VENDATO SOLAR

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

144-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE

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

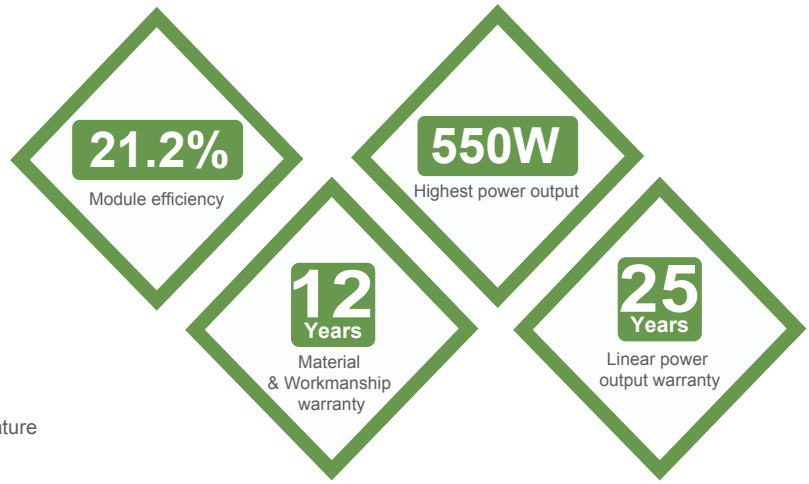
2% more power generation, lower LCOE

Excellent Anti-PID performance

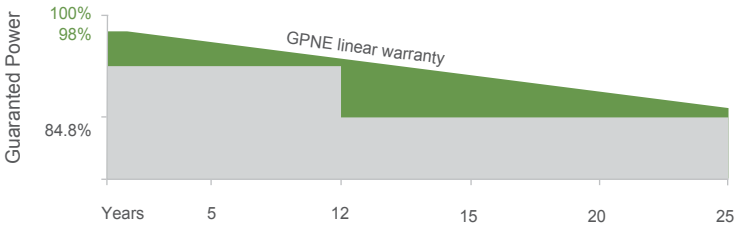
2 times of industry standard Anti-PID test by TUV SUD

IP68 junction box

High waterproof level



Product Guarantee

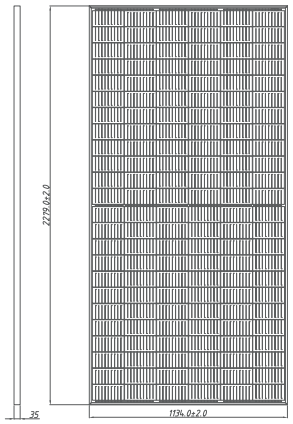


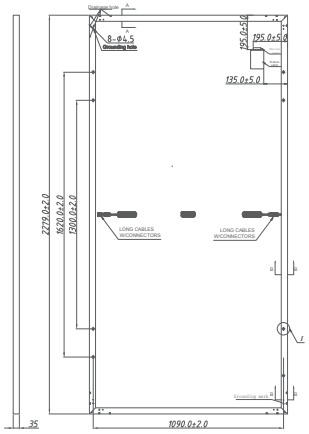
Product Certification

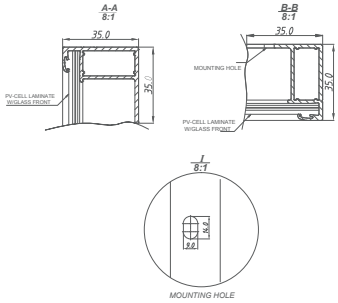
TÜV SÜD · IEC · TÜV NORD Type Tested · MCS · JET www.jet.or.jp · CQC · INMETRO · ISO · CE · J-PEC · CHUBB

VDS-S144/M10H

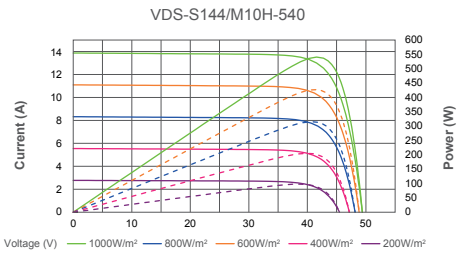
TECHNICAL DRAWINGS

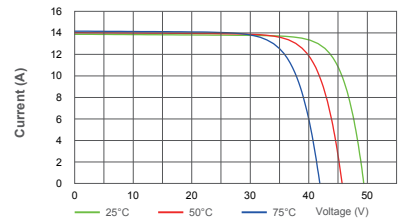






I-V CURVE





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 ηm(%)	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

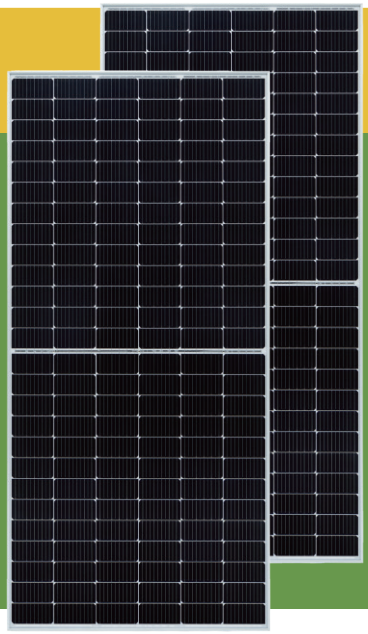
OPERATING CONDITIONS

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

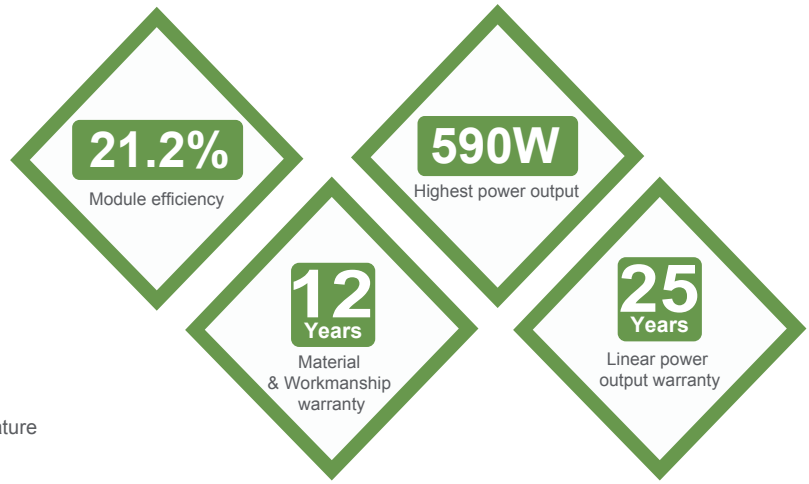
Temperature Coefficient Pmax	-0.36%/˚C
Temperature Coefficient Voc	-0.26%/˚C
Temperature Coefficient Isc	+0.043%/˚C
NMOT	43±2˚C

VENDATO SOLAR



VDS-S156/M10H
182mm Half Cell Series
570-590W

156-CELL HALF CUT MONOCRYSTALLINE SOLAR MODULE



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

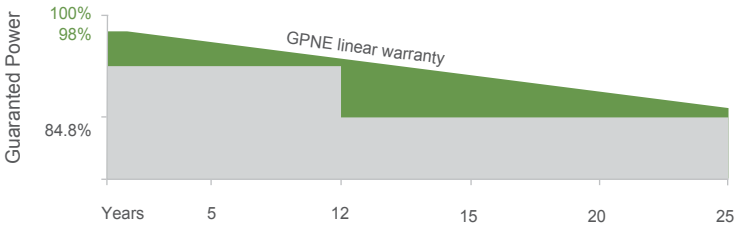
Excellent Anti-PID performance

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

IP68 junction box

High waterproof level

Product Guarantee

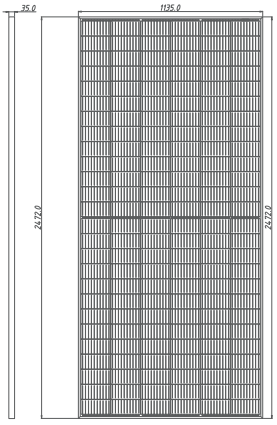


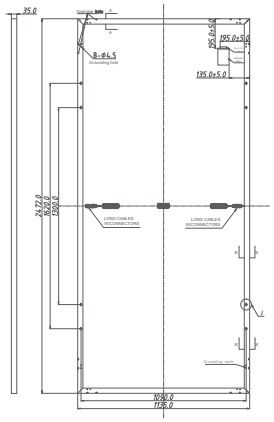
Product Certification

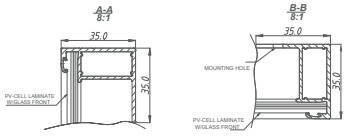
TÜV SÜD · IEC · TÜV NORD Type Tested · MCS · JET www.jet.or.jp · CQC · INMETRO · ISO · CE · J-PEC · CHUBB

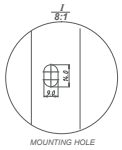
VDS-S156/M10H

TECHNICAL DRAWINGS

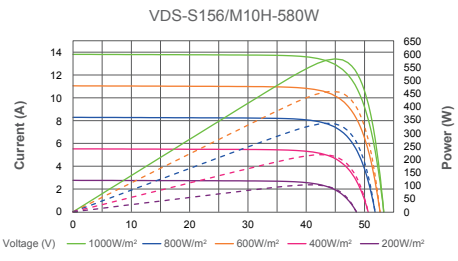


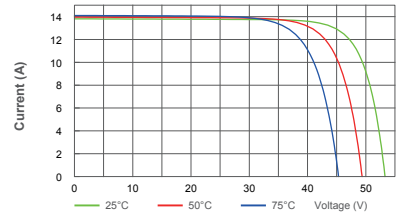






I-V CURVE





ELECTRICAL PARAMETERS

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

Maximum Power (Pmax/W)	570	575	580	585	590
Operating Voltage (Vmpp/V)	45.1	45.2	45.3	45.4	45.5
Operating Current (Impp/A)	12.65	12.73	12.81	12.89	12.97
Open-Circuit Voltage (Voc/V)	53.5	53.6	53.7	53.8	53.9
Short-Circuit Current (Isc/A)	13.38	13.46	13.54	13.62	13.70
Module Efficiency ηm(%)	20.3	20.5	20.7	20.9	21.0

Performance at NMOT

Maximum Power (Pmax/W)	420	424	427	431	435
Operating Voltage (Vmpp/V)	41.9	42.0	42.1	42.2	42.3
Operating Current (Impp/A)	10.03	10.10	10.16	10.22	10.28
Open-Circuit Voltage (Voc/V)	50.0	50.1	50.2	50.3	50.4
Short-Circuit Current (Isc/A)	10.79	10.85	10.91	10.98	11.04

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	156 (6*26)
Weight	31.5kg
Module Dimensions	2472*1135*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, 558pcs/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