

LONGER BATTERY LIFE

MORE BATTERY POWER

TECHNOLOGY



A monocrystalline cell made from a single silicon crystal wafer is most efficient at harvesting energy when receiving sun at a specific angle. For this reason monocrystalline solar technology is generally preferred for large, hi-wattage fixed installations where sun tracking technology can be utilized.

A polycrystalline cell is made from different silicon crystal wafers melded together. This combination of crystals in a single panel more effectively harvests energy from scattered (partially shaded) or angled sun rays, allowing for more consistent power delivery under varying sun conditions.

OptiMate Solar portable chargers combine the natural advantage of polycrystalline technology with smart solar charge control, making charging of a battery safe and easy. Point the panel in the general direction of the sun and the battery will receive the most optimal charge, no further expertise required!

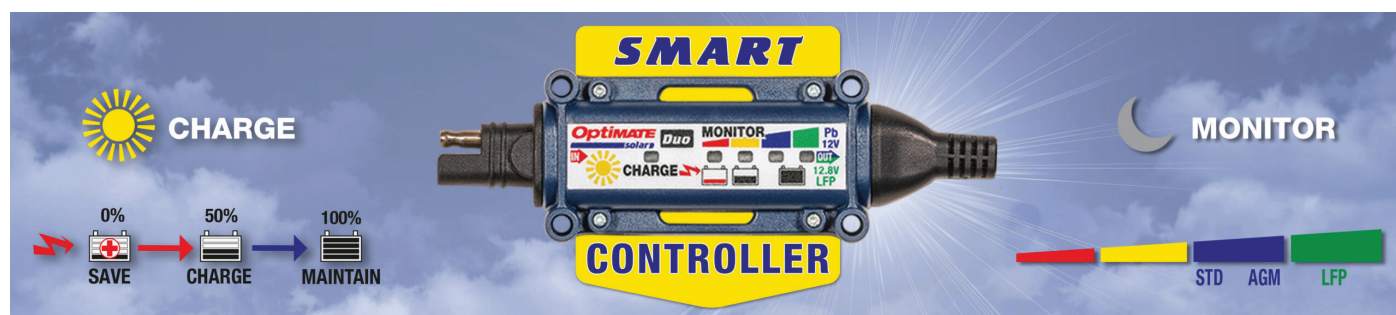


OptiMate Solar panels have solid aluminium frames with 4 robust corner brackets completing the construction of the panel. Each corner bracket has multiple mounting holes that can be used to affix the panel to a suitable surface, or the holes can be used to install the OptiMate suction mounts or an OptiMate adjustable stand.

The OptiMate suction mounts match to the mounting holes of the OptiMate corner brackets and are easily reversible. A small pull tab on each suction cup makes it easy to remove from the surface it is attached to. Suction mounts are included in the 10W and 20W travel kit. They are also available separately.



OptiMate 40W, 60W and 80W Travel Kits include an innovative adjustable rear stand that perfectly folds into the rear of the panel. Each 'leg' of the stand can be individually adjusted to suit the terrain, with a cross bar providing stability. Anchor loops are incorporated into the tips of each leg and two front mounted anchor straps can receive standard camping / tent pegs (not included in the kit), allowing the panel to withstand light to moderate wind.



The OptiMate charge controller is a fully sealed charger with a multi-step program that will save, charge and maintain the battery. The LED display provides charge progress information.

A solar panel will deliver power when it absorbs sunlight. A charge controller is needed to regulate the voltage so that the battery receives the correct charge voltage. The OptiMate charge controller automatically delivers a SAFE 24-7 charging experience, it cannot deliver power until it is correctly connected to the battery. Once connected and charging, no further supervision is required.



The OptiMate charge controller continues to show battery state of charge 'at night' or when no solar power is available. The indication mode changes from charge to monitor status during which the LEDs blink every 3 seconds. When it senses incoming solar power, it changes from monitor to charge mode.



The OptiMate charge controller adapts to the available power that the solar panel can provide and adjusts it to efficiently charge the battery. The controller automatically varies it's charge rate between continuous charge at full sun and pulse charge at low light. This dual method of charging ensures that even during low light the battery will receive high current pulses of energy.