

CE-395/400/405/410/415HM

M10/182mm Cell.108 Half-Cell Layout



Higher Efficiency

Excellent module efficiency up to: 21.3%.



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, 25 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

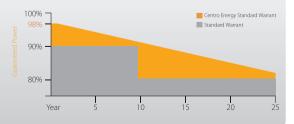








25 Years Performance Warranty





Centro Energy Co., Ltd Power Your World

Add: Industrial Park, Ehu Town, Wuxi, China Email: info@centro-energy.com

Tel: +86 25 8655 0862

Web: www.centro-energy.com

CE-395/400/405/410/415HM

M10/182mm Cell.108 Half-Cell Layout



Electrical Characteristics under STC*

| Module Type | CE-395HM | CE-400HM | CE-405HM | CE-410HM | CE-415HM |
|---------------------------------|----------|----------|----------|----------|----------|
| Max. power (Pmax) [W] | 395 | 400 | 405 | 410 | 415 |
| Max. power voltage (Vmp) [V] | 30.84 | 31.01 | 31.21 | 31.45 | 31.61 |
| Max. power current (Imp) [A] | 12.81 | 12.90 | 12.98 | 13.04 | 13.13 |
| Open circuit voltage (Voc) [V] | 36.98 | 37.07 | 37.23 | 37.32 | 37.45 |
| Short circuit current (Isc) [A] | 13.70 | 13.79 | 13.87 | 13.95 | 14.02 |
| Max. series fuse rating [A] | 25 | 25 | 25 | 25 | 25 |
| 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 [%] | 20.22 | 20.48 | 20.74 | 21.00 | 21.25 |

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

Temperature Characteristics

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

Mechanical Data

| Dimension | 1722x1134x30mm |
|--------------|------------------------------------------|
| Weight | 21.5Kg |
| Solar cell | Mono-crystalline 182mm (2*54pcs) |
| Glass | 3.2mm, Coated Tempered Glass |
| Frame | Black Anodized Aluminium Alloy |
| Junction Box | IP 68, three diodes |
| Cable | 4mm ² , (-)900mm and (+)900mm |
| Connector | MC4 Compatible |

Warranty

12 years product warranty

12 years warranty on 92% power output

25 years warranty on 83% power output

I-V CURVE

