



# CG X120

**440–450W**

Mono–Perc (M10) Solar PV Module  
 120 Cells | Max Efficiency **20.77%**  
 Monofacial | Bifacial



## THE IDEAL SOLUTION FOR



Rooftop arrays on residential,  
 commercial and industrial buildings



Ground–mounted  
 solar power plants

Contendre (CGPL) is one of the world's leading solar solution experts. We are specialised in high efficiency solar module manufacturing, distribution and research. To utilise our production and technology advantage, we provide our customers with comprehensive solutions for the whole life cycle of solar project.

We use Raw Materials certified by:



Made in India

Note: Specifications subject to technical changes and tests.  
 Contendre reserves the right of final interpretation.



### Multi Busbar Cell Technology

Shorter Distance Between Basbar  
 Allows Better Flow of Electrons  
 and Reduce Power Loss.



### Lower LCOE

Lower LCOE with Lower BOS cost  
 improving the value of the product  
 with competitive ROI.



### Lower Internal Resistance

Minimal power loss due to  
 lower internal resistance in turn  
 boosting module power.



### Bifacial Gains

Upto 25% additional bifacial gains  
 with rear side generation from  
 reflected sunlight.



### Enduring High Performance

Long–term yield security with  
 Anti LID and Anti PID Technology,  
 Hot–Spot Protect and Traceable Quality



### Extreme Weather Resilience

High durability raw materials helps  
 to withstand high front load of upto (5400 Pa)  
 and back loads of upto (2400Pa)



### A Reliable Investment

12 years product warranty and  
 25 years linear power output warranty  
 makes it a reliable investment

## MECHANICAL SPECIFICATION

Dimensions (LxWxH in mm)	1912 x 1133 x 35 (Also available in 40 mm)
Weight (kg)	23.96 kg
No. of Cells	120 (10 x 6 / 10 x 6) Mono Perc (M10)
Aluminum Frame (40HS)	Silver Anodized Aluminum Alloy (Also available in black)
Front Cover	Low Iron Tempered Glass (3.2 mm thick)
Encapsulate	Ethylene Vinyl Acetate (EVA) Sheet—PID free & UV resistant
Backsheet	Fluoro Polymer based PVDF Backsheet
Junction Box with 3-Bypass diode/Rating	Split Junction Box (IP68)—Weather proof / MC4 Compatible
Application Class Rating	Class A
Fire Safety Class Rating	Class II
Mechanical Load Test (as per IEC & UL)	5400 Pa—Front; 2400 Pa—Back
Mounting Holes Pitch (Y)—mm (A) 1360, (B) 860	
Mounting Holes Pitch (X)—mm 1095	

## ELECTRICAL PARAMETERS (STC\*)

Model	Pmax (W)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)	F.F.	Eff (%)
CG-X120-440	440W	34.47V	12.79V	40.81V	13.45A	80.32	20.31
CG-X120-445	445W	34.75V	12.83V	40.96V	13.49A	80.69	20.54
CG-X120-450	450W	35.06V	12.86V	41.18V	13.54A	80.86	20.77

### Bifacial Output – Backside Power Gain @ STC\*

5%	Nominal Maximum Power (Pmax) Module Efficiency (%)	463W 21.37%	468W 21.61%	473W 21.85%
10%	Nominal Maximum Power (Pmax) Module Efficiency (%)	485W 22.39%	490W 22.64%	496W 22.89%
25%	Nominal Maximum Power (Pmax) Module Efficiency (%)	551W 25.44%	557W 25.73%	564W 26.02%

(Note: The bifacial gain depends on the power plant design and site conditions.)

## ELECTRICAL PARAMETERS (NMOT\*)

Model	Pmax (W)	Vmp (V)	Imp (A)	Voc (V)	Isc (A)
CG-X120-440	326W	31.74V	10.28A	38.39V	10.89A
CG-X120-445	330W	31.99V	10.31A	38.53V	10.93A
CG-X120-450	334W	32.28V	10.33A	38.73V	10.97A

(3) NOCT irradiance 800 W/m<sup>2</sup>, ambient temperature 20°C, wind speed 1 m/sec

## MAXIMUM OPERATING CONDITIONS

Operating Temperature	–40°C to +85°C
Maximum System Voltage	1500V
Maximum Series Fuse Rating	25A

## TEMPERATURE COEFFICIENTS

Power (Pmax)	–0.278%/°C
Voltage (Voc)	–0.230%/°C
Current (Isc)	+0.05%/°C
NMOT / NOCT	44±2°C

## OTHER X SERIES PRODUCTS

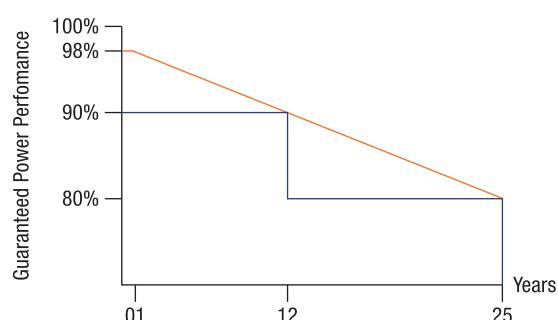
- CG-X144-XXX
- 535Wp – 550Wp

**Caution:** Please read safety and installation instructions before using the product.

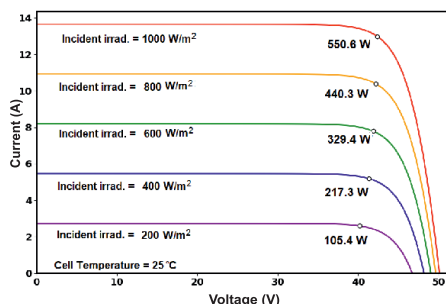
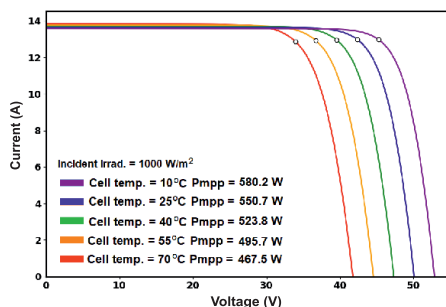
**\*Power Degradation:** Linear power degradation up to 2.0% in 1st year and 0.6%/year from year 2 to year 25. Please read Contendres warranty documents thoroughly.

**DISCLAIMER:** specifications included in the datasheet are subject to change without prior notice owing to continuous innovation on the product Development and R&D Activities. Contendres Solar reserves the right to make any adjustment to the information described here, Dataset contained in this specification do not form a representative of a single module data. @T&C Apply.

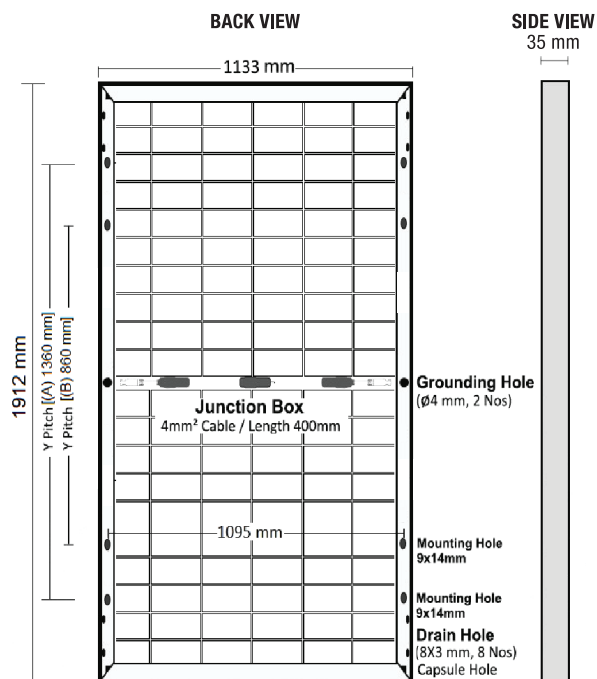
## LINEAR PERFORMANCE WARRANTY



## REFERENCE IV CURVE DETAIL



## REAR VIEW & MOUNTING DETAIL



**OFFICE:** 909, Filix Tower, LBS Road, Bhandup (W), Mumbai, MH-400078. INDIA

**FACTORY:** Unit i/6, Rajlakshmi Hi-Tech Park, Sonale Village, Bhiwandi, Maharashtra-421302. INDIA