

# COULEE SOLAR MODULE

**54-CELL**  
MONOCRYSTALLINE MODULE

**295-310W**  
POWER OUTPUT RANGE

**20.70%**  
MAXIMUM MODULE EFFICIENCY

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

Coulee Limited, electrical specialists and creators of energy saving designs for domestic and commercial applications.

Coulee solar panel manufacturing processes utilize the best quality materials available and industry-leading equipment from around the world. We stand behind our promise of quality workmanship in all of our solar products. We are committed to building strategic, mutually beneficial collaboration with installers, developers, distributors and other partners.

## Product Certificates

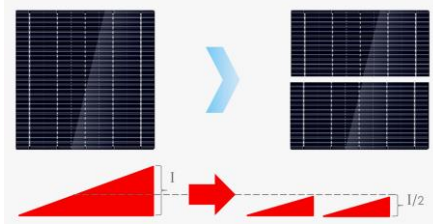
IEC/EN 61215, IEC/EN 61730



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



Coulee Limited  
<https://couleenergy.com>



**Half-cut Cell**  
Module Available



## Our Most Versatile Product

- Compatible with all major BOS components and system designs
- Up to 1500V<sub>DC</sub> system voltage

## Maximum Limited Space

- Up to 207W/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

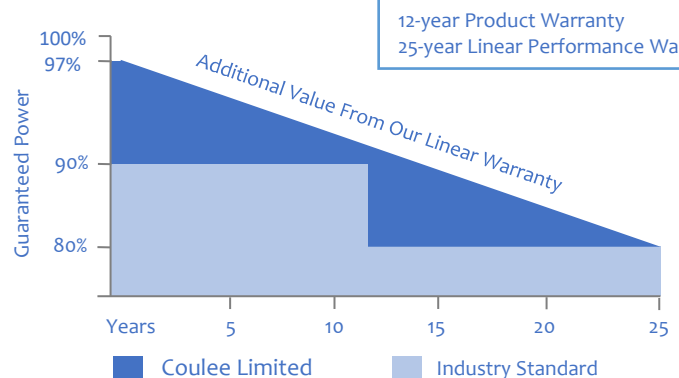
## Severe Weather Resilience

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

## Durability Against Extreme Environmental Conditions

- Salt mist corrosion tested, perfect for harsh climatic conditions

## Linear Performance Warranty



12-year Product Warranty  
25-year Linear Performance Warranty

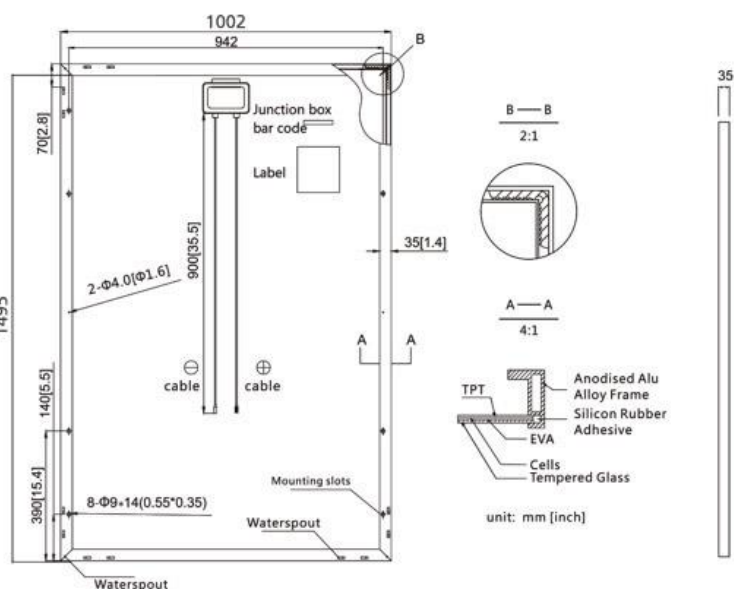
Additional Value From Our Linear Warranty

■ Coulee Limited    ■ Industry Standard

## Construction Materials

Front Glass	3.2mm, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP67 Rated
Output Cables	TUV 1 × 4mm <sup>2</sup> , Length: 900mm
Connector	MC4 (IP67)
Encapsulation Material	EVA
Backsheet	TPT
Fixing Adhesive	Silicone Sealant

## Mechanical Diagrams



## Electrical Parameters at STC

Module type	CLM-300M-54 Series			
Rated Maximum Power (P <sub>max</sub> /W)	295	300	305	310
Maximum Power Voltage (V <sub>mp</sub> /V)	30.35	30.59	30.75	30.86
Open-circuit Voltage (V <sub>oc</sub> /V)	37.38	37.17	37.53	37.71
Maximum Power Current (I <sub>mp</sub> /A)	9.71	9.81	9.92	10.05
Short-circuit Current (I <sub>sc</sub> /A)	10.28	10.30	10.36	10.44
Module Efficiency (%)	19.70	20.03	20.36	20.70

STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5

## Packaging Configuration

Pieces Per Carton: 2 | Pieces Per 20GP/40HQ: 364/900  
 Pieces Per Carton: 30 | Pieces Per 20GP/40HQ: 420/990

## Mechanical Data

Solar Cells	Mono 158.75mm × 158.75mm
Number of Cells	54Cells (6 × 9)
Module Dimensions	1495mm × 1002mm × 35mm
Weight	16.0kg

## Temperature Coefficient

Power Tolerance	0 ~ +3%
Temperature Coefficient of P <sub>max</sub>	-0.37%/°C
Temperature Coefficient of V <sub>oc</sub>	-0.28%/°C
Temperature Coefficient of I <sub>sc</sub>	0.048 %/°C
NOTC	(45 ± 2) °C

## Operating Conditions

Max. System Voltage	1500VDC (IEC)
Max. System Fuse Rating	15A
Operating Temperature	-40 ~ +85°C
Max. Static Load, Front (Snow)	5400Pa
Max. Static Load, Back (Wind)	2400Pa

## IV Curves

