



10W Photovoltaic Module 10M-V

Ameresco Solar's line of solar modules certified for hazardous locations is the direct result of over four decades of design, manufacturing, and proven field use.

Our use of quality materials, rigorous testing, and process control delivers a solar module with optimized life and electrical energy production that our industrial customers depend on.

From mountaintops to off-shore platforms, weather stations in the bitter cold of Antarctica to telephone signal repeaters in the hot Australian outback, our modules perform in the harshest environments.



Multiple mounting possibilities

Multimount frame allows even greater flexibility in mounting. Positioned parallel to the edge and back of the module, its dual channels accept either M8 or 5/16" hex-head bolts, allowing the module to be mounted from the side or back.



Easier bolt management

Bolts may be located anywhere along the channels; the channel groove is specially designed to prevent the bolt from rotating when tightening, allowing installation with just one wrench.



Long cable for easier battery connections

A 4.6 meter PVC-jacketed AWG 18-2 polarized cable is potted into the fully sealed junction box located on the module back. The module's electrical connections are sealed for prevention against corrosion and moisture penetration.

Quality and certifications



UL61730-1, UL61730-2, UL61215-1, UL61215-1-1, UL61215-2, CSA C22.2 No. 61730-1, CSA C22.2 No. 61730-2



UL121201, CSA C22.2 No. 213 Class I, Division 2 Groups A, B, C, D



EN / IEC 61730-1, EN / IEC 61730-2, EN / IEC 61215-1, EN / IEC 61215-1-1, EN / IEC 61215-2



Conforms with European Directive 2014/35/EU

ISO 9001

ISO9001 and ISO14001 factory certifications ensure that our facilities use proven manufacturing and quality control processes, and maintain environmental integrity.

ISO 14001

Photographs are intended to portray typical module appearance, actual module appearance may vary.

Electrical characteristics

| | 1) STC 1000W/m ² | 2) NMOT 800W/m ² |
|---|---------------------------------|-----------------------------|
| Maximum power (P _{max}) | 10W | 7.2W |
| Voltage at Pmax (V _{mpp}) | 18.1V | 16.2V |
| Current at Pmax (I _{mpp}) | 0.55A | 0.44A |
| Short circuit current (I _{sc}) | 0.62A | 0.51A |
| Open circuit voltage (V _{oc}) | 21.8V | 19.7V |
| Module efficiency | | 8.8% |
| Tolerance (Pmax) | | -0/+3% |
| Nominal voltage | | 12V |
| Efficiency reduction at 200W/m ² | <5% reduction (efficiency 8.4%) | |
| Limiting reverse current | | 0.62A |
| Temperature coefficient of I _{sc} | | 0.105%/°C |
| Temperature coefficient of V _{oc} | | -0.360%/°C |
| Temperature coefficient of (Pmax) | | -0.45%/°C |
| (3) NMOT | | 47±2°C |
| Maximum series fuse rating | | 1A |
| Maximum system voltage | | 50V |

1: Values at Standard Test Conditions (STC): 1000W/m² irradiance, AM1.5 solar spectrum and 25°C module temperature. 2: Values at 800W/m² irradiance, Nominal Module Operation Temperature (NMOT) and AM1.5 solar spectrum. 3: Nominal Module Operation Temperature: Module operation temperature at 800W/m² irradiance, 20°C air temperature, 1m/s wind speed.

Mechanical characteristics

| | |
|---------------|--|
| Solar cells | 36 crystalline silicon cells in series |
| Front cover | High transmission 3.2mm (1/8th in) glass |
| Encapsulant | EVA |
| Back cover | White polyester |
| Frame | Silver anodized aluminum |
| Junction box | Lo-Pro junction box |
| Output cables | AWG#18 (0.75mm ²) 2 core, ITC / PLTC Lengths 4572mm / 15 ft. ("+" red; "-" black) |
| Dimensions | 421 x 269 x 22.5mm / 16.57 x 10.58 x 0.89in |
| Weight | 1.5kg / 3.3lbs |

All dimensional tolerances within ±1% unless otherwise stated.

Certifications

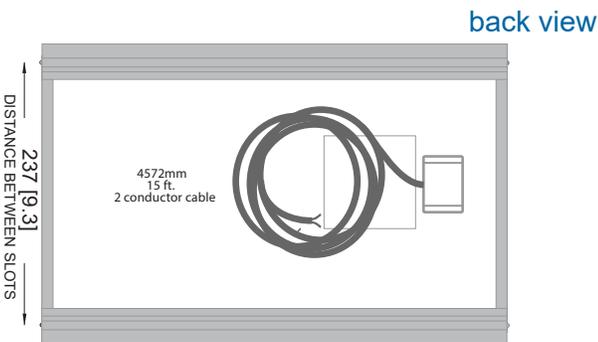
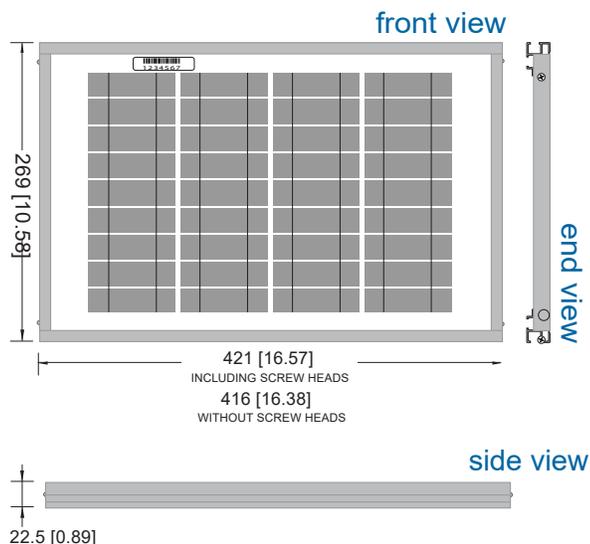
Conforms to ANSI/UL Standard UL61730-1:2017 Ed. 1+R:30Apr2020, UL61730-2:2017 Ed. 1+R:30Apr2020, UL61215-1:2017 Ed. 1, UL61215-1-1:2017 Ed. 1 and UL61215-2:2017 Ed. 1
Certified to CAN/CSA Standard C22.2 No. 61730-1:2019 Ed. 2 and C22.2 No. 61730-2:2019 Ed. 2

Conforms to ANSI/UL Standard UL121201:2017 Ed.9+R:26Aug2019
Certified to CAN/CSA Standard C22.2 No. 213:2017 Ed.3+U1;U2
Class 1, Division 2, Groups A, B, C and D

Certified in accordance with IEC61730-1:2016, IEC61730-2:2016, EN/IEC61730-1:2018, EN/IEC61730-2:2018, IEC61215-1:2016, IEC61215-2:2016 and IEC61215-1-1:2016, EN 61215-1:2016, EN 61215-1-1:2016 and EN 61215-2:2017

Conforms with European Directive 2014/35/EU

Dimensions



Dimensions in mm [in].

Warranty*

- Defect-free in materials and workmanship for 2 years
- 90% min. power output over 12 years
- Optional 25 years available

* Refer to warranty document for terms and conditions.

**For more information,
call 1-855-437-6527
or visit amerescosolar.com.**

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