



# Qudra-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 doped wafer, attenuation < 2 % (1st year) / ≤ 0.4% per year (30 years linear)



#### Much lower risk of hot spots

Special circuit design to prevent hot spots.



#### Lower LCOE

2% more power generated, lower LCOE for whole system.



Anti  
PID

#### Excellent Anti-PID performance

2 types of industry standard Anti-PID tests.

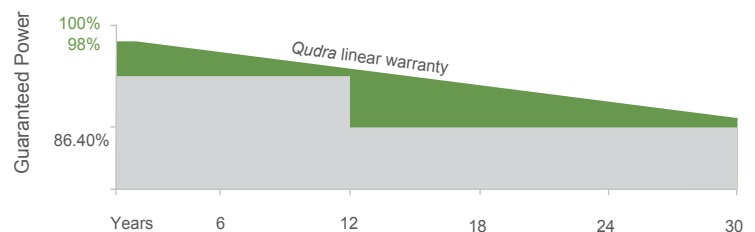


#### IP68 junction box

High waterproof level.



### Product Guarantee

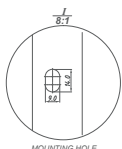
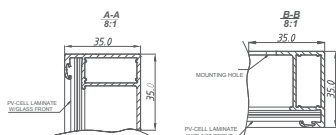
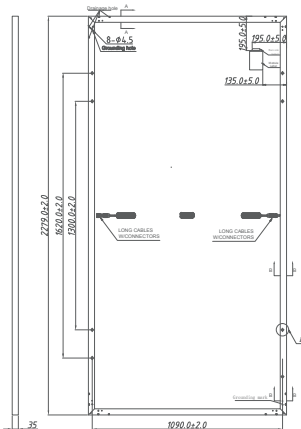
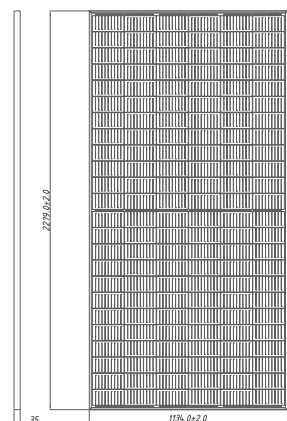


### Product Certification



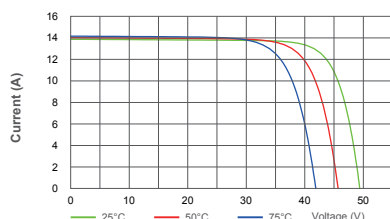
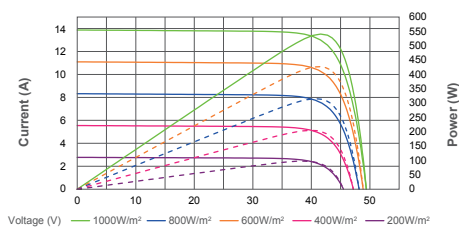
# Qudra-S144/M10H

## TECHNICAL DRAWINGS



## I-V CURVE

VDS-S144/M10H-540



## ELECTRICAL PARAMETERS

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

Parameter	530	535	540	545	550
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 $\eta$ (%)	20.4	20.6	20.8	21.0	21.3

Performance at NMOT

Parameter	395	398	402	406	410
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/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	182*182mm
Cell Arrangement	144 (6*24)
Weight	29kg
Module Dimensions	2279*1134*35mm
Cable Length	Portrait 350mm/Customized
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	31 pcs/Carton, 620 pcs/40HQ
Frame	Anodized Aluminium Alloy
Split Junction Box	IP68

## OPERATING CONDITIONS

Maximum System Voltage	1000V/1500V/DC(IEC)
Operating Temperature	-40°C ~ +85°C
Maximum 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