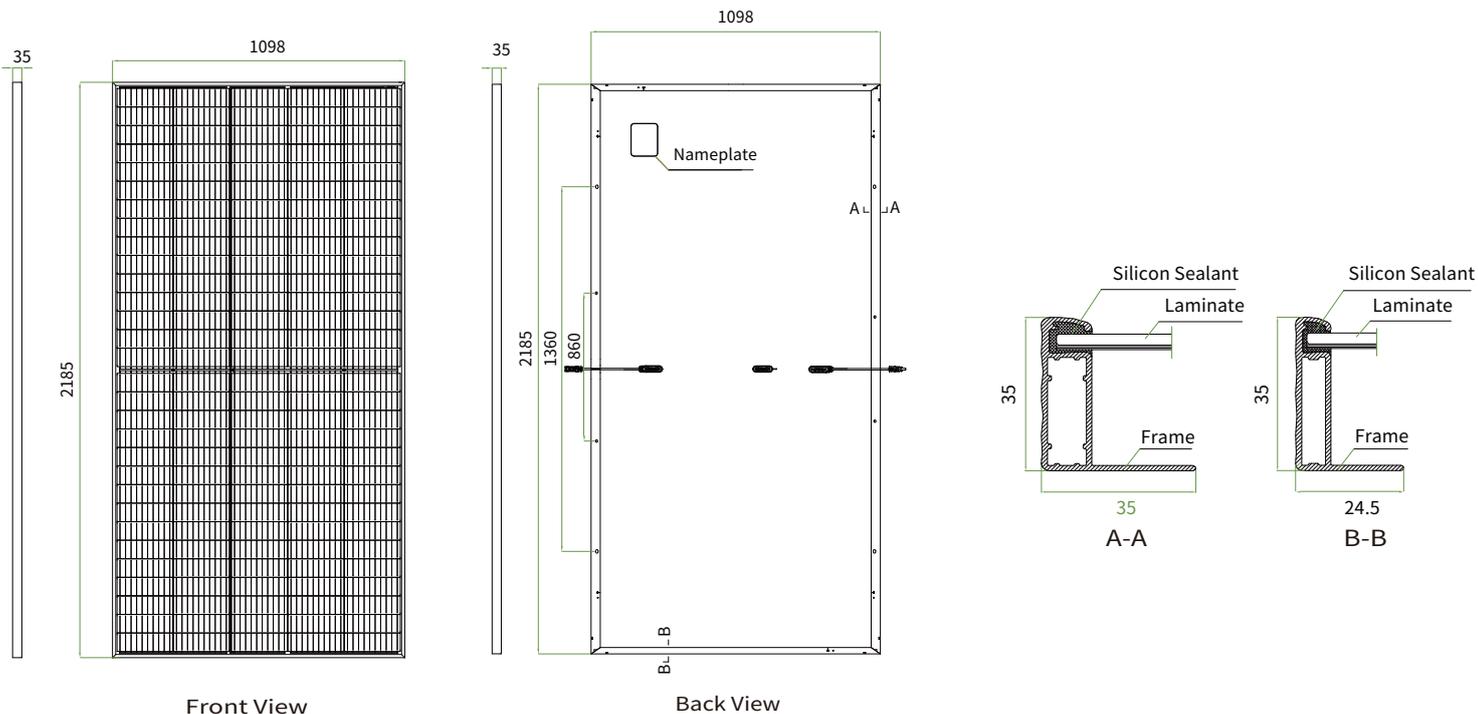
### 25 Years

Linear power output warranty



# VDS-S150/M12H

## TECHNICAL DRAWINGS



## ELECTRICAL PARAMETERS

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

	490	495	500	505	510
Maximum Power (Pmax/W)	490	495	500	505	510
Operating Voltage (Vmpp/V)	42.4	42.6	42.8	43.0	43.2
Operating Current (Impp/A)	11.56	11.63	11.69	11.75	11.81
Open-Circuit Voltage (Voc/V)	51.3	51.5	51.7	51.9	52.1
Short-Circuit Current (Isc/A)	12.14	12.21	12.28	12.35	12.42
Module Efficiency $\eta_m$ (%)	20.3	20.5	20.7	21.0	21.2

### Performance at NMOT (Power Tolerance 0 ~ +3%)

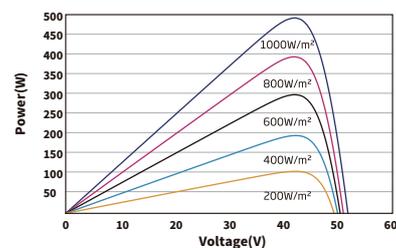
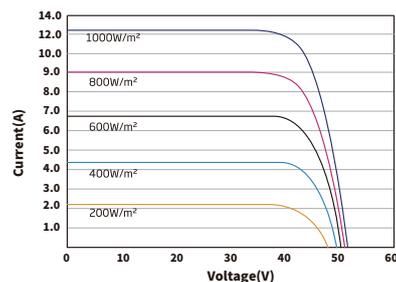
	369	373	377	381	385
Maximum Power (Pmax/W)	369	373	377	381	385
Operating Voltage (Vmpp/V)	40.0	40.2	40.4	40.6	40.5
Operating Current (Impp/A)	9.22	9.28	9.33	9.38	9.50
Open-Circuit Voltage (Voc/V)	48.2	48.4	48.6	48.8	49.0
Short-Circuit Current (Isc/A)	9.78	9.84	9.90	9.95	10.01

STC: Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, Air Mass AM1.5  
 NMOT: Irradiance at 800W/m<sup>2</sup>, Ambient Temperature 20°C, Air Mass AM1.5, Wind Speed 1m/s

## MECHANICAL SPECIFICATION

Cell Type	Monocrystalline
Cell Dimensions	210*210mm
Cell Arrangement	150 (5*30)
Weight	26.5kg
Module Dimensions	2185 x 1098 x 35mm
Cable Length	Portrait 350mm or customized length
Cable Cross Section Size	TÜV: 4mm <sup>2</sup>
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

## I-V CURVE (495W)



## OPERATING CONDITIONS

Maximum System Voltage	1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum Series Fuse	20A
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	-0.34%/°C
Temperature Coefficient Voc	-0.25%/°C
Temperature Coefficient Isc	+0.04%/°C
NMOT	43±2°C