



# CE-215/220/225/230/235/240P

## Poly 157mm Cell. 60 Cells Layout



### Higher Efficiency

Excellent module efficiency up to: 16.04%.



### High Reliability

Superior craftsmanship, engineering excellence, and attention to the finest detail ensure longevity and optimal performance.



### High Return on Investment

0.45% annual degradation, 10 year linear warranty, more output. Higher maximum system voltage reduces BOS costs.



### Extremely Environmental Testing

Remain peak performance in extreme environments. Class A fireproofing rating.



### Strength and Durability

Certified for 5400Pa snow and 3600Pa loads test. Passed hail test with 35mm hail stones at 97 km/h.



### PID Free

Certified for Anti-PID under 85 degrees Celsius, 85% RH for 288 hours.



## Centro Energy Electric Quality

For more than 5 years, we have been perfecting our PV modules to bring you the highest quality products possible.

- Automated cell and module production lines ensure consistently high quality in every module.
- Each cell and module flash tested to ensure rated level of output.
- Aesthetically pleasing black frame and cells.
- Lead-free solder protects health and the environment.

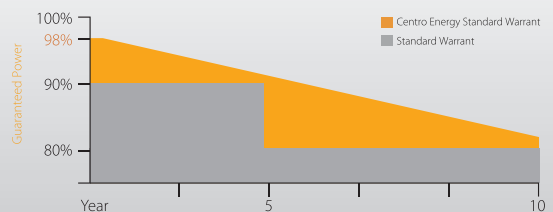
## System Certification

- ISO 9001: 2015
- ISO 14001:2015

## Authorised Photovoltaic Certificates



## 10 Years Performance Warranty



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### Electrical Characteristics under STC\*

Module Type	CE-215P	CE-220P	CE-225P	CE-230P	CE-235P	CE-240P
Max. power (Pmax) [W]	215	220	225	230	235	240
Max. power voltage (Vmp) [V]	30.8	30.9	31.1	31.3	31.5	31.7
Max. power current (Imp) [A]	6.98	7.12	7.23	7.35	7.46	7.57
Open circuit voltage (Voc) [V]	37.1	37.2	37.4	37.6	37.7	37.8
Short circuit current (Isc) [A]	7.68	7.83	7.97	8.10	8.26	8.41
Max. series fuse rating [A]	25	25	25	25	25	25
Power tolerance [W]	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Max. system voltage [V]	1500	1500	1500	1500	1500	1500
Solar panel efficiency [%]	14.99	15.34	15.7	16.04	16.39	16.74

Note: Standard Test Conditions: Air mass 1.5; Irradiance = 1000W/m<sup>2</sup>; cell temp. 25°C

### Electrical Characteristics under NOCT\*

Module Type	CE-215P	CE-220P	CE-225P	CE-230P	CE-235P	CE-240P
Max. power (Pmax) [W]	165.2	169.0	172.9	176.7	180.5	184.4
Max. power voltage (Vmp) [V]	28.08	28.17	28.35	28.53	28.72	28.90
Max. power current (Imp) [A]	5.88	6.00	6.10	6.19	6.29	6.38
Open circuit voltage (Voc) [V]	34.26	34.35	34.53	34.72	34.81	34.90
Short circuit current (Isc) [A]	6.52	6.66	6.77	6.89	7.02	7.15
Max. series fuse rating [A]	25	25	25	25	25	25
Power tolerance [W]	0/+5	0/+5	0/+5	0/+5	0/+5	0/+5
Max. system voltage [V]	1500	1500	1500	1500	1500	1500
Solar panel efficiency [%]	11.52	11.79	12.06	12.32	12.59	12.86

Note: Standard Test Conditions: Air mass 1.5; Irradiance = 800W/m<sup>2</sup>; cell temp. 25°C

### Temperature Characteristics

Temperature (NOCT) [°C]	45±2
Temp. coefficient of Pmax [%/°C]	-0.350
Temp. coefficient of Voc [V/°C]	-0.275
Temp. coefficient of Isc [mA/°C]	0.045

### Mechanical Data

Dimension	1460x982x30mm
Weight	20Kg
Solar cell	Poly 157mm Cell. 60 pcs
Glass	3.2mm, Coated Tempered Glass
Frame	Silver Anodized Aluminium Alloy
Junction Box	IP 68, three diodes
Cable	4mm <sup>2</sup> , (-)900mm and (+)900mm
Connector	MC4 Compatible

