

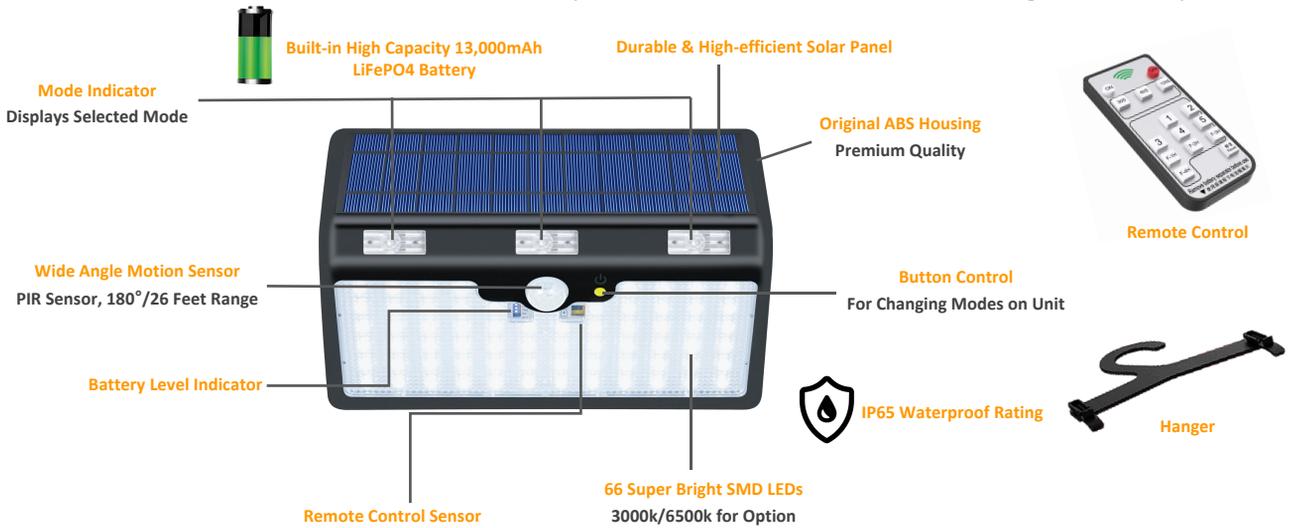


Solar Motion Security Light



Outdoor Solar LED lights provide excellent illumination with long battery life, remote controlled operation, flexible installation options and elegant ABS design allowing you to use it in many different ways. Unique Digital Display on front of unit to provide battery charging indication during day and battery level at night along with selected operation mode. Best in class motion sensor enabled security light for your patio, fence, deck, yard, pathway, etc. Take it with you on your outdoor adventures, hang it anywhere using the provided hanger! Remote controlled operation in max. brightness Always ON mode allows you to use it when required as a flood light. Perfect for camping, parties and barbecues or use it as a work light in your garage, built for all kinds of applications!

- 66 Super Bright LEDs, 1980 Lumens, 3000K/6500K for option
- Lasts 2-4 cloudy or rainy days with full charge
- Six Unique Operating Modes, Auto-ON at Night
- ALL Night Dusk to Dawn Operation
- Remote Controlled or Button Controlled (Front of Unit)
- Easy Installation: Fixed or Portable (With the Hanger to install anywhere!)



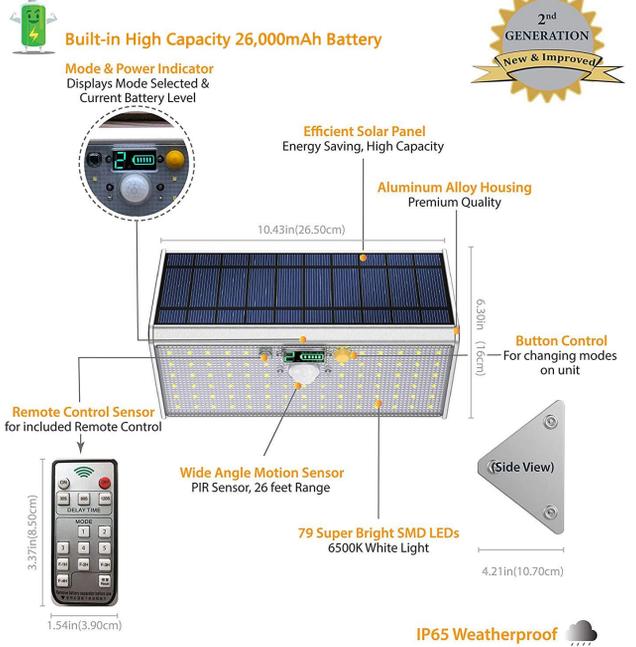
Brand	COULEE	Item model number	CLL-PL66-20
LED Chips	SMD 2835/30lm/0.2W, 66pcs	Wattage	13.2 Watts
LiFePO4 Battery	32650 Lithium Iron Phosphate Battery 3.2V/6500mAh OR 13000mAh		
Solar Panel	4W/5.5V/728mA	Lighting Mode	PIR Motion Sensor
Modes 6 in 1	<ol style="list-style-type: none"> 1. Motion Sensor + Dim Light all Night 2. Motion Sensor only 3. Motion Sensor + Normal Light (1/3 of Max) for 5 hrs 4. Intelligent : Adjusts mode automatically based on battery level 5. All Night: 1/3rd of Max brightness ALL night, perfect for pathways 6. Always ON: Max Brightness ON for 1, 2, 3 or 4 hours, perfect for parties, camping or as work light 		
Housing Material	Original ABS	Color	Black/White
Luminous Flux	1980lm	Lighting Area	60m ²
Color Temperature	3000k/6500k	Detecting Angle	180°
Light Direction	Downlight	Design Lifespan	10 Years
Waterproof Rating	IP65	Style	Modern
Shape	Rectangular	Included Components	Remote Control, Anchor & Screws with Measuring Guide, Hanger, User Guide
Special Features	Wide Angle Motion Sensor, Auto-ON at Night, Dusk to Dawn Operation, Easy Installation: Fixed (Screws Included) or Portable (with Included Hanger), Remote controlled or Button control, Long Battery life with 13000 mAh rechargeable battery, Power Level Indicator	Specific Uses	Outdoor Security for Yard, Fence, Deck, Garden, Garage or Camping
N.W./G.W.	0.91kg/1.06kg	Package Dimension	255mm × 170mm × 130mm



Solar Motion Security Light



Outdoor Solar LED lights provide excellent illumination with long battery life, remote controlled operation, flexible installation options and elegant Aluminum design allowing you to use it in many different ways. Unique Digital Display on front of unit to provide battery charging indication during day and battery level at night along with selected operation mode. Best in class motion sensor enabled security light for your patio, fence, deck, yard or pathway. Take it with you on your outdoor adventures, hang it anywhere using the provided hanger! Remote controlled operation in max. brightness Always ON mode allows you to use it when required as a flood light. Perfect for camping, parties and barbecues or use it as a work light in your garage, built for all kinds of applications!



- Heavy Duty Aluminum Weather Proof Premium Design
- IP65 Waterproof
- 79 Super Bright LEDs, 2370 Lumens, 6500K Cool White Light
- Wide Angle PIR Motion Sensor with 26 feet, 180 degree range
- Super Long Battery Life with built-in 26,000 mAh Battery
- Digital Display indicates Battery Status and Operating Mode
- Lasts 3-5 cloudy or rainy days with full charge
- Efficient Solar Charging
- Auto-ON at Night
- ALL Night Dusk to Dawn Operation
- Remote Controlled or Button Controlled (Front of Unit)
- Six Unique Operating Modes
- Easy Installation: Fixed or Portable (Use provided Hanger to install anywhere!)
- Continuous ON mode at Max. Brightness is perfect for Parties, Camping or as a work light

Brand	COULEE	Item Model Number	CLL-AL79-20
LED Chips	SMD2835/30lm/0.2W, 79pcs	Wattage	15.8 Watts
LiFePO4 Battery	32650 Lithium Iron Phosphate Battery 3.2V/13000mAh OR 26000mAh		
Solar Panel	5W/5.5V/910mA	Lighting Mode	PIR Motion Sensor
Modes 6 in 1	<ol style="list-style-type: none"> 1. Motion Sensor + Dim Light all Night 2. Motion Sensor only 3. Motion Sensor + Normal Light (1/3 of Max) for 5 hrs 4. Intelligent: Adjusts mode automatically based on battery level 5. All Night: 1/3rd of Max brightness ALL night, perfect for pathways 6. Always ON: Max Brightness ON for 1, 2, 3 or 4 hours, perfect for parties, camping or as work light 		
Housing Material	Aluminum Alloy	Color	Silver
Luminous Flux	2370lm	Lighting Area	80m ²
Color Temperature	3000k/6500k	Detecting Angle	180°
Light Direction	Downlight	Design Lifespan	12 Years
Waterproof Rating	IP65	Style	Modern
Shape	Rectangular	Included Components	Remote Control, Anchor & Screws with Measuring Guide, Hanger, User Guide
Special Features	Wide Angle Motion Sensor, Auto-ON at Night, Dusk to Dawn Operation, Easy Installation : Fixed (Screws Included) or Portable (with Included Hanger), Remote controlled or Button control, Long Battery life with 26000 mAh rechargeable battery, Power Level Indicator	Specific Uses	Outdoor Security for Yard, Fence, Deck, Garden, Garage or Camping
N.W./G.W.	1.25kg/1.55kg	Package Dimension	265mm x 160mm x 112mm

48LED Solar Motion Sensor Light

Outdoor Solar LED lights provide excellent illumination with long battery life, remote-controlled operation, flexible installation options and elegant design. Best in class motion sensor enabled security light for your patio, fence, deck, yard, pathway, etc.

- Unique 48LED Light Design - generating 450 lumens of brightness with 24 warm-light LEDs and 24 cool-white LEDs.
- Remote Control with adjustable 7 gears color temperature, switch freely from warm-white light to cool-white light.
- 3 Optional Modes - Auto on highlight at dusk to dawn and switch to auto-induction model after 3 hours; Highlight when motion sensed, lunar/off when people go away after 15 seconds.
- 2 Ways to Install - Directly install the motion sensor light on the wall OR extend a pole to stall.
- High-impact ABS/PC and IP65 waterproof rated design make the light withstand all kinds of extreme weather conditions.
- Solar-powered and PIR Motion sensor design allow for greater energy saving.



NOTE 1: Charge the solar light for 6-8 hours under the sunshine before the first-time using.

NOTE 2: Please take out the Clear Insulation Sheet when you use the Remote Control.

Brand	COULEE	Item model number	CLL-PL48-20
LED Chips	SMD 2835, 48pcs	Wattage	5 Watts
Battery	Lithium Battery 3.7V/2000mAh	Installation Type	Wall Mount
Solar Panel	2.2W/5.5V/400mA	Lighting Mode	PIR Motion Sensor
Modes 3 in 1	<ol style="list-style-type: none"> 1. Lunar Brightness Light + Motion Sensor Full Brightness Light When in dark night, the light will keep lunar brightness without people coming near, however become full bright if people comes. 2. Off + Motion Sensor Full Brightness Light (Recommend), when darkness falls, the light will keep dark without people coming near, however become full bright if people comes. 3. Full Brightness Light When darkness falls, and auto switch to mode 2 after 3 hours. 		
Housing Material	Original ABS + PC	Color	Black/White
Luminous Flux	450lm	Lighting Area	40m ²
Color Temperature	2700k - 6000k	Detecting Angle	120°
Motion Sensor Range	3 - 5m	Power Source	Solar
Light Direction	Downlight	Design Lifespan	5 Years
Waterproof Rating	IP65	Style	Classic
Shape	Rectangular	Included Components	Solar Sensor Light, Remote Control, Anchor & Screws, Pole, Metal Board, User Guide
Special Features	Wide Angle Motion Sensor, Auto-ON at Night, Easy Installation, Remote Controlled or Button Control, Dimmable, Multi-Protection, Anti-UV	Specific Uses	Outdoor Security for Yard, Fence, Deck, Garden, Garage or Camping
N.W./G.W.	0.37kg/0.39kg	Package Dimension	210mm × 125mm × 36.5mm

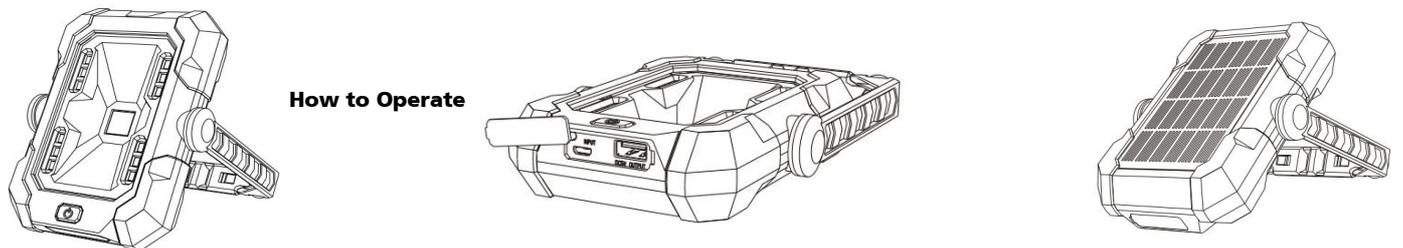
Model No.	CL-SPL06	Lumens	350lm—150lm—150lm—100lm (according to lighting mode)
Light Source/Power	COB*1+ SMD5730*12 / 6W	Charge Time	3hrs
CCT	6000K/3000K/Red	Shell Color	Black+Orange
Product Size	187*119*36mm	Material	ABS+Silicone
Battery Capacity	4400mAh	Inner Box Size	185*120*37mm
Solar Panel	6V/1W	G.W./Piece	410g
USB Input/Output	Input DC5V 2A / Output DC5V 2.1A	Carton Size	39*38.5*26cm
Lighting Mode	Spotlight (strong) - Spotlight (weak) - Flood light - Flash light (red)	QTY/CTN.	40pcs
Working Time	7hrs - 20hrs - 30hrs - 100hrs (according to lighting mode)	G.W./CTN.	16.5kg

Magnet Handle

4400mAh
7-100Hour
360° rotatable
350LM

5V 2A USB Input
5V 2.1A USB Output

Include: 1. Work Light*1 | 2. USB Cable*1 | 3. Manual*1 | 4. Hanging Buckle*1



How to Operate

- 1. ON/OFF**
Keep pressing the power button for 2 seconds to switch on & off.
- 2. Lighting Mode - Spotlight (strong)**
- Spotlight (weak) - Flood light (warm white) - Flash light (red)

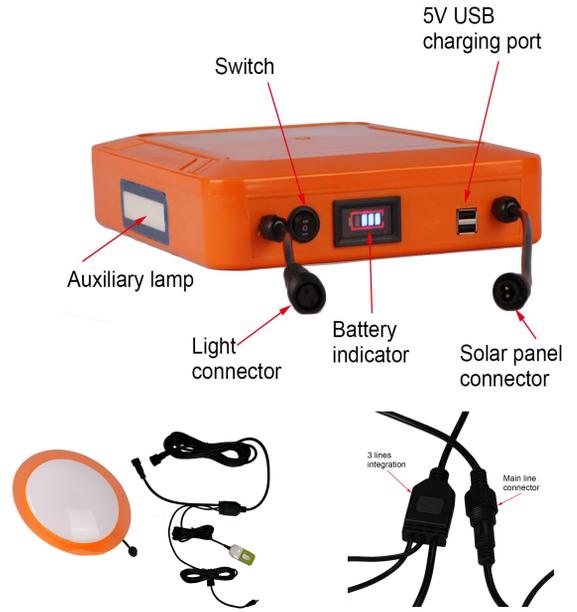
- 3. USB Input**
Use the USB charging cable, DC5V/1-2A input, when charging, there is a flickering blue indicator light, a steady indicator light while fully charged.

- 4. USB Output (Power Bank)**
Use the USB charging cable, DC5V/2.1A output, connect it with this light to charge a cellphone or other electronic devices.

- 5. Solar Energy Charge**
Please place the solar panel towards to the sunlight. When charging, there is a flickering blue indicator light, a steady indicator light while fully charged.

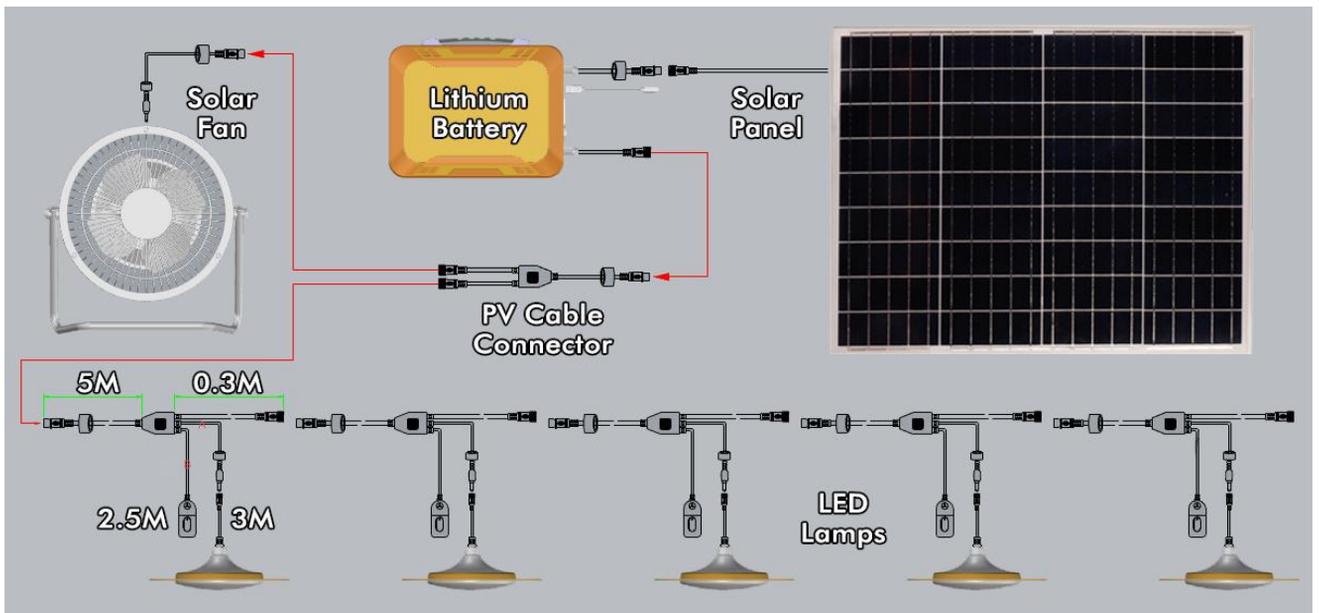
Features

- 4 in 1 design: Power bank + work light + warning light (flash light) + integrated solar panel.
- Built-in 4400mAh lithium battery, quite long battery back-up time.
- Four-gear lighting modes: Spotlight (strong) for 7hrs, spotlight (weak) for 20hrs, flood light for 30hrs, flash light (red) for 100hrs.
- USB input DC5V/2A, output DC5V/2.1A, quick charge and discharge.
- 6V/1W mono solar panel, higher conversion efficiency.
- Can be rotated 360°, bracket with strong magnets, can fix or hang it any-where or for portable use, multi-function, easy and convenient.
- Plated treatment of aluminum reflector, scientific and rational light distribution design to improve light efficiency and brightness.
- Black+orange ABS shell with nice corner protection design, sturdy and durable.
- IP64 rated waterproof.
- Smart and safe circuits control, creative design, patented item.



SPECIFICATION

Solar Panel	80W/18V
Battery	12V/30Ah Lithium Battery Bank
Working Time	Five LED Lamps on, 12 Hours Each
Input Voltage/Current	12V/3.88A
Days of Autonomy	Two Days
Power of the LED Lamp	5W
Type/Number of LED Beads	SMD3030/50PCS
Maximum Output Charging Current	2.5A
Packing Size	Lamp Holder diameter: 120mm Battery Box: 325mm*245mm*55mm Solar Panel: 680mm*760mm*36mm
Warranty	Two Years





Portable Solar-Powered Bluetooth Speaker/Radio/Lamp FM/MP3/BT/TF/Lighting (CL-40PSP-6)

Description

- Multiple functions: pure DC output system with Bluetooth connection, FM/MP3 player and LED lighting.
- Reliable portable power for mainstream electronics, perfect backup power for hiking, camping, and more emergency use.
- Advanced technology inside, compatible with Bluetooth devices.

Pleasant Sound of Music

- | | | |
|--|-------------------------------|---------------------------|
| Bluetooth
Bluetooth Connection | Low Delay | Hands-free Calling |
| Strong Bass | Support Output | Long Endurance |
| Memory 8 Devices | Waterproof | Dustproof |
| TF Card Playing | Audio Wired Connection | Solar Charging |





Charging and discharging can happen at the same time, without affecting each other



FM with concealed radio antenna, support TF card, U disk and Bluetooth.



When the output current/6VDC exceeds 4A, the overload protection will be automatically triggered



Coulee Limited

Tel.: +1 737 702 0119 | info@couleenergy.com | https://couleenergy.com

Specifications

Solar Panel	10W(9V/10V)		
Output Voltage	DC 6V Output 4pcs, USB 5V Output 1pc		
Built-in Battery	7.4V, 6000mAh (18650 Lithium-ion)		
Charging Time	Depending on the charging method(s)		
Discharging Time	Depending on the power of the loadings		
Rated Charging Current	1A	Rated Discharge Current	3.5A
System Voltage	7.4V	No-load Loss	<20mA
Under Voltage	6.0V	Over Discharge Voltage	5.5V
Over Pressure Protection	8.4V		
Control Method	Charging; PWM (Pulse Width Modulation)		
Operating Temperature	-10°C to 55°C		
Protection	Overcharge, Overload and Short Circuit Protection		

Note: The specific configuration of the system is subject to the actual product.

Application

Portable Solar BT Speaker

Portable and compact, easy to carry



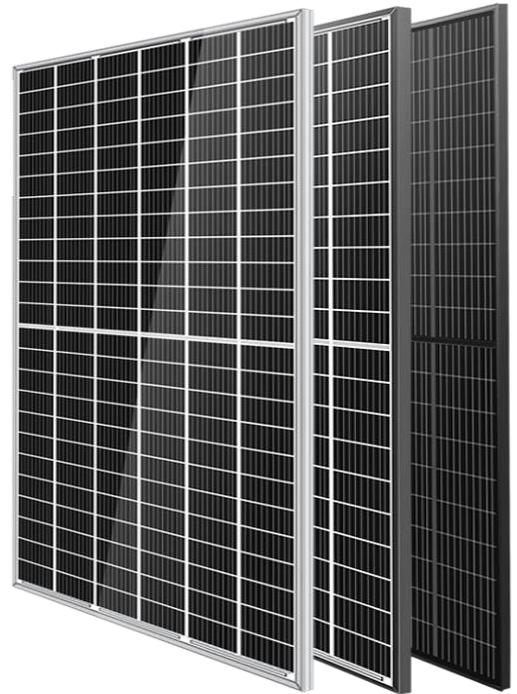
Broad Compatibility

Designed to Work With all USB-Powered Devices



COULEE ULTRA SOLAR MODULE

Mono PERC Half-cut Cell Series

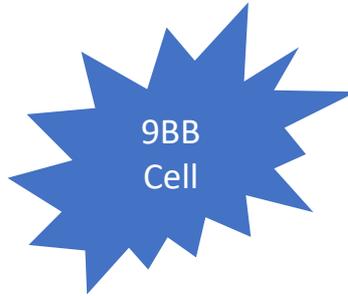


72 × 2 CELL
MONOCRYSTALLINE MODULE

430-450W
POWER OUTPUT RANGE

20.4%
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 450W with outstanding cell efficiency up to 22.3% and module efficiency 20.4%

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 204W/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

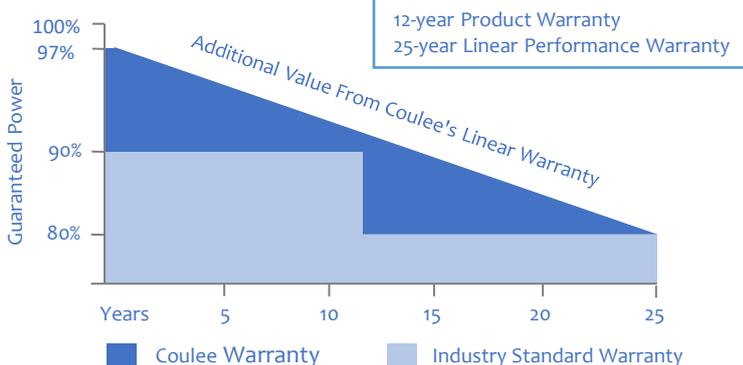
Severe Weather Resilience

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

Reduced Hot Spot Risk

- With optimized electrical design and lower operating current

Linear Performance Warranty



12-year Product Warranty
25-year Linear Performance Warranty

Additional Value From Coulee's Linear Warranty

■ Coulee Warranty ■ Industry Standard Warranty

Construction Materials

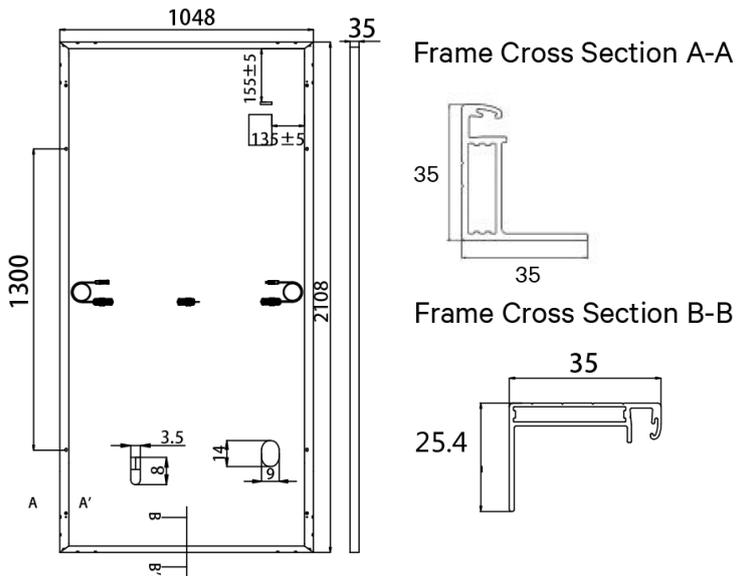
Front Glass	3.2mm, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Output Cables	4mm ² , Landscape: 1300mm, Portrait: N 150mm/P 300mm
Connector	MC4 Compatible
Encapsulation Material	EVA
Backsheet	TPT (White OR Black)
Fixing Adhesive	Silicone Sealant

Mechanical Data

Solar Cells	Mono 166mm × 83mm
Number of Cells	72 × 2pcs
Module Dimensions	2108mm × 1048mm × 35mm
Weight	24.1kg

Temperature Coefficient

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

Mechanical Diagrams

Electrical Parameters at STC

Module type	CLM-450M-72 Series				
Rated Maximum Power (Pmax/W)	430	435	440	445	450
Maximum Power Voltage (Vmp/V)	40.6	40.8	41.0	41.2	41.4
Open-circuit Voltage (Voc/V)	49.2	49.4	49.6	49.8	50.0
Maximum Power Current (Imp/A)	10.61	10.67	10.74	10.81	10.88
Short-circuit Current (Isc/A)	11.19	11.26	11.33	11.40	11.47
Module Efficiency (%)	19.5	19.7	19.9	20.1	20.4

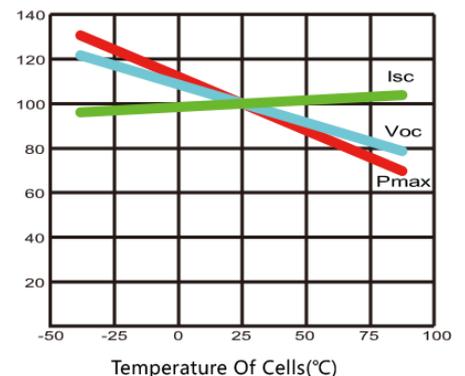
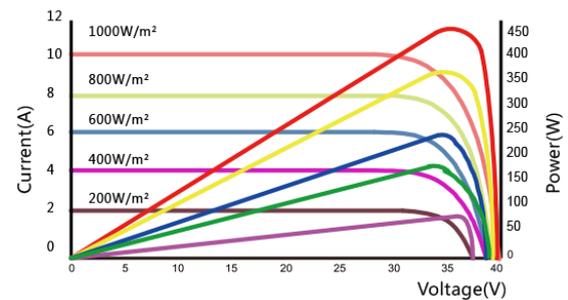
STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5

Packaging Configuration

Pieces Per Pallet: 66 | Pallets Per 40HQ: 11 | Pieces Per 40HQ: 726

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

IV Curves


COULEE BIFACIAL SOLAR MODULE

Mono PERC Half-cut Cell Series



72 BIFACIAL
MONOCRYSTALLINE PERC CELL

435-455W
POWER OUTPUT RANGE

20.9%
MAXIMUM EFFICIENCY

0 - +3%
POSITIVE POWER TOLERANCE

9BB Low LID
Bifacial PERC

Ideal For Large Scale Installations

- High power footprint reduces installation time and BOS costs
- Up to 1500VDC system voltage

Maximum Limited Space

- Up to 209W/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
- Increased module robustness to minimize micro-cracks
- 100% EL double inspection

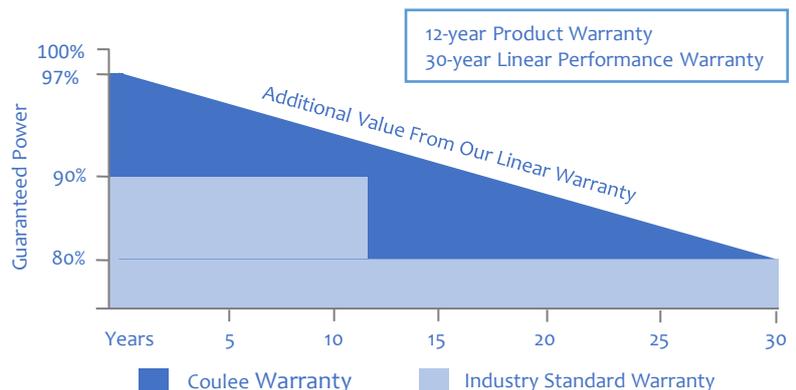
Increased Value

- Higher maximum system voltage reduces BOS costs
- 0.5% annual degradation
- More energy production at higher temperatures

Durability Against Extreme Environmental Conditions

- Module coating resistant to sand, acid, and alkali

Linear Performance Warranty



Design of the Coulee Bifacial Ultra

The purpose of Dual Glass was to design a new concept of solar module featuring a significantly improved reliability compared to the conventional design without losing the advantages of traditional modules.

Coulee Bifacial Ultra is the top performance reference solar module series, based on the Low LID Bifacial PERC with Half-cut technology. The bifacial technology enables additional energy harvesting from rear side (up to 25%), and 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.

Product Certificates

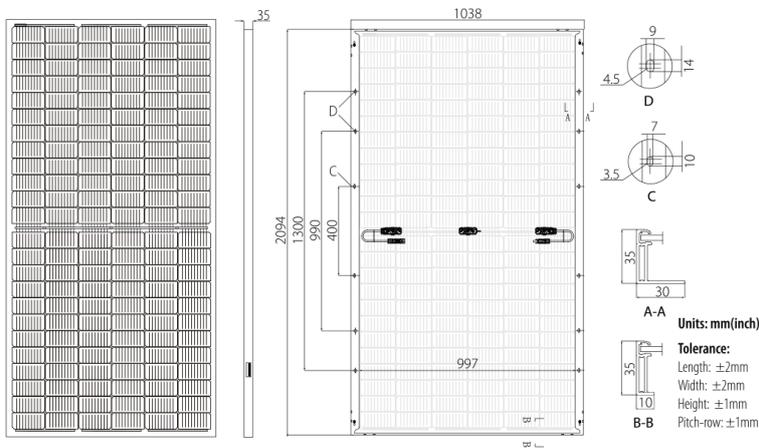
IEC/EN 61215, IEC/EN 61730



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

Mechanical Parameters

Glass (Dual)	2.0mm Coated Tempered Glass
Junction Box	IP68, Three Diodes
Output Cable	4mm ² , Landscape: 1300mm, Portrait: N 150mm/P 300mm
Cell Orientation	144 (6×24)
Frame	Anodized Aluminum Alloy (OR Frameless)
Weight	27.6kg
Dimension	2094mm × 1038mm × 35mm

Mechanical Diagrams

Operating Parameters

Max. System Voltage	1500VDC (IEC)
Max. System Fuse Rating	25A
Operating Temperature	-40 ~ +85°C
Safety Class	Class II

Temperature Ratings (STC)

Temperature Coefficient of Pmax	-0.370%/°C
Temperature Coefficient of Voc	-0.300%/°C
Temperature Coefficient of Isc	-0.060%/°C
NOTC	(45 ± 2) °C

Mechanical Loading

Front Side Max. Static Loading	5400Pa
Rear Side Max. Static Loading	2400Pa
Hailstone Test	25mm, 23m/s

Electrical Parameters at STC

Module type	CLM-450M-72 Series (Dual Glass)				
Rated Max. Power (Pmax/W)	435	440	445	450	455
Maximum Power Voltage (Vmp/V)	40.8	41.0	41.2	41.4	41.6
Open-circuit Voltage (Voc/V)	49.1	49.2	49.4	49.6	49.8
Maximum Power Current (Imp/A)	10.66	10.73	10.80	10.87	10.93
Short-circuit Current (Isc/A)	11.36	11.45	11.52	11.58	11.65
Module Efficiency η (%)	20.0	20.2	20.5	20.7	20.9

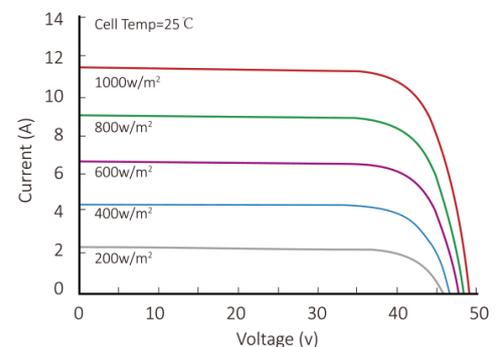
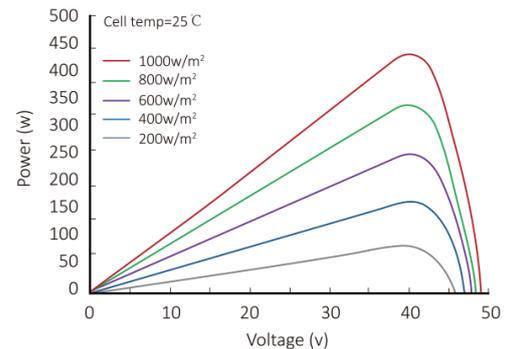
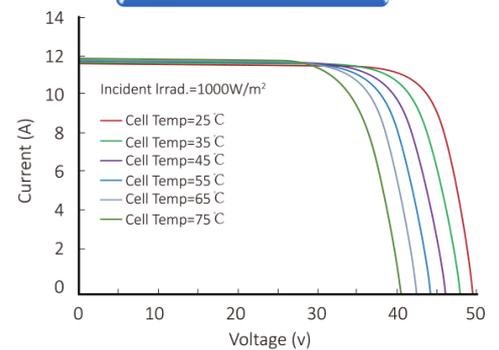
STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5

Electrical Parameters with Different Rear Side Power Gain (445W Front)

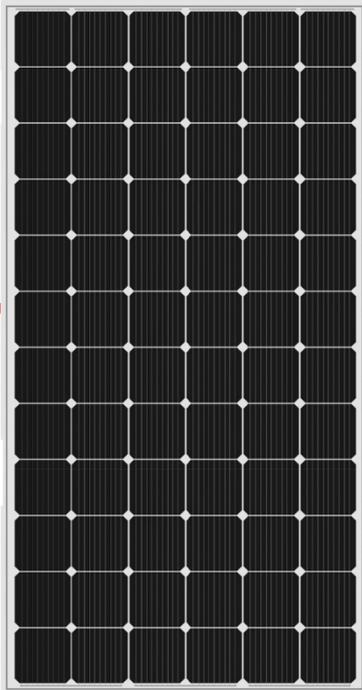
Pmax/W	Voc/V	Isc/A	Vmp/V	Imp/A	Pmax Gain
467	49.4	12.09	41.2	11.34	5%
490	49.4	12.67	41.2	11.88	10%
512	49.5	13.24	41.3	12.42	15%
534	49.5	13.82	41.3	12.96	20%
556	49.5	14.40	41.3	13.50	25%

Packaging Configuration

Pieces Per Pallet: 66 | Pallets Per 40HQ: 11 | Pieces Per 40HQ: 726

IV Curves – 440W


COULEE SOLAR MODULE



72 CELL
MONOCRYSTALLINE MODULE

420-440W
POWER OUTPUT RANGE

20.1%
MAXIMUM 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.

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>

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 201W/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

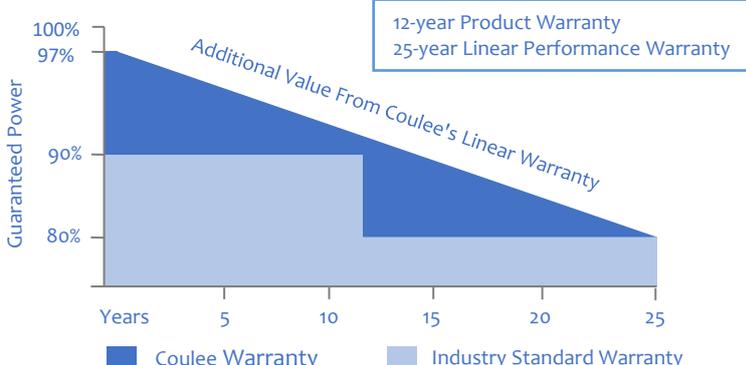
Severe Weather Resilience

- 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



Construction Materials

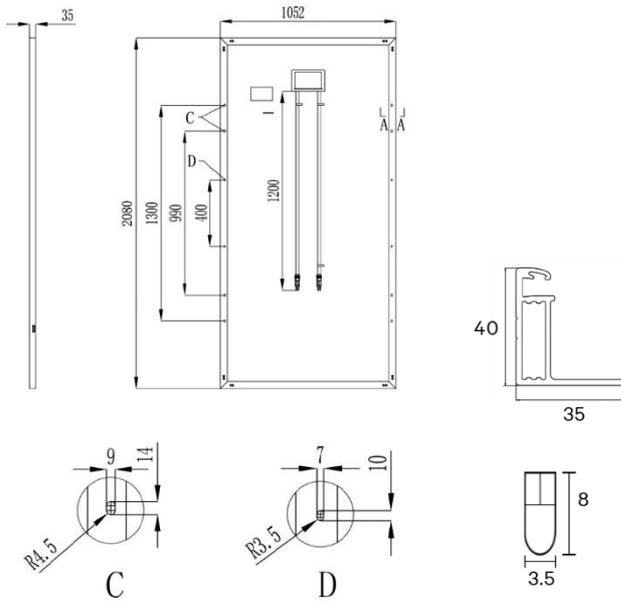
Front Glass	3.2mm, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP67 Rated
Output Cables	TUV 1 × 4mm ² , Length: 1200mm
Connector	MC4 (IP67)
Encapsulation Material	EVA
Backsheet	TPT (White OR Black)
Fixing Adhesive	Silicone Sealant

Mechanical Data

Solar Cells	Mono 166mm × 166mm
Number of Cells	72Cells (6 × 12)
Module Dimensions	2080mm × 1052mm × 40mm
Weight	24kg

Temperature Coefficient

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

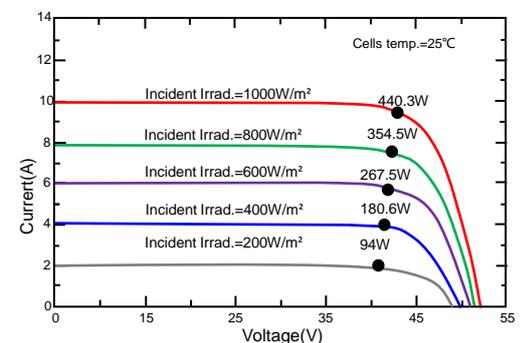
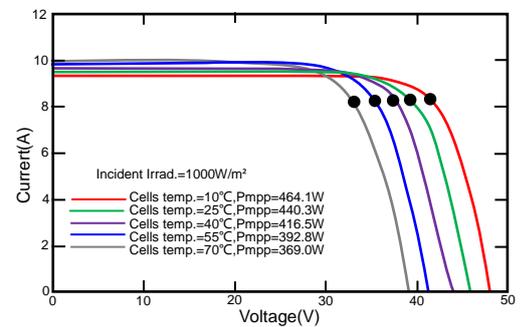
Mechanical Diagrams

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-440M-72 Series				
Rated Maximum Power (Pmax/W)	420	425	430	435	440
Maximum Power Voltage (Vmp/V)	40.2	40.4	40.6	40.8	41.0
Open-circuit Voltage (Voc/V)	48.8	49.0	49.2	49.4	49.6
Maximum Power Current (Imp/A)	10.45	10.52	10.6	10.67	10.74
Short-circuit Current (Isc/A)	11.04	1.11	11.19	11.26	11.33
Module Efficiency (%)	19.2	19.4	19.7	19.9	20.1

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

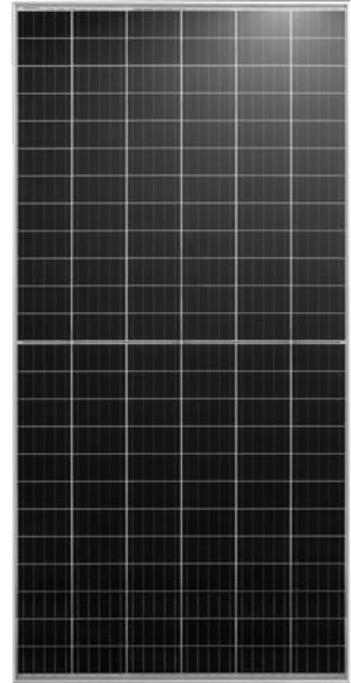
IV Curves

Packaging Configuration

Pieces Per Pallet: 56 | Pallets Per 40HQ: 11 | Pieces Per 40HQ: 616

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

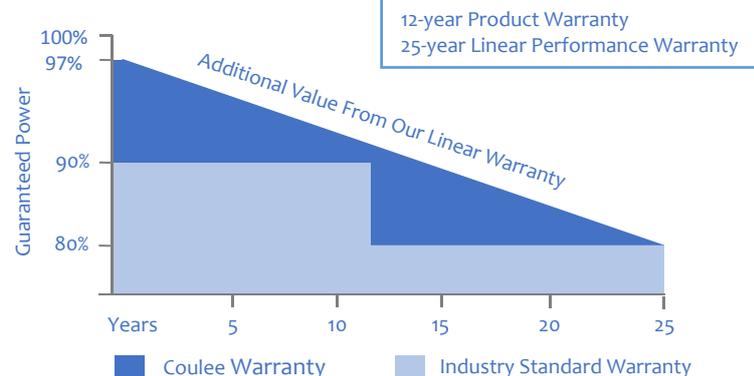
Severe Weather Resilience

- 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

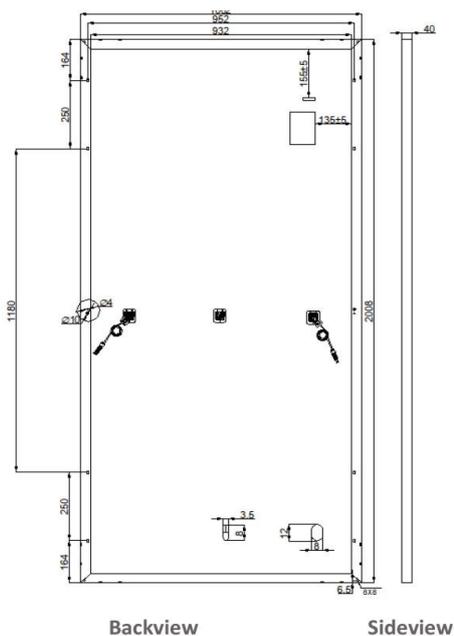
Mechanical Data

Solar Cells	Mono PERC 158.75mm
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

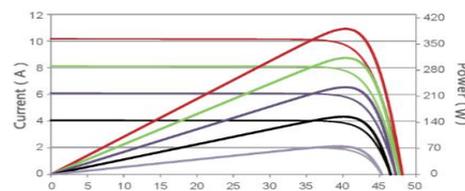


Operating Conditions

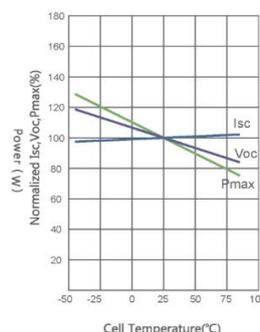
Max. System Voltage	1500VDC (IEC)
Max. System Fuse Rating	15A
Operating Temperature	-40 ~ +85°C
Max. Static Load, Front (Snow)	5400Pa
Max. Static Load, Back (Wind)	2400Pa

IV Curves

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



Temperature Dependence of Isc, Voc, Pmax



Electrical Parameters at STC

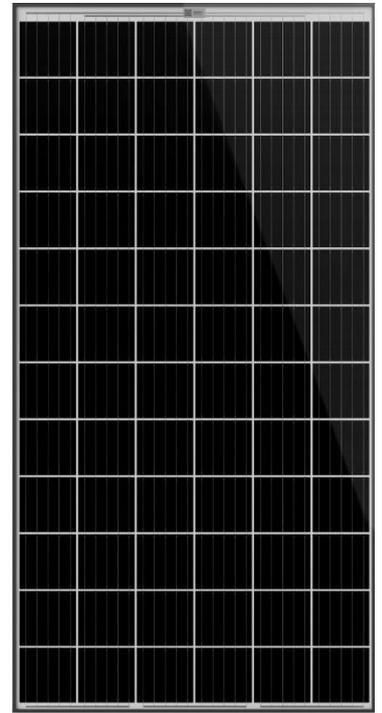
Module type	CLM-400M-72(H) Series			
Rated Maximum Power (Pmax/W)	390	395	400	410
Maximum Power Voltage (Vmp/V)	41.1	41.4	41.7	42.3
Open-circuit Voltage (Voc/V)	49.3	49.5	49.8	50.4
Maximum Power Current (Imp/A)	9.49	9.55	9.60	9.69
Short-circuit Current (Isc/A)	10.12	10.23	10.36	10.60
Module Efficiency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

COULEE SOLAR MODULE



72 CELL
MONOCRYSTALLINE MODULE

380-400W
POWER OUTPUT RANGE

21.17%
MAXIMUM EFFICIENCY

0 - +3%
POSITIVE POWER TOLERANCE

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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>

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 21.17W/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

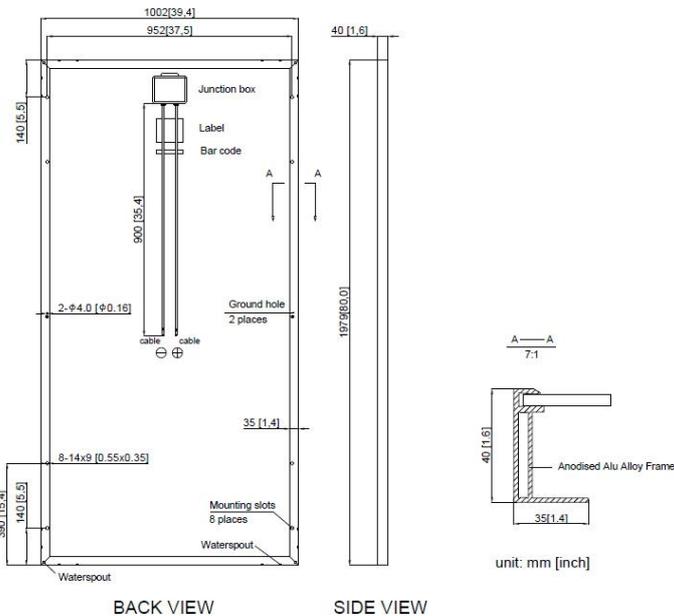
- Salt mist corrosion tested, perfect for harsh climatic conditions

Linear Performance Warranty



Construction Materials

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

Mechanical Diagrams

Mechanical Data

Solar Cells	Mono 158.75mm × 158.75mm
Number of Cells	72Cells (6 × 12)
Module Dimensions	1979mm × 1002mm × 40mm
Weight	22.5kg

Temperature Coefficient

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	(-0.43 ± 0.05)%/°C
Temperature Coefficient of Voc	(-0.33 ± 0.02)%/°C
Temperature Coefficient of Isc	(0.058 ± 0.01)%/°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

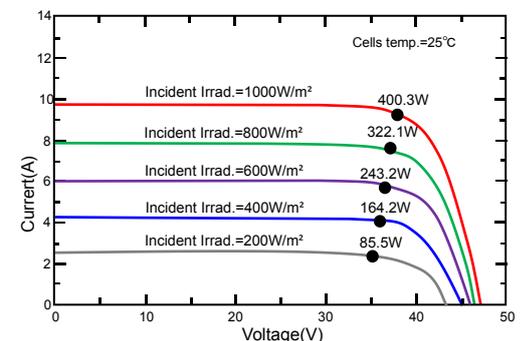
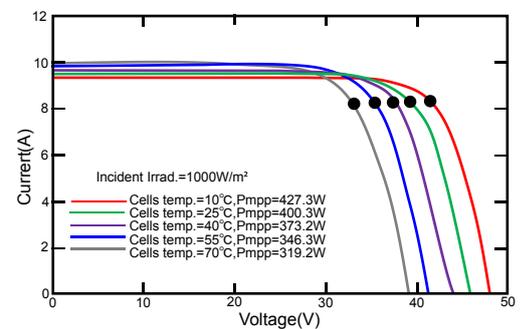
Electrical Parameters at STC

Module type	CLM-400M-72 Series				
Rated Maximum Power (Pmax/W)	380	385	390	395	400
Maximum Power Voltage (Vmp/V)	40.5	40.8	41.1	41.4	41.7
Open-circuit Voltage (Voc/V)	48.9	49.1	49.3	49.5	49.8
Maximum Power Current (Imp/A)	9.39	9.44	9.49	9.55	9.60
Short-circuit Current (Isc/A)	9.75	9.92	10.12	10.23	10.36
Module Efficiency (%)	19.16	19.42	19.67	19.92	20.17

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

Packaging Configuration

Pieces Per Pallet: 56 | Pallets Per 40HQ: 11 | Pieces Per 40HQ: 616

IV Curves


COULEE SOLAR MODULE

Mono Poly Solutions

ALL BLACK



72 CELL
MONOCRYSTALLINE MODULE

360-380W
POWER OUTPUT RANGE

19.58%
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 195.8W/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

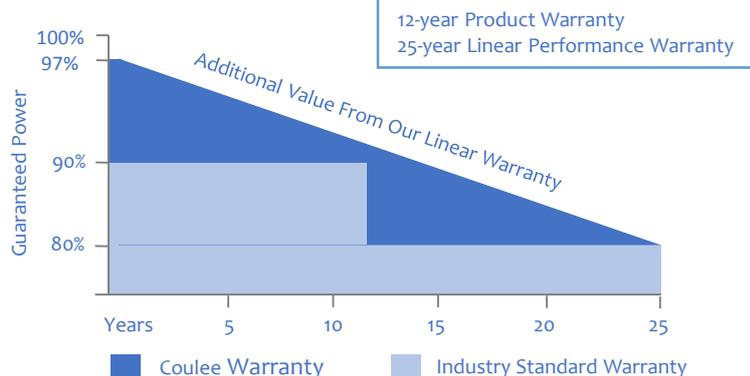
Severe Weather Resilience

- 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



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Product Certificates

IEC/EN 61215, IEC/EN 61730



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



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

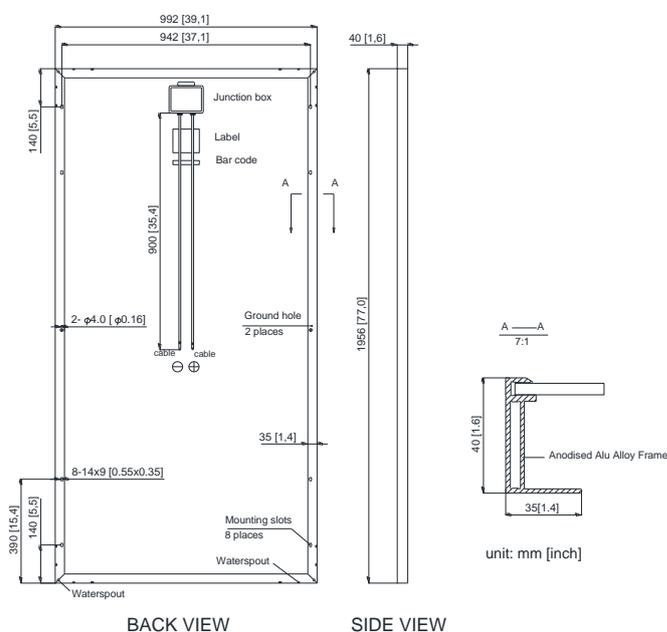
Mechanical Data

Solar Cells	Mono 156.75mm × 156.75mm
Number of Cells	72Cells (6 × 12)
Module Dimensions	1956mm × 992mm × 40mm
Weight	21kg

Temperature Coefficient

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	(-0.43 ± 0.05)%/°C
Temperature Coefficient of Voc	(-0.33 ± 0.02)%/°C
Temperature Coefficient of Isc	(0.058 ± 0.01)%/°C
NOTC	(45 ± 2) °C

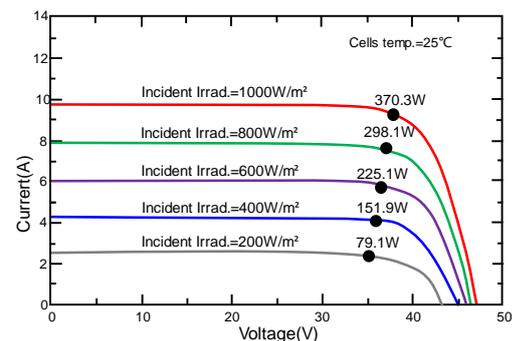
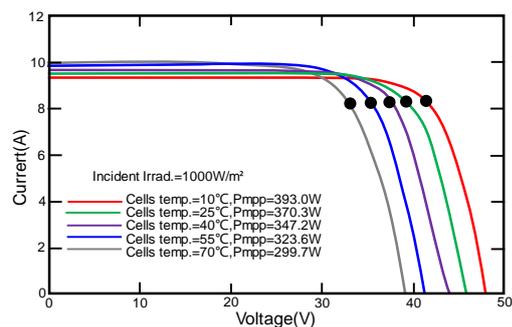
Mechanical Diagrams



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



Electrical Parameters at STC

Module type	CLM-370M-72 Series			
Rated Maximum Power (Pmax/W)	360	370	375	380
Maximum Power Voltage (Vmp/V)	39.0	39.4	39.7	40.2
Open-circuit Voltage (Voc/V)	47.4	47.8	48.1	48.8
Maximum Power Current (Imp/A)	9.24	9.39	9.45	9.46
Short-circuit Current (Isc/A)	9.71	9.83	9.88	9.92
Module Efficiency (%)	18.55	19.07	19.33	19.58

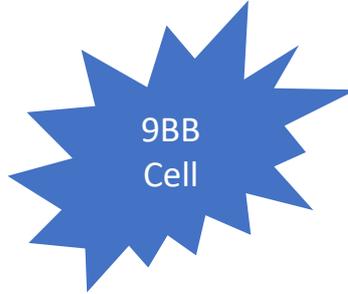
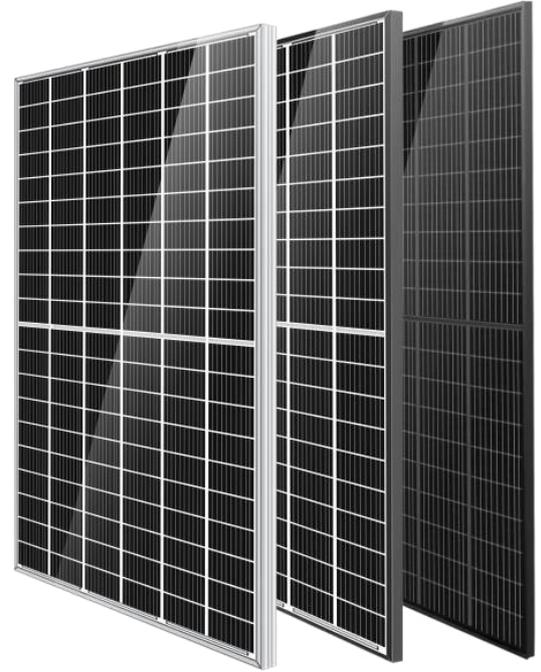
STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5

Packaging Configuration

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

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/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

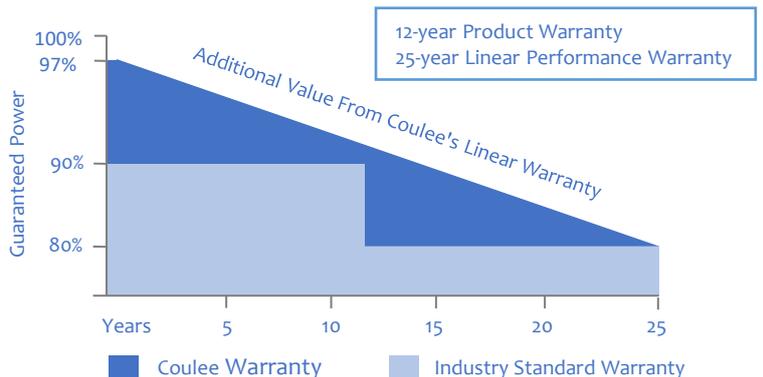
Severe Weather Resilience

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

Reduced Hot Spot Risk

- With optimized electrical design and lower operating current

Linear Performance Warranty



Construction Materials

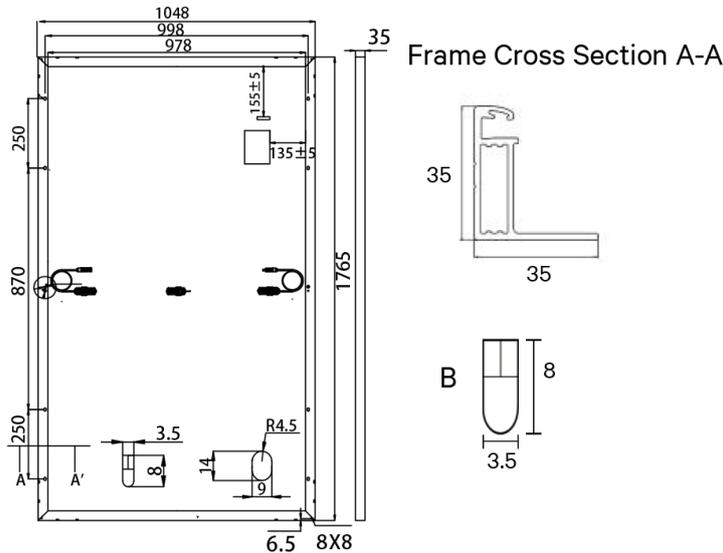
Front Glass	3.2mm, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated
Output Cables	4mm ² , Landscape: 1100mm, Portrait: N 150mm/P 300mm
Connector	MC4 Compatible
Encapsulation Material	EVA
Backsheet	TPT (White OR Black)
Fixing Adhesive	Silicone Sealant

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%/°C
Temperature Coefficient of Voc	-0.28%/°C
Temperature Coefficient of Isc	+0.05%/°C
NOTC	(45 ± 2) °C

Mechanical Diagrams

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

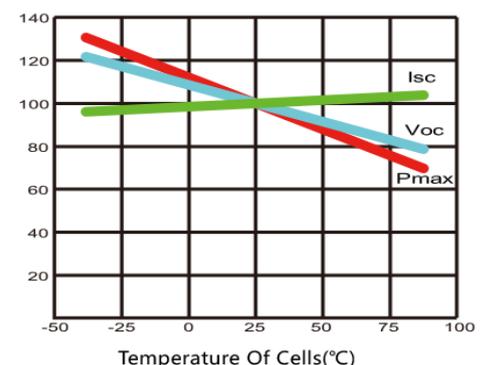
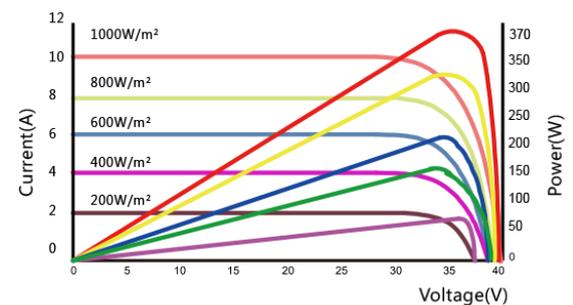
STC: Irradiance 1000W/m, Cell Temperature 25°C, AM = 1.5

Packaging Configuration

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

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

IV Curves


COULEE SOLAR MODULE

Mono Poly Solutions

Half-cut Cell



120 Half-cut CELLS
MONOCRYSTALLINE MODULE

325-340W
POWER OUTPUT RANGE

20.35%
MAXIMUM EFFICIENCY

0 - +3%
POSITIVE POWER TOLERANCE

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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>



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 203.5W/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

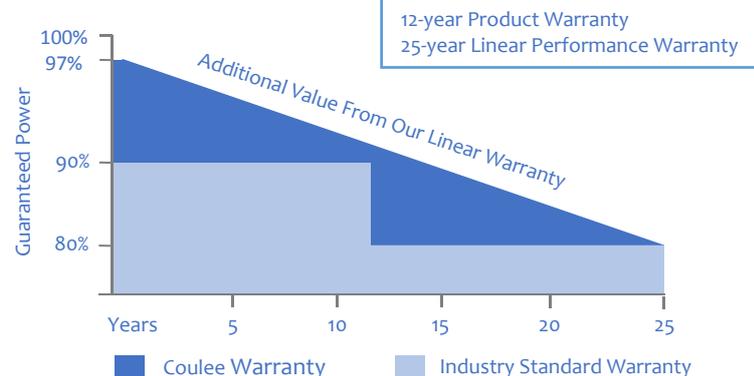
Severe Weather Resilience

- 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



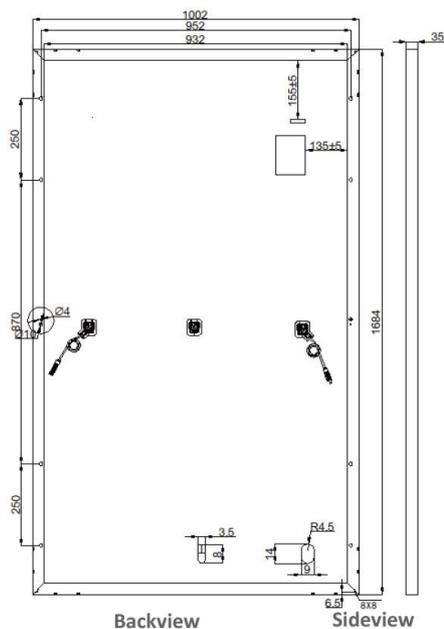
12-year Product Warranty
25-year Linear Performance Warranty



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 Diagrams



Mechanical Data

Solar Cells	Mono PERC 158.75mm
Number of Cells	120 Half-cut Cells (6 × 20)
Module Dimensions	1684mm × 1002mm × 35mm
Weight	19kg

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

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

Electrical Parameters at STC

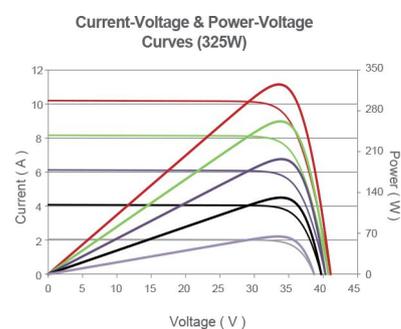
Module type	CLM-330M-60(H) Series			
Rated Maximum Power (Pmax/W)	325	330	335	340
Maximum Power Voltage (Vmp/V)	33.6	33.8	34.0	34.2
Open-circuit Voltage (Voc/V)	41.1	41.3	41.5	41.7
Maximum Power Current (Imp/A)	9.68	9.77	9.87	9.96
Short-circuit Current (Isc/A)	10.20	10.31	10.36	10.55
Module Efficiency (%)	19.26	19.56	19.85	20.15

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

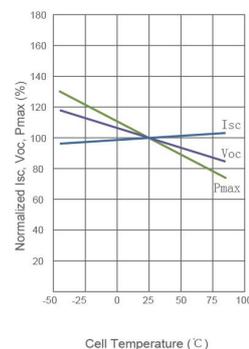
Packaging Configuration

Pieces Per Pallet: 62 | Pallets Per 40HQ: 13 | Pieces Per 40HQ: 806

IV Curves



Temperature Dependence of Isc, Voc, Pmax



COULEE SOLAR MODULE

Mono Poly Solutions

ALL BLACK



60 CELL
MONOCRYSTALLINE MODULE

320-335W
POWER OUTPUT RANGE

20.08%
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 200.8W/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

Coulee Limited, a leading manufacturer of solar products and creators of energy-saving designs for residential, commercial and industrial applications.

Couleenergy 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

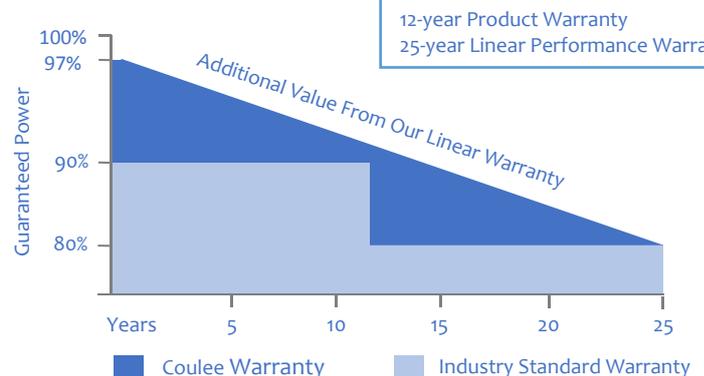


CAUTIONS:
READ SAFETY AND INSTALLATION
INSTRUCTIONS BEFORE USING THE PRODUCT.



Coulee Limited
<https://couleenergy.com>

Linear Performance Warranty



12-year Product Warranty
25-year Linear Performance Warranty

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

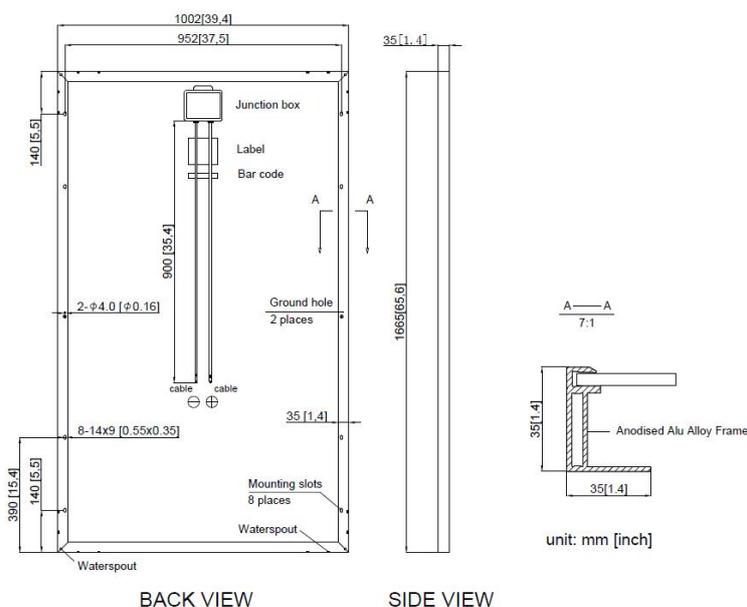
Mechanical Data

Solar Cells	Mono 158.75mm × 158.75mm
Number of Cells	60Cells (6 × 10)
Module Dimensions	1665mm × 1002mm × 35mm
Weight	19.0kg

Temperature Coefficient

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	-0.41 %/°C
Temperature Coefficient of Voc	-0.32 %/°C
Temperature Coefficient of Isc	0.058 %/°C
NOTC	(45 ± 2) °C

Mechanical Diagrams

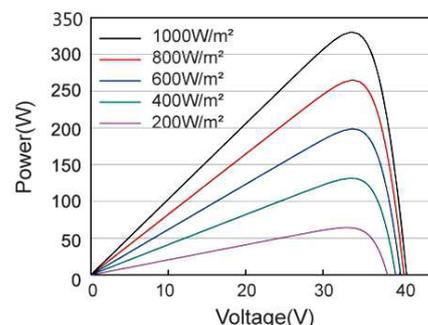
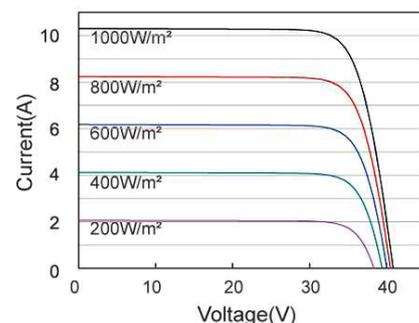


Operating Conditions

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 (330W)



Electrical Parameters at STC

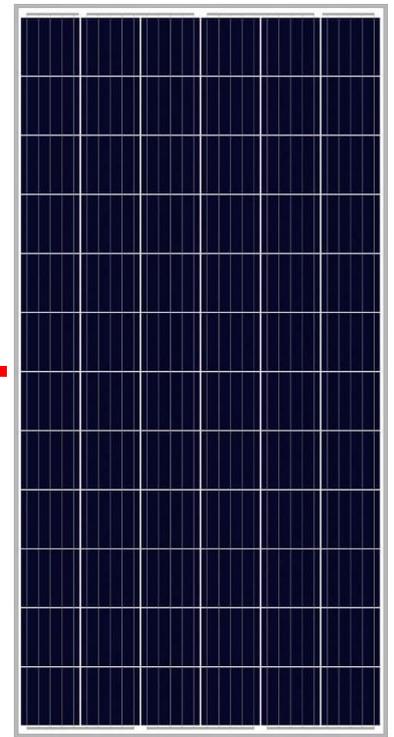
Module type	CLM-330M-60 Series			
Rated Maximum Power (Pmax/W)	320	325	330	335
Maximum Power Voltage (Vmp/V)	33.4	33.6	33.8	34.0
Open-circuit Voltage (Voc/V)	40.9	41.1	41.3	41.5
Maximum Power Current (Imp/A)	9.59	9.68	9.77	9.87
Short-circuit Current (Isc/A)	10.15	10.20	10.31	10.36
Module Efficiency (%)	19.18	19.48	19.78	20.08

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

Packaging Configuration

Pieces Per Pallet: 66 | Pallets Per 40HQ: 14 | Pieces Per 40HQ: 924

COULEE SOLAR MODULE



72 CELL
POLYCRYSTALLINE MODULE

320-340W
POWER OUTPUT RANGE

17.53%
MAXIMUM 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:
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INSTRUCTIONS BEFORE USING THE PRODUCT.



Coulee Limited
<https://couleenergy.com>

Ideal For Large Scale Installations

- High power footprint reduces installation time and BOS costs
- Up to 1500VDC system voltage

Maximum Limited Space

- Up to 175.3W/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

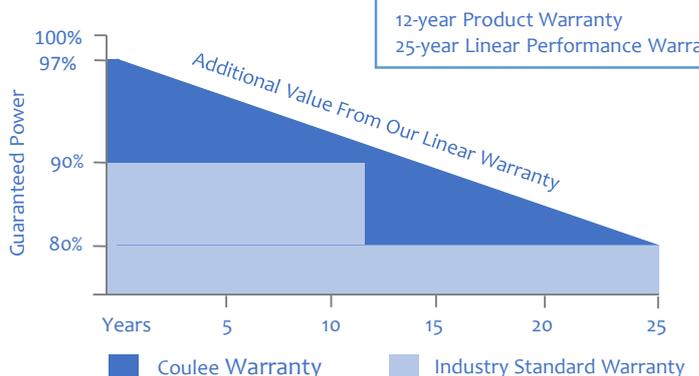
Severe Weather Resilience

- 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



12-year Product Warranty
25-year Linear Performance Warranty

Construction Materials

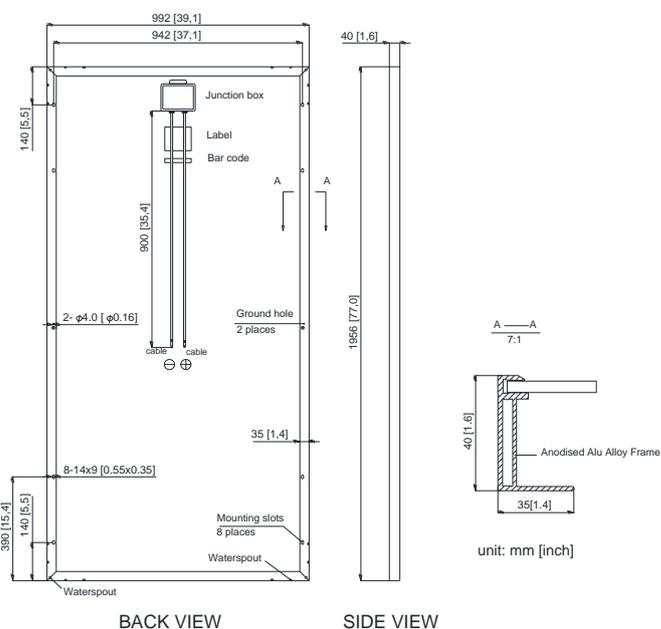
Front Glass	3.2mm, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP67 Rated (Black)
Output Cables	TUV 1 × 4mm ² , Length: 900mm
Connector	MC4 (IP67)
Encapsulation Material	EVA
Backsheet	TPT (White OR Black)
Fixing Adhesive	Silicone Sealant

Mechanical Data

Solar Cells	Poly 156.75mm × 156.75mm
Number of Cells	72Cells (6 × 12)
Module Dimensions	1956mm × 992mm × 40mm
Weight	21kg

Temperature Coefficient

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	(-0.41 ± 0.05)%/°C
Temperature Coefficient of Voc	(-0.34 ± 0.02)%/°C
Temperature Coefficient of Isc	(0.05 ± 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

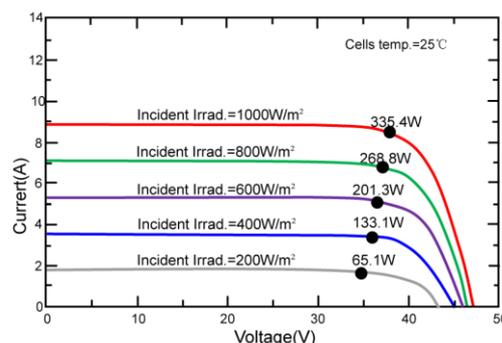
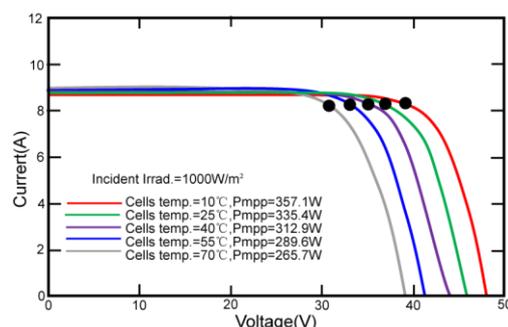
Electrical Parameters at STC

Module type	CL335P6-72 Series			
Rated Maximum Power (Pmax/W)	320	330	335	340
Maximum Power Voltage (Vmp/V)	37.45	37.85	38.00	38.30
Open-circuit Voltage (Voc/V)	45.75	46.14	46.34	46.49
Maximum Power Current (Imp/A)	8.55	8.72	8.82	8.88
Short-circuit Current (Isc/A)	9.00	9.18	9.26	9.32
Module Efficiency (%)	16.50	17.01	17.27	17.53

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

IV Curves


COULEE SOLAR MODULE

60 CELL
POLYCRYSTALLINE MODULE

270-285W
POWER OUTPUT RANGE

17.42%
MAXIMUM MODULE EFFICIENCY

0 - +3%
POSITIVE POWER TOLERANCE

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Product Certificates

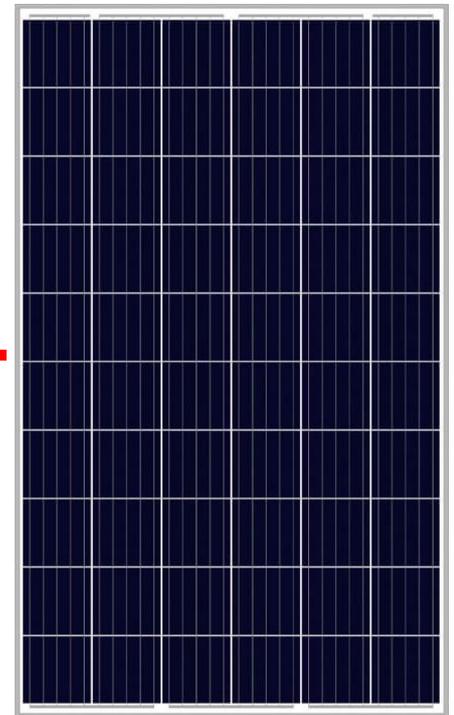
IEC/EN 61215, IEC/EN 61730



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



Coulee Limited
<https://couleenergy.com>



Our Most Versatile Product

- Compatible with all major BOS components and system designs
- Up to 1500V_{DC} system voltage

Maximum Limited Space

- Up to 174.2W/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



Construction Materials

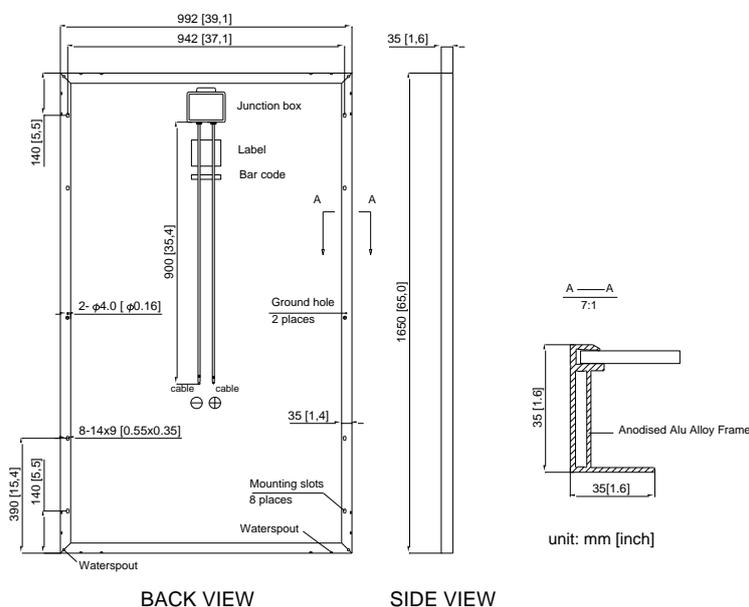
Front Glass	3.2mm, Low Iron, Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP67 Rated (Black)
Output Cables	TUV 1 × 4mm ² , Length: 900mm
Connector	MC4 (IP67)
Encapsulation Material	EVA
Backsheet	TPT (White OR Black)
Fixing Adhesive	Silicone Sealant

Mechanical Data

Solar Cells	Poly 156.75mm × 156.75mm
Number of Cells	60Cells (6 × 10)
Module Dimensions	1650mm × 992mm × 35mm
Weight	17.6kg

Temperature Coefficient

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	(-0.41 ± 0.05)%/°C
Temperature Coefficient of Voc	(-0.34 ± 0.02)%/°C
Temperature Coefficient of Isc	(0.05 ± 0.01)%/°C
NOTC	(45 ± 2) °C

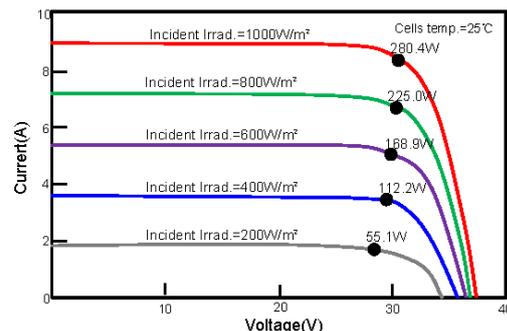
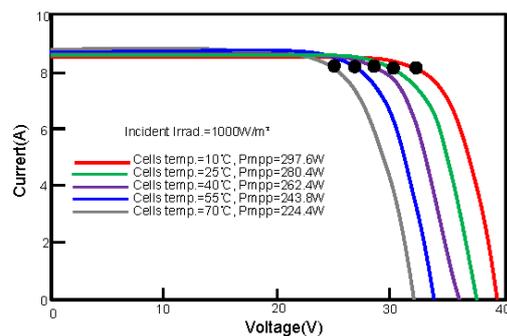
Mechanical Diagrams

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

Electrical Parameters at STC

Module type	CL280P6-60 Series			
Rated Maximum Power (Pmax/W)	270	275	280	285
Maximum Power Voltage (Vmp/V)	30.95	31.29	31.63	31.79
Open-circuit Voltage (Voc/V)	38.30	38.46	38.62	38.80
Maximum Power Current (Imp/A)	8.72	8.78	8.85	8.97
Short-circuit Current (Isc/A)	9.16	9.22	9.28	9.36
Module Efficiency (%)	16.50	16.80	17.11	17.42

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

IV Curves

Packaging Configuration

Pieces Per Pallet: 66 | Pallets Per 40HQ: 14 | Pieces Per 40HQ: 924



FLEXIBLE SOLAR PANELS

CLM-65MF/CLM-70MF

Flexible Panels To Power Your Next Adventure

Couleenergy Flexible panel use unique shingled cells technology. The panel made with conducting resin paste without ribbon to minimize the optical and resistive losses, improve mechanical load to flexing over 30 degrees, and are able to withstand harsh weather conditions and are almost impervious to corrosion.

Key Features

- The latest Shingled PERC solar cells technology.
- Over 30 degrees of ultimate bending no cells cracks.
- Improved 15~20% power of output than the traditional panel.
- Minimizes the optical and resistive losses.
- 5 years workmanship and materials warranty.
- OEM and ODM supported.



Powerful



Weather Resistant

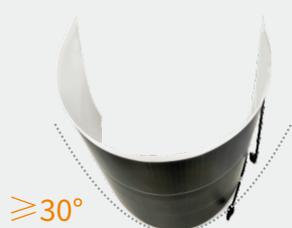
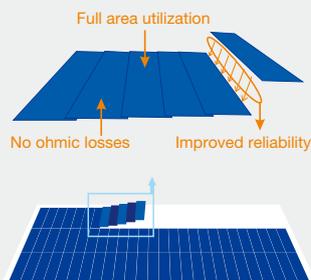
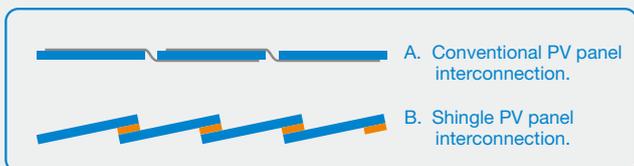


Flexible

What Is Shingled Cells Technology Advantage?

Shingled-cell technology, by cutting cells., these smaller currents will help reduce "Cell To Module" loss, which means higher output and more flexible.

The innovative shingled-cell technology allows no ribbon soldering internally and smaller branch current, so that internal resistance is lower, and increase the efficiency of the modules. The unique parallel design reduces the hot-spot effect significantly, and the gorgeous aesthetic appearance will bring different visual enjoyment.



Typical Electrical Data		
at STC: Irradiance 1000 W/m ² module temperature 25°C AM=1.5;		
Model	CLM-65MF	CLM-70MF
Pmax (W)	65W	70W
Power Tolerance	0 ~ +3%	0 ~ +3%
Vmp (V)	18.42	18.6
Imp (A)	3.58	3.79
Voc (V)	22.32	22.5
Isc (A)	3.8	4
Working Temperature	-40°C ~+ 85°C	-40°C ~+ 85°C
Nominal Operating cell Temp	45± 2°C	45± 2°C
Temp coefficient of Pmax	-0.4%/ °C	-0.4%/ °C
Temp coefficient of Voc	-0.3 %/ °C	-0.3 %/ °C
Temp coefficient of Isc	0.06 %/ °C	0.06 %/ °C
Temp coefficient of Vmpp	-0.35 %/ °C	-0.35 %/ °C
Nominal Voltage	12V	12V
Max. System Voltage	600VDC	600VDC
Max. Fusing Current	15A	15A

Mechanical Data	
Cells Type	Prime Monocrystalline PERC solar cells
Module Dimensions(L/W/H)	1120*375mm
Module weight	1.0kg
Cell's Efficiency	20.8% 22.4%
Front Cover (material/ thickness)	Higher Strength TPT/ETFE/ 2.2mm
Back Sheet (color)	White/ Black
Bending Range	≥30°
Junction Box (protection degree)	≥IP65/IP68 with by-pass diode
Grommets	316 stainless Steel /6 Mounting holes/ Square & Round corners
Cables & Connectors	0.5 m/2.5&4.0mm ² /MC4 compatible/IP68

COULEE LIMITED

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FLEXIBLE SOLAR PANELS

CLM-80M/CLM-85M

Flexible Panels To Power Your Next Adventure

Couleenergy Flexible panel use unique shingled cells technology. The panel made with conducting resin paste without ribbon to minimize the optical and resistive losses, improve mechanical load to flexing over 30 degrees, and are able to withstand harsh weather conditions and are almost impervious to corrosion.

Key Features

- The latest Shingled PERC solar cells technology.
- Over 30 degrees of ultimate bending no cells cracks.
- Improved 15~20% power of output than the traditional panel.
- Minimizes the optical and resistive losses.
- 5 years workmanship and materials warranty.
- OEM and ODM supported.



Powerful



Weather Resistant

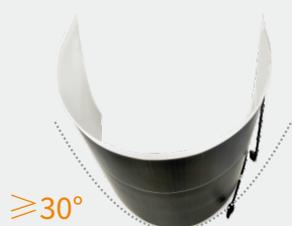
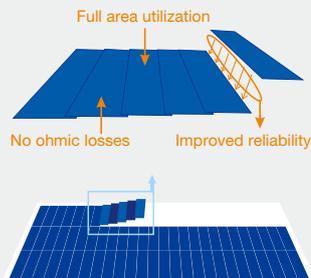
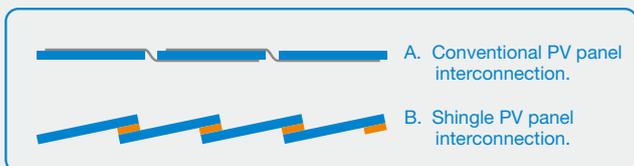


Flexible

What Is Shingled Cells Technology Advantage?

Shingled-cell technology, by cutting cells., these smaller currents will help reduce "Cell To Module" loss, which means higher output and more flexible.

The innovative shingled-cell technology allows no ribbon soldering internally and smaller branch current, so that internal resistance is lower, and increase the efficiency of the modules. The unique parallel design reduces the hot-spot effect significantly, and the gorgeous aesthetic appearance will bring different visual enjoyment.



Typical Electrical Data		
at STC: Irradiance 1000 W/m ² module temperature 25°C AM=1.5;		
Model	CLM-80M	CLM-85M
Pmax (W)	80W	85W
Power Tolerance	0 ~ +3%	0 ~ +3%
Vmp (V)	15.07	15.24
Imp (A)	5.32	5.58
Voc (V)	18.28	18.45
Isc (A)	5.58	5.88
Working Temperature	-40°C ~+ 85°C	-40°C ~+ 85°C
Nominal Operating cell Temp	45± 2°C	45± 2°C
Temp coefficient of Pmax	-0.4%/ °C	-0.4%/ °C
Temp coefficient of Voc	-0.3 %/ °C	-0.3 %/ °C
Temp coefficient of Isc	0.06 %/ °C	0.06 %/ °C
Temp coefficient of Vmpp	-0.35 %/ °C	-0.35 %/ °C
Nominal Voltage	12V	12V
Max. System Voltage	600VDC	600VDC
Max. Fusing Current	15A	15A

Mechanical Data	
Cells Type	Prime Monocrystalline PERC solar cells
Module Dimensions(L/W/H)	935*530mm
Module weight	1.2kg
Cell's Efficiency	20.7% 22.0%
Front Cover (material/ thickness)	Higher Strength TPT/ETFE/ 2.2mm
Back Sheet (color)	White/ Black
Bending Range	≥30°
Junction Box (protection degree)	≥IP65/IP68 with by-pass diode
Grommets	316 stainless Steel /6 Mounting holes/ Square & Round corners
Cables & Connectors	0.5 m/2.5&4.0mm ² /MC4 compatible/IP68



FLEXIBLE SOLAR PANELS

CLM-100MF/CLM-105MF

Flexible Panels To Power Your Next Adventure

Couleenergy Flexible panel use unique shingled cells technology. The panel made with conducting resin paste without ribbon to minimize the optical and resistive losses, improve mechanical load to flexing over 30 degrees, and are able to withstand harsh weather conditions and are almost impervious to corrosion.

Key Features

- The latest Shingled PERC solar cells technology.
- Over 30 degrees of ultimate bending no cells cracks.
- Improved 15~20% power of output than the traditional panel.
- Minimizes the optical and resistive losses.
- 5 years workmanship and materials warranty.
- OEM and ODM supported.



Powerful



Weather Resistant

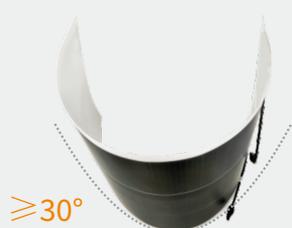
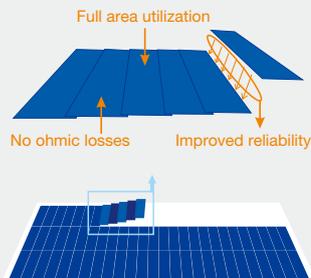
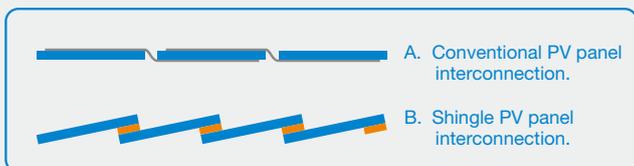


Flexible

What Is Shingled Cells Technology Advantage?

Shingled-cell technology, by cutting cells., these smaller currents will help reduce "Cell To Module" loss, which means higher output and more flexible.

The innovative shingled-cell technology allows no ribbon soldering internally and smaller branch current, so that internal resistance is lower, and increase the efficiency of the modules. The unique parallel design reduces the hot-spot effect significantly, and the gorgeous aesthetic appearance will bring different visual enjoyment.



Typical Electrical Data		
at STC: Irradiance 1000 W/m ² module temperature 25°C AM=1.5;		
Model	CLM-100MF	CLM-105MF
Pmax (W)	100W	105W
Power Tolerance	0 ~ +3%	0 ~ +3%
Vmp (V)	18.43	18.61
Imp (A)	5.47	5.65
Voc (V)	22.33	22.51
Isc (A)	5.79	5.97
Working Temperature	-40°C ~+ 85°C	-40°C ~+ 85°C
Nominal Operating cell Temp	45± 2°C	45± 2°C
Temp coefficient of Pmax	-0.4%/ °C	-0.4%/ °C
Temp coefficient of Voc	-0.3 %/ °C	-0.3 %/ °C
Temp coefficient of Isc	0.06 %/ °C	0.06 %/ °C
Temp coefficient of Vmpp	-0.35 %/ °C	-0.35 %/ °C
Nominal Voltage	12V	12V
Max. System Voltage	600VDC	600VDC
Max. Fusing Current	15A	15A

Mechanical Data	
Cells Type	Prime Monocrystalline PERC solar cells
Module Dimensions(L/W/H)	1120*530mm
Module weight	1.5kg
Cell's Efficiency	21.3% 22.4%
Front Cover (material/ thickness)	Higher Strength TPT/ETFE/ 2.2mm
Back Sheet (color)	White/ Black
Bending Range	≥30°
Junction Box (protection degree)	≥IP65/IP68 with by-pass diode
Grommets	316 stainless Steel /6 Mounting holes/ Square & Round corners
Cables & Connectors	0.5 m/2.5&4.0mm ² /MC4 compatible/IP68



FLEXIBLE SOLAR PANELS

CLM-120M/CLM-125M

Flexible Panels To Power Your Next Adventure

Couleenergy Flexible panel use unique shingled cells technology. The panel made with conducting resin paste without ribbon to minimize the optical and resistive losses, improve mechanical load to flexing over 30 degrees, and are able to withstand harsh weather conditions and are almost impervious to corrosion.

Key Features

- The latest Shingled PERC solar cells technology.
- Over 30 degrees of ultimate bending no cells cracks.
- Improved 15~20% power of output than the traditional panel.
- Minimizes the optical and resistive losses.
- 5 years workmanship and materials warranty.
- OEM and ODM supported.



Powerful



Weather Resistant

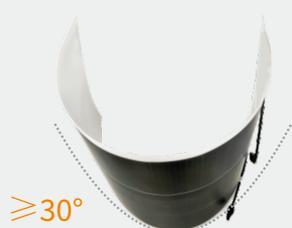
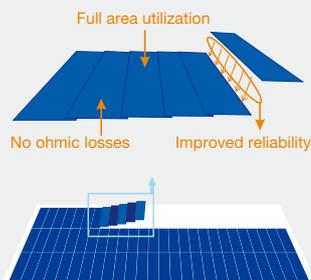
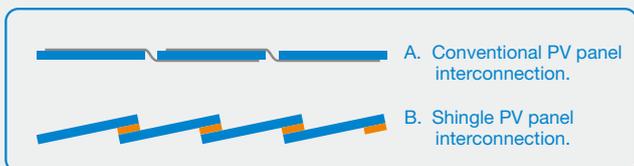


Flexible

What Is Shingled Cells Technology Advantage?

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Typical Electrical Data

at STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5;

Model	CLM-120M	CLM-125M
Pmax (W)	120W	125W
Power Tolerance	0 ~ +3%	0 ~ +3%
Vmp (V)	17.18	17.36
Imp (A)	7.03	7.21
Voc (V)	20.83	21.01
Isc (A)	7.40	7.58
Working Temperature	-40°C ~+ 85°C	-40°C ~+ 85°C
Nominal Operating cell Temp	45± 2°C	45± 2°C
Temp coefficient of Pmax	-0.4%/ °C	-0.4%/ °C
Temp coefficient of Voc	-0.3 %/ °C	-0.3 %/ °C
Temp coefficient of Isc	0.06 %/ °C	0.06 %/ °C
Temp coefficient of Vmpp	-0.35 %/ °C	-0.35 %/ °C
Nominal Voltage	12V	12V
Max. System Voltage	600VDC	600VDC
Max. Fusing Current	15A	15A

Mechanical Data

Cells Type	Prime Monocrystalline PERC solar cells
Module Dimensions(L/W/H)	1120*685mm
Module weight	1.7kg
Cell's Efficiency	20.4% 21.2%
Front Cover (material/ thickness)	Higher Strength TPT/ETFE/ 2.2mm
Back Sheet (color)	White/ Black
Bending Range	≥30°
Junction Box (protection degree)	≥IP65/IP68 with by-pass diode
Grommets	316 stainless Steel /6 Mounting holes/ Square & Round corners
Cables & Connectors	0.5 m/2.5&4.0mm ² /MC4 compatible/IP68

COULEE LIMITED

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No. 24 Beihai Rd., Beilun Dist., Ningbo, P. R. China.





FLEXIBLE SOLAR PANELS

CLM-150M/CLM-160M

Flexible Panels To Power Your Next Adventure

Couleenergy Flexible panel use unique shingled cells technology. The panel made with conducting resin paste without ribbon to minimize the optical and resistive losses, improve mechanical load to flexing over 30 degrees, and are able to withstand harsh weather conditions and are almost impervious to corrosion.

Key Features

- The latest Shingled PERC solar cells technology.
- Over 30 degrees of ultimate bending no cells cracks.
- Improved 15~20% power of output than the traditional panel.
- Minimizes the optical and resistive losses.
- 5 years workmanship and materials warranty.
- OEM and ODM supported.



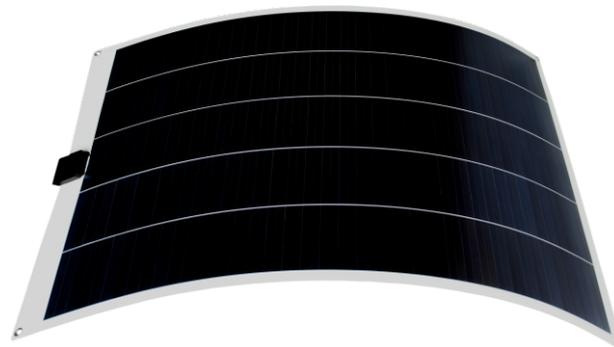
Powerful



Weather Resistant



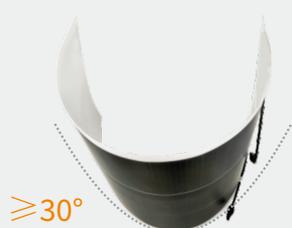
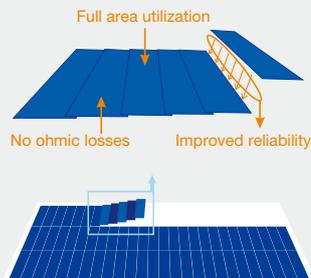
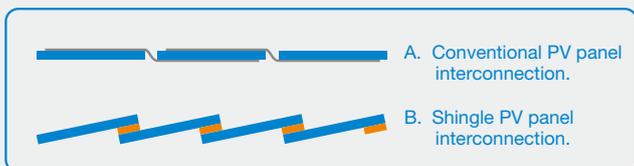
Flexible



What Is Shingled Cells Technology Advantage?

Shingled-cell technology, by cutting cells., these smaller currents will help reduce "Cell To Module" loss, which means higher output and more flexible.

The innovative shingled-cell technology allows no ribbon soldering internally and smaller branch current, so that internal resistance is lower, and increase the efficiency of the modules. The unique parallel design reduces the hot-spot effect significantly, and the gorgeous aesthetic appearance will bring different visual enjoyment.



Typical Electrical Data		
at STC: Irradiance 1000 W/m ² module temperature 25°C AM=1.5;		
Model	CLM-150M	CLM-160M
Pmax (W)	150W	160W
Power Tolerance	0 ~ +3%	0 ~ +3%
Vmp (V)	17.2	18.27
Imp (A)	8.72	8.8
Voc (V)	20.9	22.15
Isc (A)	9.3	9.25
Working Temperature	-40°C ~+ 85°C	-40°C ~+ 85°C
Nominal Operating cell Temp	45± 2°C	45± 2°C
Temp coefficient of Pmax	-0.4%/ °C	-0.4%/ °C
Temp coefficient of Voc	-0.3 %/ °C	-0.3 %/ °C
Temp coefficient of Isc	0.06 %/ °C	0.06 %/ °C
Temp coefficient of Vmpp	-0.35 %/ °C	-0.35 %/ °C
Nominal Voltage	12V	12V
Max. System Voltage	600VDC	600VDC
Max. Fusing Current	15A	15A

Mechanical Data	
Cells Type	Prime Monocrystalline PERC solar cells
Module Dimensions(L/W/H)	1120*845mm
Module weight	2.2kg
Cell's Efficiency	20.4% 20.5%
Front Cover (material/ thickness)	Higher Strength TPT/ETFE/ 2.2mm
Back Sheet (color)	White/ Black
Bending Range	≥30°
Junction Box (protection degree)	≥IP65/IP68 with by-pass diode
Grommets	316 stainless Steel /6 Mounting holes/ Square & Round corners
Cables & Connectors	0.5 m/2.5&4.0mm ² /MC4 compatible/IP68

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FLEXIBLE SOLAR PANELS

CLM-180MF/CLM185MF

Flexible Panels To Power Your Next Adventure

Couleenergy Flexible panel use unique shingled cells technology. The panel made with conducting resin paste without ribbon to minimize the optical and resistive losses, improve mechanical load to flexing over 30 degrees, and are able to withstand harsh weather conditions and are almost impervious to corrosion.

Key Features

- The latest Shingled PERC solar cells technology.
- Over 30 degrees of ultimate bending no cells cracks.
- Improved 15~20% power of output than the traditional panel.
- Minimizes the optical and resistive losses.
- 5 years workmanship and materials warranty.
- OEM and ODM supported.



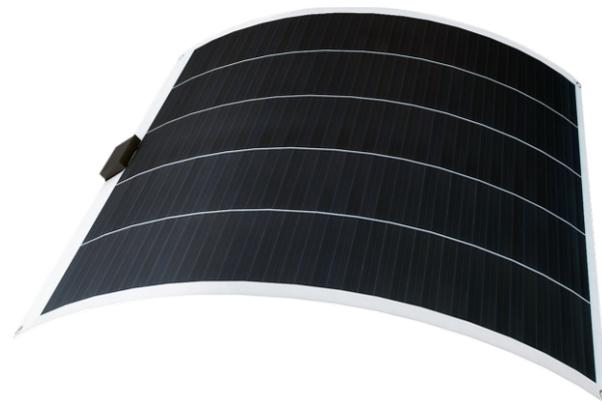
Powerful



Weather Resistant



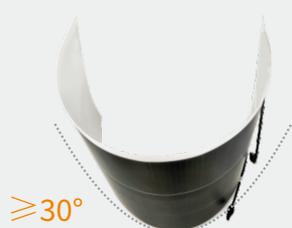
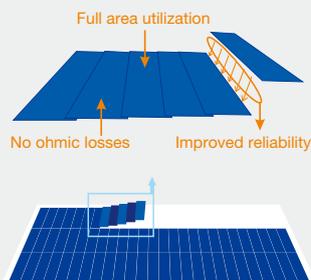
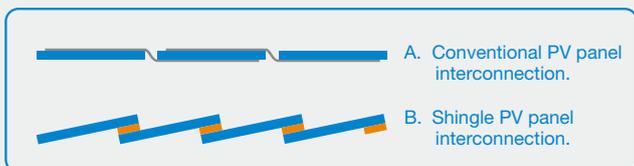
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Typical Electrical Data

at STC: Irradiance 1000 W/m² module temperature 25°C AM=1.5;

Model	CLM-180MF	CLM-185MF
Pmax (W)	180W	185W
Power Tolerance	0 ~ +3%	0 ~ +3%
Vmp (V)	17.15	17.33
Imp (A)	10.53	10.71
Voc (V)	20.8	21
Isc (A)	11.1	11.27
Working Temperature	-40°C ~+ 85°C	-40°C ~+ 85°C
Nominal Operating cell Temp	45± 2°C	45± 2°C
Temp coefficient of Pmax	-0.4%/ °C	-0.4%/ °C
Temp coefficient of Voc	-0.3 %/ °C	-0.3 %/ °C
Temp coefficient of Isc	0.06 %/ °C	0.06 %/ °C
Temp coefficient of Vmpp	-0.35 %/ °C	-0.35 %/ °C
Nominal Voltage	12V	12V
Max. System Voltage	600VDC	600VDC
Max. Fusing Current	15A	15A

Mechanical Data

Cells Type	Prime Monocrystalline PERC solar cells	
Module Dimensions(L/W/H)	1120*1005	
Module weight	2.4kg	
Cell's Efficiency	20.4%	21.0%
Front Cover (material/ thickness)	Higher Strength TPT/ETFE/ 2.2mm	
Back Sheet (color)	White/ Black	
Bending Range	≥30°	
Junction Box (protection degree)	≥IP65/IP68 with by-pass diode	
Grommets	316 stainless Steel /6 Mounting holes/ Square & Round corners	
Cables & Connectors	0.5 m/2.5&4.0mm ² /MC4 compatible/IP68	

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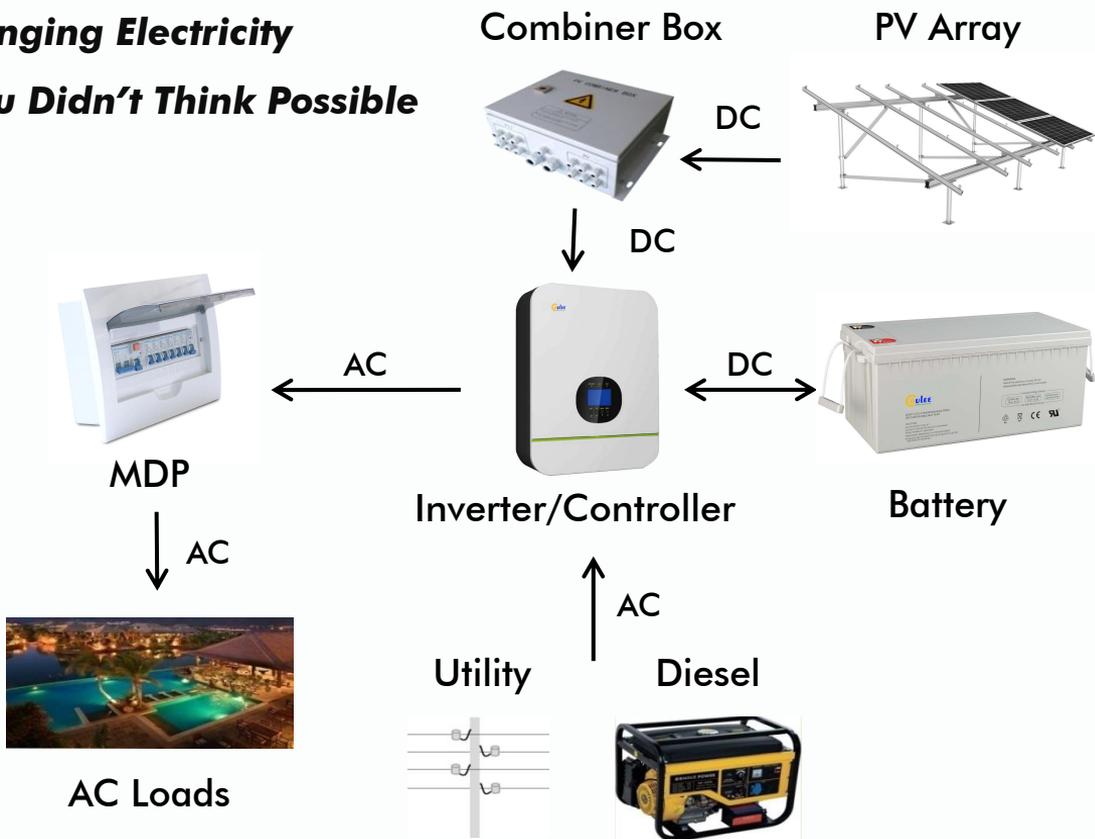




Off-grid PV System 3kWp



**Bringing Electricity
Where You Didn't Think Possible**



Main Components

Item		Specification	Q'ty/Unit		Remark
Power Generation Module	Bracket	3kWp Ground/Rooftop Bracket, Pot Galvanize Steel, All Accessories Included	1	set	Tilt Degree of the Bracket is Determined as per the Geographical Position
	Solar Panel	CL-335M-60, Premium Mono Solar Panel 335Wp	9	pcs	Plywood Crate
	Cable 1	4mm ²	30	M	
	Cable 2	16mm ²	20	M	
	Connector 1	MC4 Connector	9	pair	
	Connector 2	3 to 1 MC4 Waterproof Connector	3	pair	
	Combiner Box	3 to 1 Combiner Box, Open Circuit Voltage 500/1000VDC	1	set	
All-in-one Solar Controller & Inverter	Display module	LED & LCD Display	1	pcs	
	Controller	48V/80A MPPT Controller, Maximum 4.5kWp PV Array	1	set	With Diesel Engine Trigger Function, Reverse Charge Function, RS485 Communication
	Inverter	Pure Sine Wave Output, Maximum Allowable Output Power 5kWp, Single Phase, Surge Power 10000VA	1	pcs	
	System Box	With Total Cut-out Switch, Inverter and Controller Installed	1	pcs	
	Bypass Function	PV & Utility Power Change Function	1	set	
Battery module	Battery -02	12V/150Ah GEL Battery	8	sets	DOD 70%, Autonomy 1 day
	Battery Holder	48V/300Ah Battery Holder	1	set	
	Cable	Battery→Inverter: 5M, 25mm ² Outdoor Cable	5	M	
Packing	Carton	Standard Export Packaging	1	set	
Other	Auxiliary Material				All

Half-cut Cell Mono Solar Panel

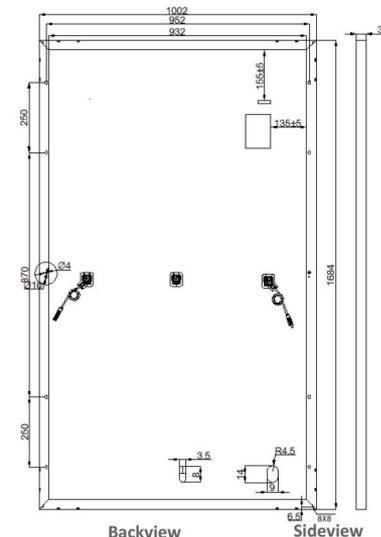
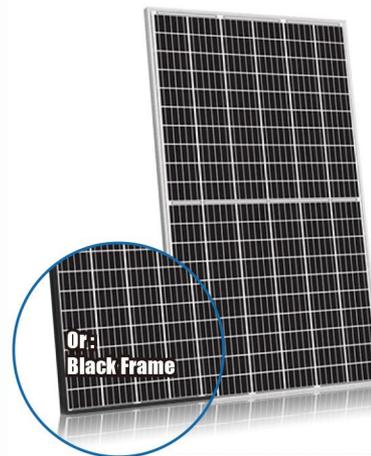
Module type	CLM-335M-60
Rated Maximum Power (Pmax/W)	335
Maximum Power Voltage (Vmp/V)	34.0
Open-circuit Voltage (Voc/V)	41.5
Maximum Power Current (Imp/A)	9.87
Short-circuit Current (Isc/A)	10.36
Module Efficiency (%)	19.85

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

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

Power Tolerance	0 ~ +3%
Temperature Coefficient of Pmax	$(-0.36 \pm 0.05)\%/^{\circ}\text{C}$
Temperature Coefficient of Voc	$(-0.28 \pm 0.02)\%/^{\circ}\text{C}$
Temperature Coefficient of Isc	$(0.048 \pm 0.01)\%/^{\circ}\text{C}$
NOTC	$(45 \pm 2)^{\circ}\text{C}$

- Reduced Power Loss
- Increased Shade Tolerance
- Less Hot Spot
- Improved Heat Dissipation
- More Physically Durable



Solar Cells	Mono PERC
Number of Cells	120 Half-cut Cells (6 × 20)
Module Dimensions	1684mm × 1002mm × 35mm
Weight	19kg

5kW Off-grid Solar Inverter

WHY?

Consider future loads that may require power so that the inverter installed today can handle growth in the next few years.

- Built-in MPPT solar charge controller
- Configurable grid or solar input priority
- Optional WIFI/ GPRS remote monitoring
- Smart function and parameter setting via LCD button
- Parallel for scalability
- Can be connected to generator



Datasheet	CLI-SA 5000TL (All-in-one Solar Controller/Inverter/Charger)
Battery voltage	48VDC
INVERTER OUTPUT	
RATED POWER	5000VA/ 5000W
Parallel Capability	Yes, 6 units
AC Voltage Regulation	230VAC \pm 5%
(Battery Mode)	@ 50/60Hz
Surge Power	10000VA
Efficiency (Peak)	93%
Waveform	Pure sine wave
Transfer Time	10 ms (For Personal Computers); 20 ms (For Home Appliances)
SOLAR CHARGER	
Maximum PV Array Power	4500W
MPPT Range @ Operating Voltage	60VDC ~ 115VDC
Maximum PV Array Open Circuit Voltage	145VDC
Maximum Solar Charge Current	80A
Maximum Efficiency	97%
Standby Power Consumption	2 W
AC CHARGER	
Charge Current	60A
AC Input Voltage	230 VAC
Selectable Voltage Range	170-280 VAC (For Personal Computers) ; 90-280 VAC (For Home Appliances)
Frequency Range	50Hz/60Hz (Auto sensing)
PHYSICAL	
Dimension (D/W/H) in mm	130/350/455
Net Weight (kgs)	14.5
OPERATING ENVIRONMENT	
Humidity	5% to 95% Relative Humidity(Non-condensing)
Operating Temperature	0°C - 55°C
Storage Temperature	-15°C - 60°C

Deep Cycle GEL Battery

- CLPC series is specially designed for frequent cyclic performance.
- With thicker plates, special nano-gelled material and additives as well as updated safety valve regulated technology, the CLPC series has excellent performance for high/lower temperature stability and lower current/power discharge application.
- CLPC series offers excellent recovery after deep discharge under frequent cyclic discharge, and can deliver around 1400 cycles at 80% DOD.



Lead Carbon & LiFePO4 Batteries
Available for Options

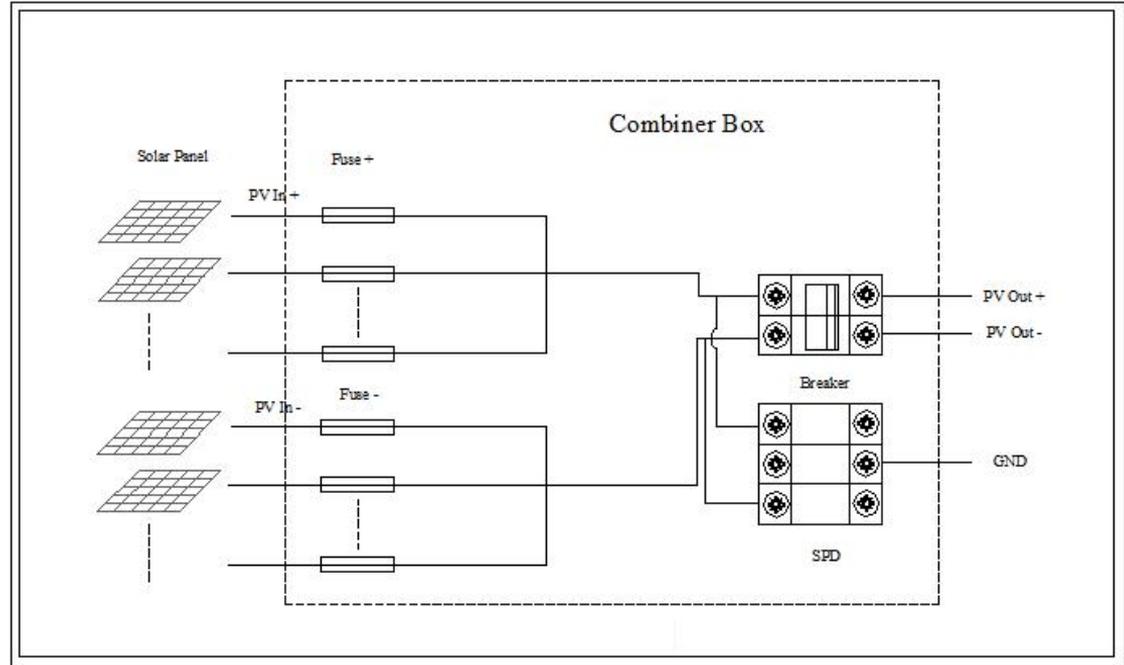
Model	Nominal Voltage (V)	Capacity C10 (Ah)	Weight (kg)	Total Height (mm)	Height (mm)	Length (mm)	Width (mm)	Internal Resistance (mΩ@25°C)
CLPC 200-6	6	200	30.8	275	275	243	187	2.3
CLPC 24-12	12	24	7.4	126	126	165	175	9.3
CLPC 33-12	12	33	11.2	180	171	180	130	8.3
CLPC 38-12	12	38	12.6	180	170	196	165	7.3
CLPC 50-12	12	50	15.7	229	208	227	138	6.8
CLPC 65-12	12	65	21.2	174	174	350	166	6.5
CLPC 70-12	12	70	21.5	227	208	259	169	6.1
CLPC 80-12	12	80	24.4	217	214	331	174	5.8
CLPC 90-12	12	90	29.7	217	214	331	174	5.6
CLPC 100-12	12	100	32.8	238	209	407	174	5.1
CLPC 120-12	12	120	38.5	241	241	483	170	4.6
CLPC 150-12	12	150	48.5	241	214	530	209	4.3
CLPC 200-12	12	200	57.5	245	219	522	240	3.8
CLPC 250-12	12	250	72.8	245	219	522	268	3.4

Combiner Box

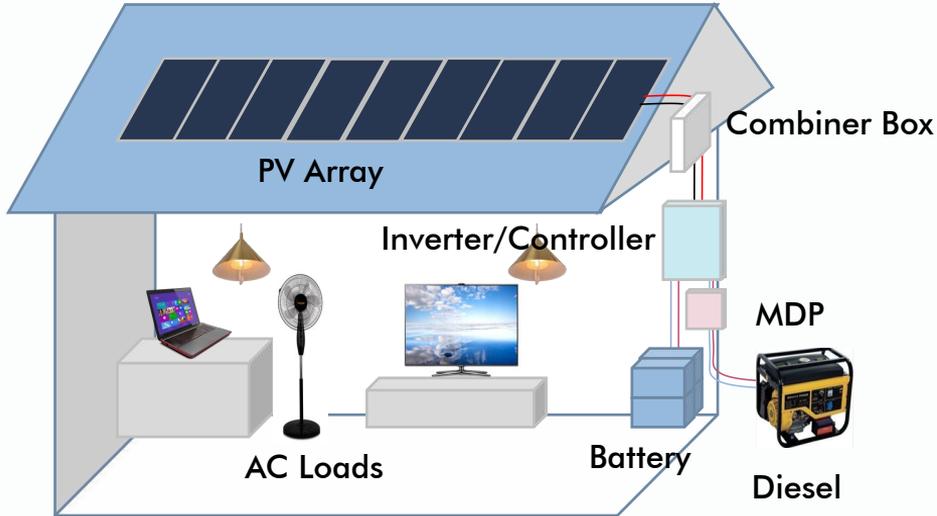


- 3 strings input, 1 string output
- IP65 waterproof
- UV resistance, flame retardant

PV Input:	6mm ²
PV Output:	16mm ²
Ground:	10mm ²
Voltage :	1000V



3D View Roof Installation (Ground Bracket for Option)



Rated Power Production Per Day (PSH: 5.0 Hours)		9.6 kWh
Power Consumption Per Hour	Rating Formula	Duration
1000W	9600Wh/1000W	9.6 Hours
2000W	9600Wh/2000W	4.8 Hours
3000W	9600Wh/3000W	3.2 Hours
4000W	9600Wh/4000W	2.4 Hours
5000W	9600Wh/5000W	1.92 Hours

Appliances	Rated Power(W)	QTY (PCS)	Total W
LED Lamps	7	10	70
Satellite Receiver	25	1	25
LCD TV	70	1	70
Fan	40	3	120
Printer	150	1	150
Computer	250	1	250
Washing Machine	300	1	300
Rice Cooker	1000	1	1000
Hair dryer	500	1	500
Laptop	90	1	90
Refrigerator(120L)	200	1	200
Total			2775

Warranty

- Solar Panels:
 - 12-year for product
 - 25-year for performance
- Battery: 3-year
- All-in-one Controller: 2-year
- Combiner Box: 2-year
- Other accessories: 2-year



Due to consolidated knowledge, experience and our qualified staff you'll get the best possible service through the whole process of consulting, planning and realization of your PV system(s).