# HIGH PERFORMANCE 72 CELL MONOCRYSTALLINE Optimal Premium

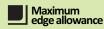
SOLAR PHOTOVOLTAIC MODULE

CNPV-210M, CNPV-205M, CNPV-200M, CNPV-195M, CNPV-190M

MOREPOWER

3% Positive Tolerance CNPV's positive tolerance on label rating power provides higher kWh for money invested.

ARC Glass Low iron, anti reflective coated glass gives 2% Energy gain.



Critical design to overcome accumulated dirt, power reduction.

Cell&Module Matching Matching gives 2% additional

Matching gives 2% additional power gain measured at STC conditions.

Independent Performance Verification

Independently verified by Photon and Öko-Test as amongst the best kWh/kWp output worldwide.

100% Electro Luminescence EL screening provides defect free modules.

Unique Frame Twist resistant frame design.

International Bankability Pre-approved with financial institutions and rapid capability ensures customers' cost of project is reduced.

SO9001 SO14001 OHSAS18001 Audited controls for high value consistency.



Series by CNP

FORLONGER

True Linear 25 Warranty 25 Highest power warranty coverage available on a linear basis.

#### Workmanship 10 Warranty years 10 years global workmanship warranty.

Strength 8000Pa

> Degradation Resistance Superior resistance to PID.

Accredited ammonia/salt mist resistance Long life in marine and high pollution environments.

Smart Junction Box Long term water vapour screening and increased heatsink.

Low Carbon Corbon Footprint Cone of the lowest carbon footprints over 100 years life cycle.

Green Credentials Fully committed to recycling during production and end of product life, a dedicated member of PV cycle.

> Eco Friendly Packaging

Friendly materials choice with high density packing.

ISO14001 accredited **ISO** Continuous improvement in reducing environmental impact.



## About CNPV

CNPV Solar Power SA, is a leading integrated manufacturer of solar photovoltaic products, that designs, manufactures and supplies highly efficient and cost effective crystalline solar photovoltaic modules. Reliability & longevity are built into our world-class crystalline solar photovoltaic modules, which undergo rigorous internal tests and external certifications (IEC61215, IEC61730, UL, and CE) to ensure peak performance and safety. For further information, please visit CNPV's website at http://www.cnpv-power.com, please contact us at marketing@cnpv-power.com.





















| Electrical Data                       | CNPV-190M | CNPV-195M | CNPV-200M | CNPV-205M | CNPV-210M |
|---------------------------------------|-----------|-----------|-----------|-----------|-----------|
| Peak Power Watts-Pmax (Wp)            | 190       | 195       | 200       | 205       | 210       |
| Power Output Tolerance-Pmax (%)       | 0/+3      | 0/+3      | 0/+3      | 0/+3      | 0/+3      |
| Maximum Power Voltage-Vmp(V)          | 36.60     | 36.80     | 37.10     | 37.30     | 37.50     |
| Maximum Power Current-Imp (A)         | 5.20      | 5.30      | 5.40      | 5.50      | 5.60      |
| Open Circuit Voltage-Voc (V)          | 45.35     | 45.50     | 45.65     | 45.80     | 45.95     |
| Short Circuit Current-Isc(A)          | 5.55      | 5.65      | 5.75      | 5.85      | 5.95      |
| Encapsulated Solar Cell Efficiency-ηc | 17.1      | 17.6      | 18.0      | 18.5      | 18.9      |
| Module Efficiency-ŋm (%)              | 14.9      | 15.3      | 15.6      | 16.0      | 16.4      |

Values at Standard Test Conditions STC (Air Mass AM 1.5, Irradiance 1000W/m², Cell Temperature 25  $^\circ \! \mathbb{C}$  )

## Mechanical Data

| Solar Cells         | Mono Crystalline 125×125mm                                    |
|---------------------|---|
| Cells Configuration | 72 cells (6×12)   |
| Module Dimension    | 1581×809×35mm(62.24"×31.85"×1.38")                            |
| Weight              | 15Kg(33lb)  |
| Glass               | High transmission tempered glass with ARC                     |
| Frame               | Anodized aluminium alloy type 6063T5; color:<br>Silver        |
| J-box               | IP65, 1000VDC, TUV&UL certified with 3 schottky bypass diodes |
| Cables/Connector    | 4.0mm <sup>2</sup> (12AWG), TUV certified/IP67, Type IV       |
|                     |   |

# Temperature RatingsNominal Operating Cell<br/>Temperature (NOCT)45°C(±2°C)Temperature Coefficient of Pmax-0.40%/°CTemperature Coefficient of Voc-0.30%/°CTemperature Coefficient of Isc0.05%/°C

# 10 years workmanship warranty

(Please refer to CNPV product warranty for details)

25 years world's first true linear performance warranty

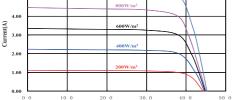
| Maximum Ratings            |                   |
|----------------------------|-------------------|
| Operational Temperature    | - <b>40∼+85</b> ℃ |
| Maximum System Voltage     | 1000VDC           |
| Maximum Series Fuse Rating | 10A               |

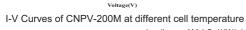
|                | Packaging Configuration      |                 |
|----------------|------------------------------|-----------------|
| <b>)~+85</b> ℃ | Modules per box              | 30 pcs          |
| 00VDC          | Modules per 40 ft container  | 840 pcs         |
| A              | Modules per 20 ft container  | 360 pcs         |
|                | Dimensions of Pallet (L×W×H) | 1665×1145×991mm |
|                | Gross Weight                 | 495kg           |

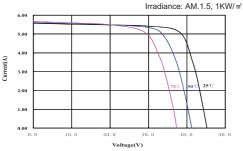


### I-V Characteristics at Different Irradiance & Temperature

I-V Curves of CNPV-200M at different irradiance Cell Temp.25°C





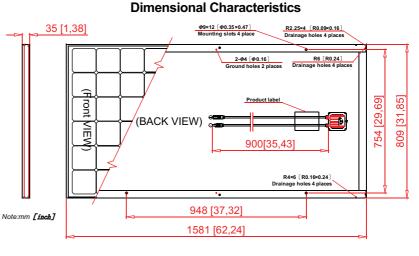






Wattage Up to Years Warranty

25



DISCLAIMER: specifications included in this datasheet are subject to change without previous notice from the company. In case of any conflicts/problems that may arise due to misinterpretation, prevailing conditions are the ones described in the original version (in English).

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