



CG X144

535–550W

Mono–Perc (M10) Solar PV Module
 144 Cells | Max Efficiency **21.45%**
 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



R-72008656

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

Also Available in DCR Version



Multi Busbar Cell Technology

Shorter Distance Between Busbar
 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) | 2261 x 1134 x 35 (Also available in 40 mm) |
| 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 (Y)–mm (A) 1400, (B) 400 | |
| Mounting Holes Pitch (X)–mm 1095 | |

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 | 20.87 |
| CG–X144–540 | 540 | 49.5 | 41.7 | 12.96 | 13.64 | 80.04 | 21.06 |
| CG–X144–545 | 545 | 49.6 | 41.8 | 13.05 | 13.73 | 80.10 | 21.26 |
| CG–X144–550 | 550 | 49.7 | 41.9 | 13.14 | 13.82 | 80.16 | 21.45 |

(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*

| | | | | | |
|-----|------------------------------|--------|--------|--------|--------|
| 5% | Nominal Maximum Power (Pmax) | 551W | 557W | 562W | 561W |
| | Module Efficiency (%) | 21.49% | 21.72% | 21.92% | 22.11% |
| 10% | Nominal Maximum Power (Pmax) | 578W | 583W | 589W | 594W |
| | Module Efficiency (%) | 22.54% | 22.74% | 22.97% | 23.17% |
| 25% | Nominal Maximum Power (Pmax) | 656W | 663W | 669W | 675W |
| | Module Efficiency (%) | 25.59% | 25.86% | 26.09% | 26.33% |

(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

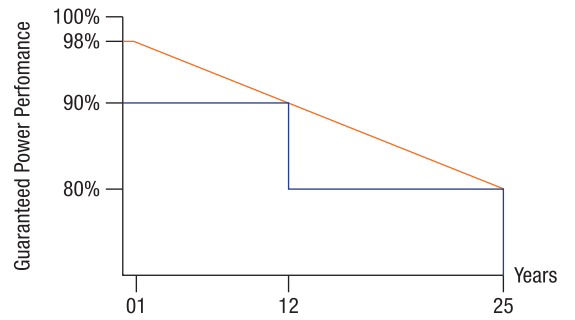
- CG–X120–XXX
- 440Wp – 450Wp

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

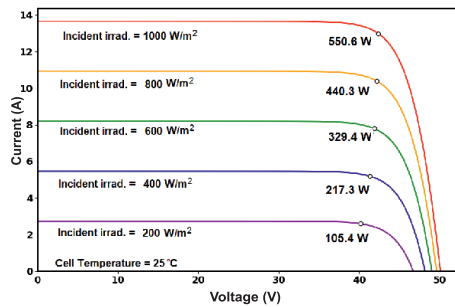
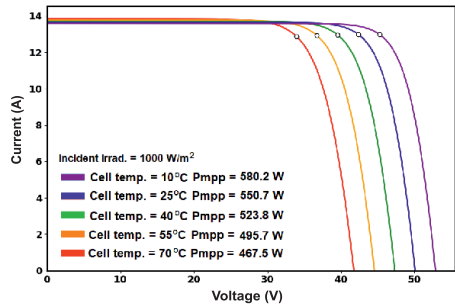
***Power Degradation:** Linear power degradation up to 2.0% in 1st year and 0.6%/year from year 2 to year 25. Please read Contendre warranty documents thoroughly.

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. Contendre 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.

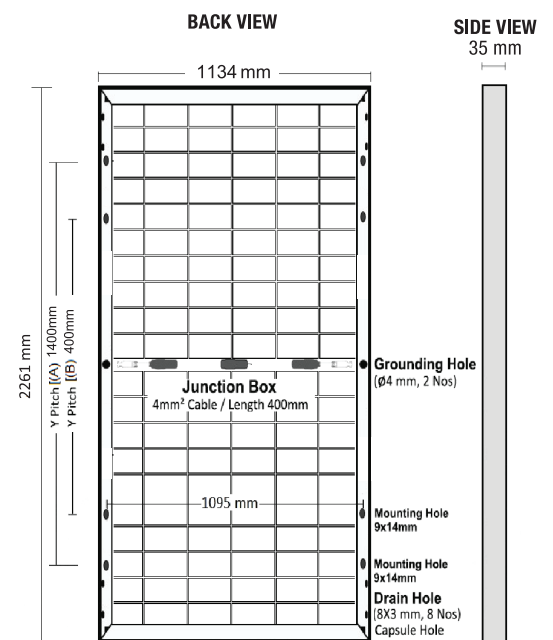
LINEAR PERFORMANCE WARRANTY



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