

CE-650/655/660/665/670M

M12/210mm Cell.132 Half-Cell Layout



Higher Efficiency

Excellent module efficiency up to: 21.57%.



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, 30 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.



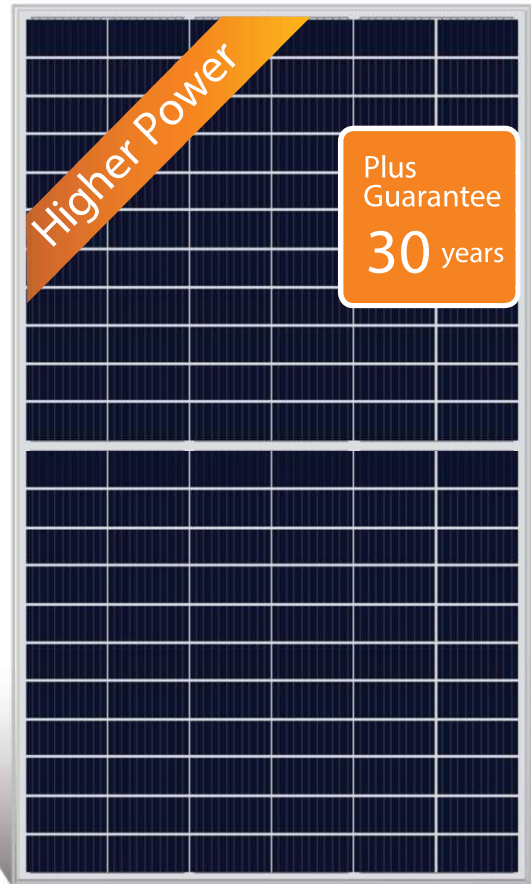
Strength and Durability

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 10 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

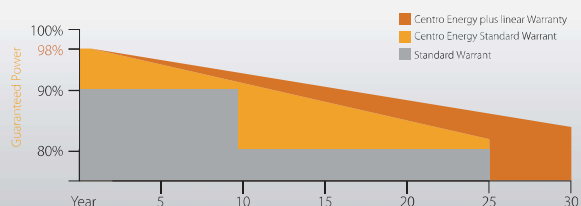
ISO 9001: 2015

ISO 14001:2015

Authorised Photovoltaic Certificates



30 Years Performance Warranty



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Electrical Data (at STC)

	CE-650M	CE-655M	CE-660M	CE-665M	CE-670M
Max. power (Pmax) [W]	650	655	660	665	670
Max. power voltage (Vmp) [V]	37.72	37.91	38.08	38.15	38.33
Max. power current (Imp) [A]	17.23	17.28	17.33	17.43	17.48
Open circuit voltage (Voc) [V]	45.31	45.50	45.66	45.72	45.78
Short circuit current (Isc) [A]	18.29	18.34	18.39	18.44	18.49
Maximum Series Fuse Rating	30	30	30	30	30
Power tolerance [W]	0/+5	0/+5	0/+5	0/+5	0/+5
Max. system voltage [V]	1500	1500	1500	1500	1500
Solar panel efficiency [%]	20.92	21.09	21.25	21.41	21.57

Note: Standard Test Conditions: Air mass 1.5; Irradiance = 1000W/m²; cell temp. 25°C

Temperature characteristics

Temperature (NOCT) [°C]	45±2
Temp. coefficient of Pmax [%/°C]	-0.40
Temp. coefficient of Voc [V/°C]	-0.29
Temp. coefficient of Isc [mA/°C]	0.05

Mechanical Data

Dimension	2384x1303x35mm
Weight	34.5Kg
Solar cell	Mono-crystalline 210mm 132pcs
Glass	3.2mm, Anti-reflective glass
Frame	Silver Anodized Aluminium Alloy
Junction Box	IP 68, three diodes
Cable	4mm ² , 1000mm
Connector	MC4 Compatible

Warranty

12 years product warranty
12 years warranty on 92% power output
30 years warranty on 83% power output

