Poly

**Solutions** 



# **COULEE ULTRA SOLAR MODULE**

Mono PERC Half-cut Cell Series

60 × 2 CELL

MONOCRYSTALLINE MODULE

360-380W POWER OUTPUT RANGE

**20.5**% MAXIMUM EFFICIENCY

**0 - +3**% POSITIVE POWER TOLERANCE

Coulee Ultra is the top performance reference solar module series. Based on the advanced mono wafer and PERC Half-cut technology, Ultra offers as much power as 380W with outstanding cell efficiency up to 22.3% and module efficiency 20.5%.

Thanks to the Half-Cut technology, the cell internal resistance is reduced, which provides an additional module power even while shading, cloudy weather, and in low light conditions.

9BB cells: More uniform current collection capability, reducing the current heat loss of the internal cells.

## **Product Certificates**

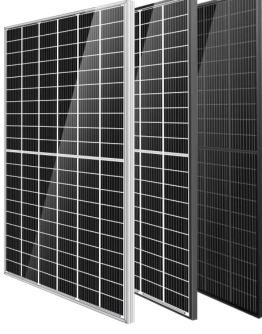
IEC/EN 61215, IEC/EN 61730





CAUTIONS: READ SAFETY AND INSTALLATION INSTRUCTIONS BEFORE USING THE PRODUCT.





#### **Ideal For Large Scale Installations**

- Reduce BOS cost by connecting more modules in a string
- Up to 1500VDC system voltage

#### **Maximum Limited Space**

• Up to 205W/m<sup>2</sup> power density

#### **Highly Reliable Due to Stringent Quality Control**

- Over 30 in-house tests (UV, TC, HF, etc.)
- In-house testing goes well beyond certification requirements
- Fire Class A tested
- 100% EL double inspection

## **Severe Weather Resilience**

- 2400Pa wind load
- 5400Pa snow load
- 35mm hail stones at 97km/h

#### **Reduced Hot Spot Risk**

• With optimized electrical design and lower operating current

## **Linear Performance Warranty**





#### **Construction Materials**

Front Glass	3.2mm, Low Iron, Tempered Glass			
Frame	Anodized Aluminum Alloy			
Junction Box	IP68 Rated			
Output Cables	4mm², Landscape: 1100mm, Portrait: N 150mm/P 300mm			
Connector	MC4 Compatible			
Encapsulation Material	EVA			
Backsheet	TPT (White OR Black)			
Fixing Adhesive	Silicone Sealant			

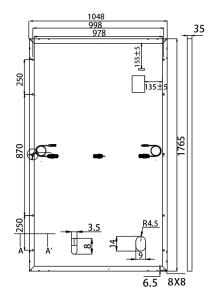
# **Mechanical Data**

Solar Cells	Mono 166mm × 83mm			
Number of Cells	60 × 2pcs			
Module Dimensions	1765mm × 1048mm × 35mm			
Weight	20kg			

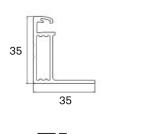
## **Temperature Coefficient**

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	-0.36%/℃
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Isc	+0.05%/°C
NOTC	(45 ± 2) °C

# **Mechanical Diagrams**



Frame Cross Section A-A





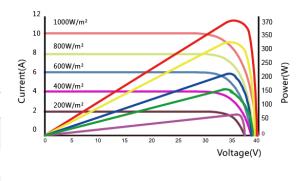
## **Operating Conditions**

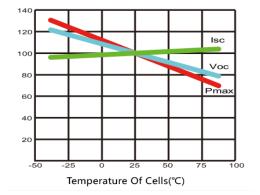
Max. System Voltage	1500VDC (IEC)		
Max. System Fuse Rating	20A		
Operating Temperature	-40 ~ +85°C		
Max. Static Load, Front (Snow)	5400Pa		
Max. Static Load, Back (Wind)	2400Pa		

#### **Electrical Parameters at STC**

Module type	CLM-360M-60 Series					
Rated Maximum Power (Pmax/W)	360	365	370	375	380	
Maximum Power Voltage (Vmp/V)	33.70	33.90	34.10	34.30	34.50	
Open-circuit Voltage (Voc/V)	40.90	41.10	41.30	41.50	41.70	
Maximum Power Current (Imp/A)	10.69	10.77	10.86	10.95	11.04	
Short-circuit Current (Isc/A)	11.20	11.28	11.37	11.46	11.55	
Module Efficiency (%)	19.5	19.7	20.0	20.3	20.5	
STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5						

# IV Curves





# **Packaging Configuration**

Pieces Per Pallet: 66 | Pallets Per 40HQ: 13 | Pieces Per 40HQ: 858