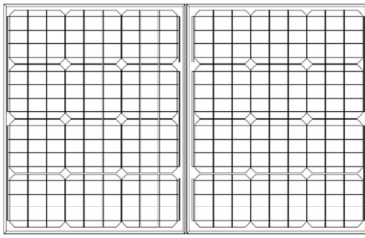




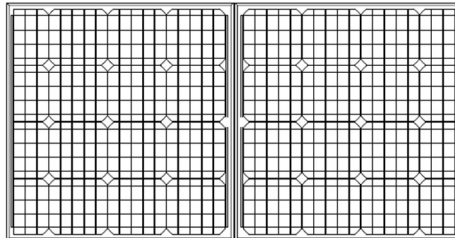
## Folding Mono-crystalline solar panel with 15A Charge Regulator – Series 2

### Kit Contents

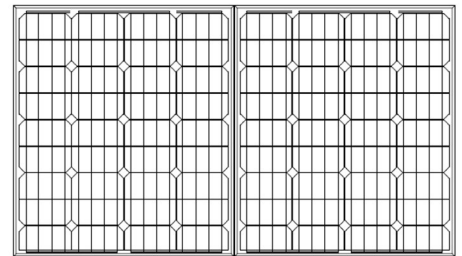
3 versions of the Solar Panel kits are available. Depending on which kit you have, it will include one of the panels below:



100W Kit p/n 044047



120W Kit p/n 044048



160W Kit p/n 044049

### 15A Solar Charge Regulator



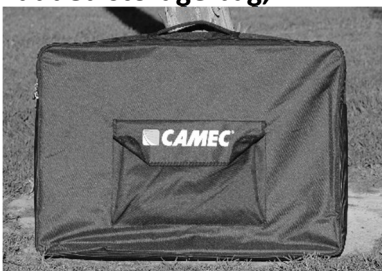
- Green (Working) LED on or flashing indicates that the unit is operating/optional load output is connected.
- Blue (Charging) LED on indicates that the battery is charging. Note when the battery is fully charged, this LED may flash as the controller cycles the charge to keep the battery topped up.
- Red (Low Voltage) LED indicates that there is no battery connected or the battery is below 10.8V. The LED may flash along with the Blue charging LED to indicate the battery is fully charged. Also this LED may flash alternately with the Green LED to indicate there is no Solar input (ie the panel is obscured by clouds etc) – but by flashing, this indicates the battery is still above 10.8V and suitable for use.

**NOTE:** It is normal for the LED's to flicker on & off or alternate when in use as the controller's microprocessor constantly monitors the state of charge, discharge and amount of energy being generated by the panel.

### 5 Meter connection cable with Anderson plugs & battery connector.

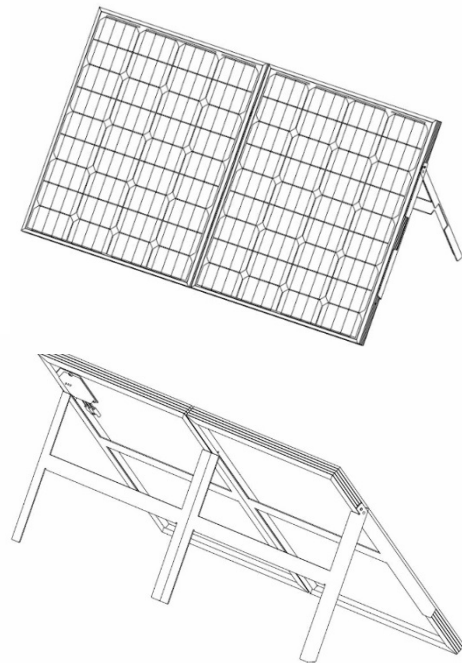


### Padded storage bag,



## INSTALLATION:

1. Locate a clear sunlit area free from over hanging branches or obstructions.
2. Remove Solar Panel kit from carry bag.
3. Unclip the latches on the side of the Unit and fold panels outward. Extend the two Stands to their maximum length and lock in position
4. Place Solar Panel kit in position facing the sun.
5. Fully extend battery lead and connect to charge controller. Ensure that battery connectors do not come in contact with one another. Connect battery connector to the '+' Positive (Red) & '-' Negative (Black) battery terminals. Ensure that the connection is secure



**NOTE:** To obtain maximum output it is suggested that the panels are regularly moved to track the sun's movement throughout the day

## FREQUENTLY ASKED QUESTIONS

- Q.** What type of batteries can be used with the system.
- A.** Any 12V DC battery that is used for cars, boats, motor cycles, etc., however AGM batteries are recommended as they are better suited for dedicated solar cycling/discharge use. If you require a battery, Camec offers the 042885 100AH & 043165 120AH Sealed AGM batteries with exclusive 26 Month Warranty.
- Q.** Will the solar panel over charge my battery.
- A.** The charge regulator ensures that an appropriate amount of charge is supplied to the battery, so it will not be over charged.
- Q.** How do I clean the solar panels.
- A.** Dust & dirt should first be swept off the panel surface using a soft brush then using a wet cloth to wipe the panel surface to remove remaining dirt & grime. It is recommended that any bird droppings be removed as soon as possible as if left can cause damage to the surface.
- Q.** Is the solar panel kit water proof.
- A.** It is recommended that the kit is not exposed to excessive water (eg pressure washer) to ensure maximum life of the solar panel & regulator.

## TROUBLE SHOOTING IF SYSTEM DOES NOT FUNCTION (No blue Charge Indicator)

- a. Check all connections to ensure that they are secure and free from moisture & debris.
- b. Check the battery and ensure it is a 12V battery. Test the battery voltage and If it is measuring a low voltage (eg 8 volts), it may have reached the end of its serviceable life. If it is measuring 14.5V or higher, then it is fully charged and the blue charge indicator may not illuminate or only illuminate cyclically as it needs topping up.
- c. Disconnect the battery cable from the charge controller and measure the open circuit voltage of the panels. The open circuit voltage should read between 15 & 23.5V DC.

If you are still experiencing difficulties, please contact Camec on 1300 422 632 (Australia), or 09 257 2419 (NZ)