



108BB 410W HC Series

mSolar 10BB Half-Cell Black
Monocrystalline PERC PV Module



Excellent efficiency

10 busbar technology increases power by decreasing the distance between busbars and the finger grid line



Improved weak illumination response

More power output even in lower light conditions such as overcast days or off-peak sunlight hours



Anti PID

Panels rigorously tested to limit power degradation caused by 'stray' currents



High wind and snow resistance

5,400Pa Snow Load
2,400Pa Wind Load



25-year warranty

M Solar modules are guaranteed to retain at least 84.3% of the initial power output



Appealing Aesthetics

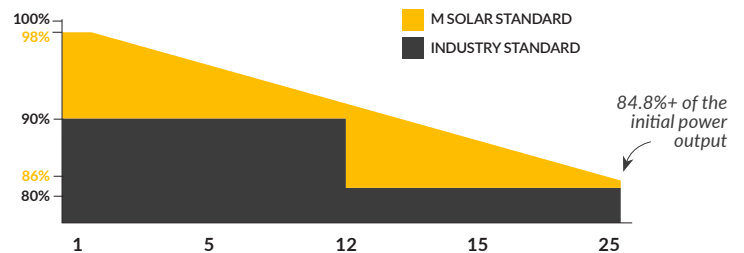
Fully black module creates a sleek, uniform array



25-year product warranty, 25-year output warranty



0.5% annual degradation over 25 years



CEC



UL 61730 | IEC 61215 | IEC 61730
ISO9001, ISO14001, ISO45001

108BB 410W HC Series

msolar 10BB Half-Cell, All-Black Monocrystalline PERC PV Module

Electrical Characteristics | STC*

| Module Type | TXI10-400108BB | TXI10-405108BB | TXI10-410108BB |
|---------------------------------|----------------|----------------|----------------|
| Nominal Power Watt Pmax (W)* | 400 | 405 | 410 |
| Power Output Tolerance Pmax (W) | 0~+5 | 0~+5 | 0~+5 |
| Maximum Power Voltage Vmp (V) | 31.01 | 31.21 | 31.45 |
| Maximum Power Current Imp (A) | 12.90 | 12.98 | 13.04 |
| Open Circuit Voltage (V) | 37.07 | 37.23 | 37.32 |
| Short Circuit Current Isc (A) | 13.97 | 13.87 | 13.95 |
| Module Efficiency (%) | 20.48 | 20.74 | 21.00 |

*STC (Standard Test Condition): Irradiance 1000W/m², Module Temperature 25°C, AM 1.5
*Measuring tolerance: ±

Electrical Characteristics | NMOT*

| | | | |
|--------------------------------|-------|-------|-------|
| Maximum Power Watt Pmax (Wp) | 270 | 274 | 278 |
| Maximum Power Voltage Vmpp (V) | 29.26 | 29.47 | 29.72 |
| Maximum Power Current Imp (A) | 10.32 | 10.38 | 10.43 |
| Open Circuit Voltage Voc (V) | 34.88 | 35.12 | 35.23 |
| Short Circuit Current Isc (A) | 11.03 | 11.10 | 11.16 |

*NMOT(Nominal module operating temperature): Irradiance 800W/m². Ambient Temperature 20°C, AM 1.5, Wind Speed 1m/s

Mechanical Data

| | |
|-------------------|--|
| Solar Cells | Mono PERC, 182mm half cells |
| Cells orientation | 108 (6x9+6x9) |
| Module dimension | 67.80x44.65x1.38 in. (1,722x1,134x35 mm) |
| Weight | 46.30 lb (21.00 kg) |
| Glass | 3.2mm, High Transmission, Low Iron & Semi-Tempered Glass |
| Junction Box | IP 68, 3 Diodes |
| Cables | 1,200mm |
| Connectors | MC4 EVO2 |

Temperature Ratings

| | |
|---------------------------------|------------|
| NOCT | 42°C±2°C |
| Temperature coefficient of Pmax | -0.350%/°C |
| Temperature coefficient of Voc | -0.275%/°C |
| Temperature coefficient of Isc | +0.045%/°C |

Working Conditions

| | |
|--------------------------|-------------------|
| Maximum System Voltage | 1500VDC |
| Operating Temperature | -40°C ~+85°C |
| Maximum Series Fuse | 25A |
| Maximum Load (Snow/Wind) | 5,400Pa / 2,400Pa |

Fire Rating

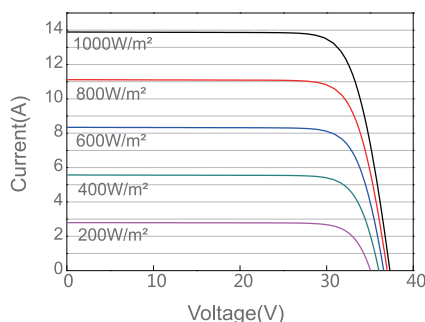
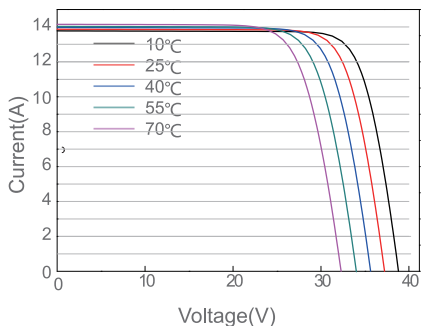
UL Type 1**

*Do not connect Fuse in Combiner Box with two or more strings in parallel connection
*Remark: Electrical data in this catalog do not refer to a single module and they are not part

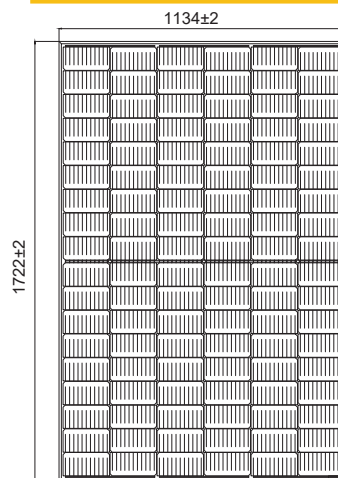
of the offer. They only serve for comparison among different module types.
**Please note, the 'Fire Class' Rating is designated for the full installed PV system,

which includes, but is not limited to, the module, the type of mounting used, pitch and roof composition.

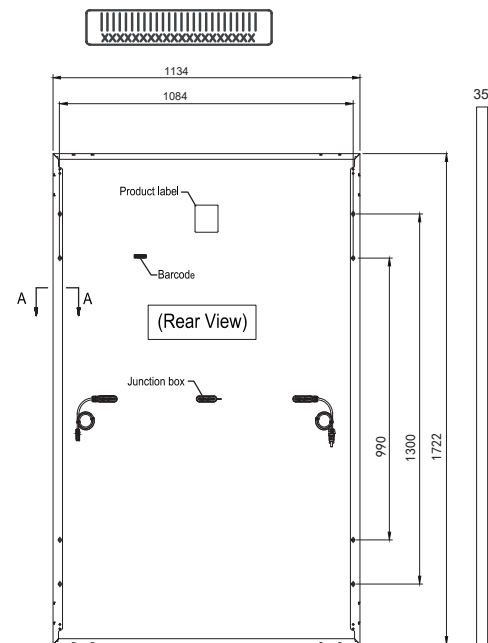
I-V Curves of PV Module (405W)



Dimensions (MM)



Front

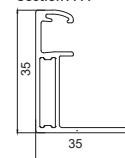


Back

Side

Tolerance:
Length: ±2mm
Width: ±2mm
Height: ±1mm
Pitch-row: ±1mm

Section A-A



Packaging Details

| | | |
|----------------------|-------------------------|-----------------------------|
| 31 Panels per pallet | Pallet Stack Weight | Truck Weight |
| 26 Pallets per truck | 2,934 lbs. (1341.98 kg) | 38,461.2 lbs. (17,445.7 kg) |

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