

CG X144

535–550W



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

Up to **21.29%**
Module Efficiency

Mono-Perc (M10)
Solar PV Module

144 Cells

Also Available in DCR Module

THE IDEAL SOLUTION FOR



Rooftop arrays on residential, commercial and industrial buildings



Ground-mounted solar power plants

Contendre Solar is India's most premium integrated solar solutions company, specializing in the manufacturing of high-efficiency solar PV modules. With a 1.2 GW AI-enabled facility, we deliver world-class quality, performance, and reliability—powering a sustainable and brighter future.



Contendre is a leading manufacturer of high-efficiency solar PV modules, committed to delivering reliable, sustainable, and future-ready energy solutions. With advanced technology, stringent quality standards, and long-term performance assurance, we empower projects worldwide to achieve lower LCOE and higher returns.



Mechanical Specification

Dimensions (LxWxH in mm)	2278 x 1134 x 35
Weight (kg)	28.5 kg
No. of Cells	144 (12 x 6 / 12 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 (X)–mm	1095
Mounting Holes Pitch (Y1)–mm	1000
Mounting Holes Pitch (Y2)–mm	1400

Electrical Parameters (Stc*)

Model	Pmax (W)	Voc (V)	Vmp (V)	Imp (A)	Isc (A)	F.F.	Eff (%)
CG–X144–535	535	49.4	41.6	12.87	13.56	79.93	20.71
CG–X144–540	540	49.5	41.7	12.96	13.64	80.04	20.90
CG–X144–545	545	49.6	41.8	13.05	13.73	80.10	21.10
CG–X144–550	550	49.7	41.9	13.14	13.82	80.16	21.29

(1) STC: 1000/m² irradiance, 25°C cell temperature, AM1.5g spectrum according to EN 60904–3.
 (2) Power measurement uncertainty is within +/-2%.

Bifacial Output – Backside Power Gain @ STC*

	Nominal Maximum Power (Pmax)	551W	557W	562W	561W
5%	Module Efficiency (%)	21.33%	21.56%	21.76%	21.95%
10%	Nominal Maximum Power (Pmax)	578W	583W	589W	594W
	Module Efficiency (%)	22.37%	22.57%	22.80%	22.99%
25%	Nominal Maximum Power (Pmax)	656W	663W	669W	675W
	Module Efficiency (%)	25.39%	25.67%	25.90%	26.13%

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

Electrical Parameters (Nmot*)

Model	Pmax (W)	Voc (V)	Vmp (V)	Imp (A)	Isc (A)
CG–X144–535	399.20	46.00	38.40	10.39	10.96
CG–X144–540	402.80	46.00	38.40	10.48	11.06
CG–X144–545	406.70	46.20	38.70	10.51	11.09
CG–X144–550	410.60	46.20	38.80	10.58	11.17

(3) NOCT irradiance 800 W/m², 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

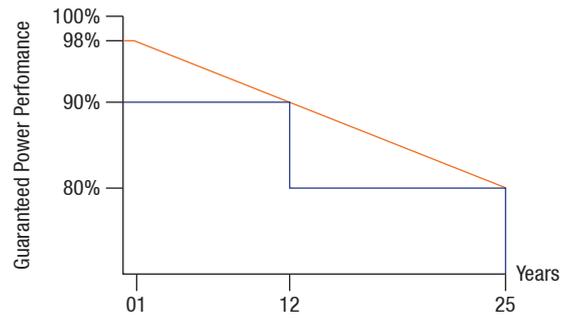
Temperature Coefficients

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

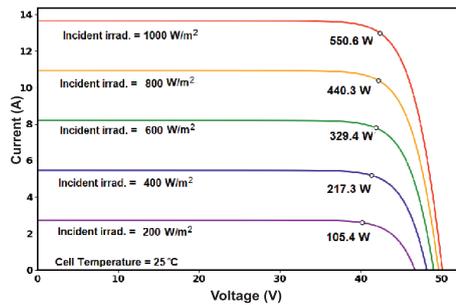
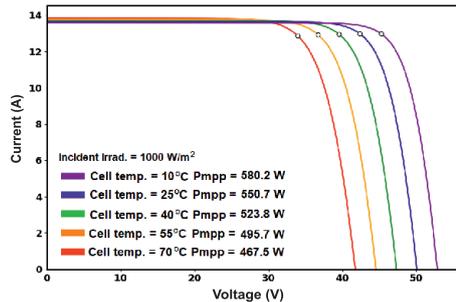
Other X Series Products

- CG–X120–XXX
- 440Wp – 450Wp

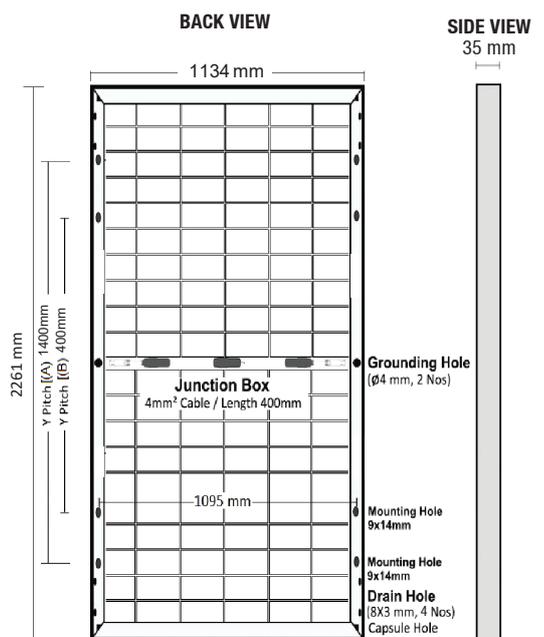
Linear Performance Warranty



Reference Iv Curve Detail



Rear View & Mounting Detail



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