

McCrometer CONNECT 300mA Solar Panel

OVERVIEW

This photovoltaic module generates DC electricity when exposed to sunlight. The panel is designed for safe operation in 12-volt systems only. Voltage regulator and mounting hardware are included with all of Automata's Solar Panels. When using Automata's MINI Field Stations, all Solar Panels should be connected to the station battery or appliance with matching polarity. The red wire is positive (+) and the black wire is negative (-). Cover or shade the solar panel while making connections to avoid sparks or damage to the electrical equipment.

SPECIFICATION

- Power at STC(Pm):** 5W
- Short Circuit Current (Isc):** 0.33A
- Open Circuit Voltage (Voc):** 21.0V
- Peak Power Current (Ippm):** 0.30A
- Peak Power Voltage (Vppm):** 17.0V
- Maximum System Voltage:** 1000V DC
- Standard Test Conditions:**
- Temperature 25°C,
- Irradiance 1000W/m²
- AM=1.5
- Dimension:** 9.75" L x 9.38" W x 1.38"



Front and Back View of the 300mA Solar panel with Voltage Regulator

TILT ANGLE

The following shows the angle (from horizontal) at which the module should be installed in order to maximize annual energy output. At most latitudes, performance can be improved by less of an angle during the summer and more of an angle during the winter.

- 0-4° = 10° from horizontal
- 5-20° = Add 5° to local latitude
- 21-45° = Add 10° to local latitude
- 45-65° = Add 10° to local latitude
- 66-75° = 80° from horizontal

The module should be oriented toward the sun as much as possible. This is especially important during the middle part of the day – the module's most productive period. It is important to keep the module free from all shadowing.

DIRECTIONAL FACING

As a general rule, modules used in the northern hemisphere should be faced due south (not magnetic south). Modules used in the southern hemisphere should face due north (not magnetic north).

