



# 30W Photovoltaic Module 30J-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.



#### **Accessible junction box**

J-type junction box has accessible terminals for easier module interconnections in off-grid applications, and it allows fitting cable glands for various sections.



#### **Durable scratch-resistant back sheet**

The thick back sheet provides extra insulation and increased resistance to protect your module against rough handling. Made of white polyester, it ensures longer term performance and increased energy production.



#### **High reliability**

Cell interconnections and diode placement use well-established industry practice and are field-proven to provide excellent reliability.

#### **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, Divsion 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

ISO 14001

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

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

#### **Electrical characteristics**

	1731C 1000W/III	- INIVIO I OUUVV/III-	
Maximum power (P <sub>max</sub> )	30W	22.1W	
Voltage at P <sub>max</sub> (V <sub>mpp</sub> )	18.2V	16.7V	
Current at P <sub>max</sub> (I <sub>mpp</sub> )	1.65A	1.32A	
Short circuit current (I <sub>sc</sub> )	1.75A	1.41A	
Open circuit voltage (V <sub>oc</sub> )	22.1V	20.9V	
Module efficiency	10.	10.6%	
Tolerance (P <sub>max</sub> )	-0/+	-0/+3%	
Nominal voltage	12	12V	
Efficiency reduction at 200W/m <sup>2</sup>	<5% reduction	<5% reduction efficiency 10%	
Limiting reverse current	1.7	1.75A	
Temperature coefficient of I <sub>sc</sub>	0.037	0.0373%/°C	
Temperature coefficient of V <sub>oc</sub>	-0.281	-0.2810%/°C	
Temperature coefficient of (P <sub>max</sub>	-0.398	-0.3983%/°C	
(3) NMOT	38	38.7°C	
Maximum series fuse rating	5	5A	
Maximum system voltage	5	50V	

(1) STC 1000W/m<sup>2</sup>

(2) NIMOT 800\M/m<sup>2</sup>

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 solarspectrum. 3: Nominal Module OperationTemperature: 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 IP65 with 4 terminal screw connection block; accepts

PG 13.5, M20 13mm (1/2") conduit, or cable fittings accepting

6-12mm diameter cable. Terminals accept 2.5-10mm<sup>2</sup>

(8-14 AWG) wire

Dimensions 790 x 358 x 50mm / 31.1 x 14.1 x 2in

Weight 3.9kg / 8.6lbs

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

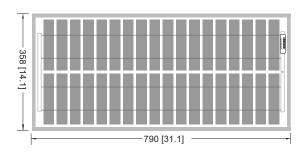
Conforms to ANSI/UL Standard UL121201:2017 Ed.9+R:26Aug2019 Certified to CAN/CSA Stanard C22.2 No. 213:2017 Ed.3+U1;U2 Class 1, Division 2, Groups A, B, C and D

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

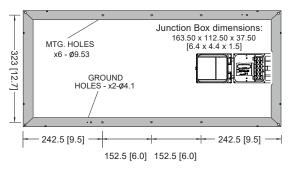
# **Dimensions**

#### front view



# side view

#### back view



Dimensions in mm [in].

## Warrantv\*

- 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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