

# American Solar<sup>★</sup>

## Monocrystalline

ASW-50M

Engineered in the USA produced overseas



**WHOLESALE**

*"QUALITY YOU CAN COUNT ON"*



### Features

- TUV, IEC, ISO, VDE, CE CERTIFIED
- Excellent module Efficiency
- Fast Mounting
- Maximizes System Output In Low Light
- 100% EL Testing on All ASW Modules, Guaranteed No Hotspot
- Guaranteed Positive Output Tolerance (0+3%)
- Withstands High Wind (2400 Pa) and Snow Loads (5400 Pa)
- Excellent Performance in all Environments

### Function

- Off-grid 12 Volt Systems
- RV and Boat
- 12 V Battery Charging

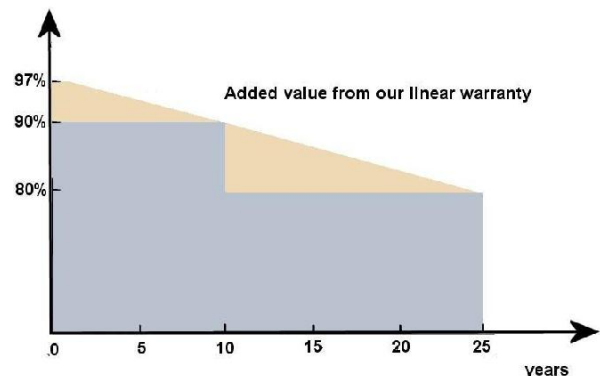
### Precautions

Only qualified personnel should install or perform maintenance. Please read the American Solar Wholesale Installation Manual before installation. Be aware of dangerous high DC voltage; Do not install modules when wet or broken.

All ASW solar modules are guaranteed to perform for 25 years from the date of purchase. Performance standards insure linear production levels starting at 97.5% at the end of the first year and a maximum decrease of only .07% each year thereafter.

- 5 years at 95% or above
- 5 more years at 90% or above
- 15 more years at 80% or above
- 10 year material & workmanship guarantee

### Linear Warranty



## Electrical

Maximum Power at STC (Pmax)	50 W
Optimum Operating Voltage (Vmp)	17.7 V
Optimum Operating Current (Imp)	2.85 A
Open-Circuit Voltage (Voc)	21.4 V
Short-Circuit Current (Isc)	3.1 A
Maximum System Voltage	600 VDC

STC: Irradiance 1000 W/m<sup>2</sup>, module temperature 25°C, AM=1.5

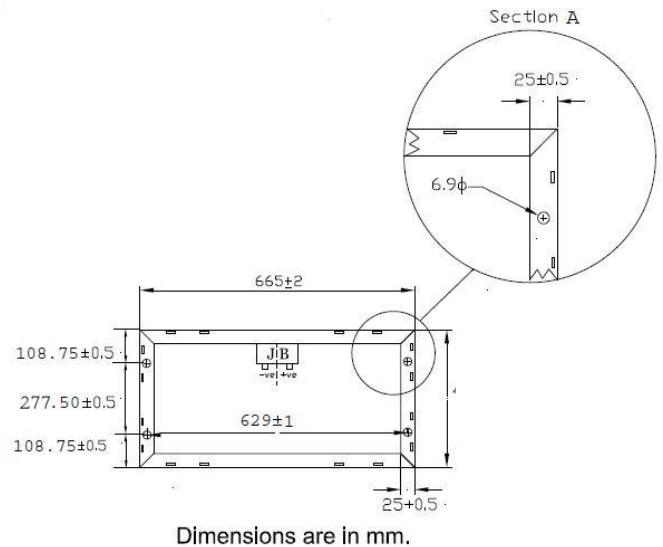
## Mechanical

Solar Cell	Monocrystalline
No. of Cells	36
Dimensions	21.8" x 25.7" x 0.98 (inch)
Weight	3.96 kgs (8.71 lbs.)
Front Glass	3.2 mm (0.13 inches) tempered glass
Frame	Anodized aluminum alloy
Junction Box	IP65 rated
Output Cables	4.0 mm <sup>2</sup> (0.006 inches <sup>2</sup> ), 36 inches long
Connectors	MC4 connectors
Fire Rating	Class A Depending on mounting

## Maximum Ratings

Operating Module Temperature -40°C to +90°C

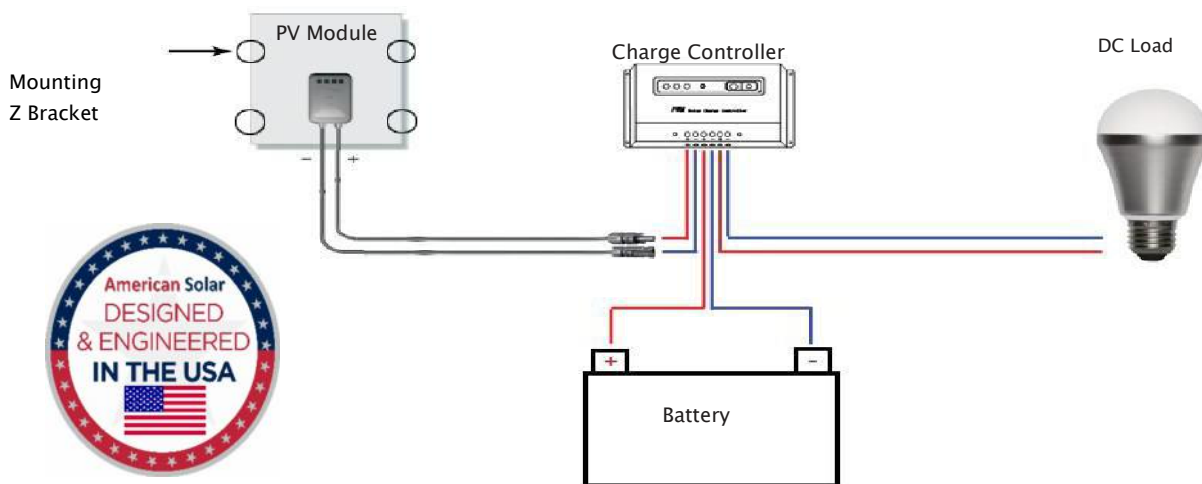
## Diagram



## Temperatures

Nominal Operating Cell Temperature (NOCT)	47±2°C
Temperature Coefficient of Pmax	-0.44%/°C
Temperature Coefficient of Voc	-0.30%/°C
Temperature Coefficient of Isc	0.04%/°C

## Wiring Diagram



Our modules are certified by 5 testing organizations:

