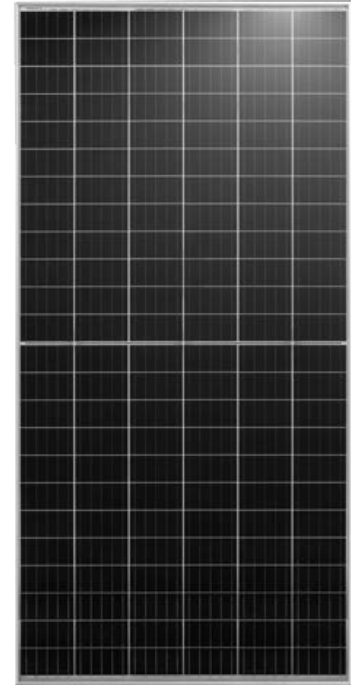


COULEE SOLAR MODULE

Mono Poly Solutions

Half-cut Cell



144 Half-cut CELLS
MONOCRYSTALLINE MODULE

390-410W
POWER OUTPUT RANGE

20.38%
MAXIMUM EFFICIENCY

0 - +3%
POSITIVE POWER TOLERANCE



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 203.8W/m² 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

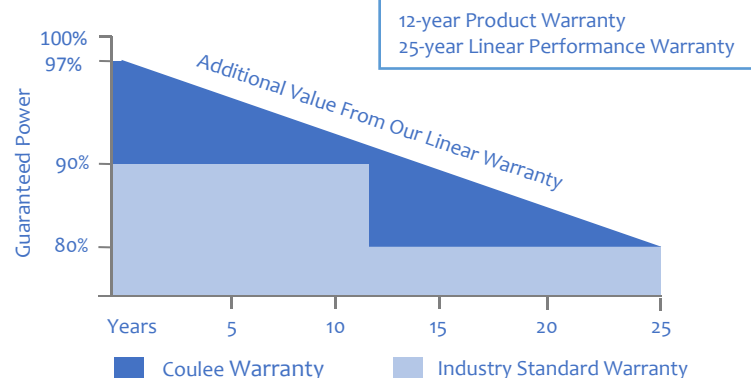
Severe Weather Resilience

- 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



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.

Coulee super-high efficiency module adopt Advanced PERC(Passivated Emitter and Rear Cell) technology. Its higher conversion efficiency and better anti-PID performance bring installers the maximize power yield per unit area.

Management System

ISO9001: Quality Management System
ISO14001: Environmental Management System
OHSAS 18001: Occupation Health and Safety Management System



Coulee Limited
<https://couleenergy.com>

Construction Materials

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

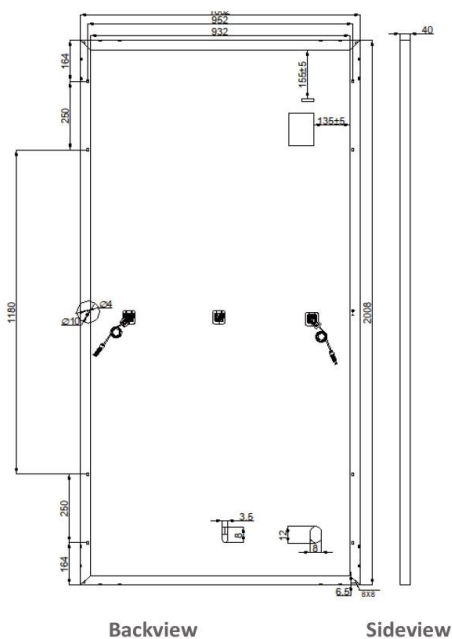
Mechanical Data

Solar Cells	Mono PERC
Number of Cells	144 Half-cut Cells (6 × 24)
Module Dimensions	2008mm × 1002mm × 40mm
Weight	22.5kg

Temperature Coefficient

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	(-0.36 ± 0.05)%/°C
Temperature Coefficient of Voc	(-0.28 ± 0.02)%/°C
Temperature Coefficient of Isc	(0.048 ± 0.01)%/°C
NOTC	(45 ± 2) °C

Mechanical Diagrams

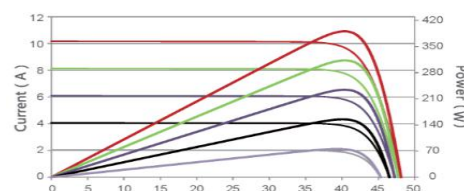


Operating Conditions

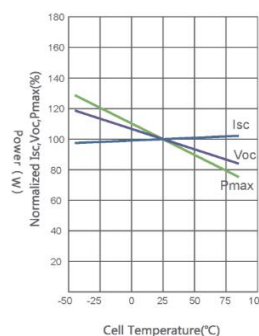
Max. System Voltage	1500VDC (IEC)
Max. System Fuse Rating	15A
Operating Temperature	-40 ~ +85°C
Max. Static Load, Front (Snow)	5400Pa
Max. Static Load, Back (Wind)	2400Pa

IV Curves

Current-Voltage & Power-Voltage Curves (390W)



Temperature Dependence of Isc, Voc, Pmax



Electrical Parameters at STC

Module type	CLM-400M-72(H) Series			
Rated Maximum Power (Pmax/W)	390	395	400	410
Maximum Power Voltage (Vmp/V)	41.1	41.4	41.7	42.3
Open-circuit Voltage (Voc/V)	49.3	49.5	49.8	50.4
Maximum Power Current (Imp/A)	9.49	9.55	9.60	9.69
Short-circuit Current (Isc/A)	10.12	10.23	10.36	10.60
Module Efficiency (%)	19.38	19.63	19.88	20.38

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

Packaging Configuration

Pieces Per Pallet: 56 | Pallets Per 40HQ: 12 | Pieces Per 40HQ: 672