**1.Solar panels and array:**

A Solar panel consists of a number of solar modules, which are connected in series and parallel configuration to provide specific voltage and current to charge a battery. A diode is connected on the positive terminal of such string in forward bias.

**2.Array junction box:**

AJB is the interface between the solar panels and the charge controller. All the incoming/ outgoing cables/wires from the solar panel to charge controller are terminated at AJB.

**3.Charge Controller:**

Charge controller is the interface between array and the battery bank. It protects the battery from overcharging and moderate charging at finishing end of the batter bank. Therefore, it enhances the life of the battery bank. It also indicates the charging status of batteries like battery undercharged, overcharged or deep discharges through LEDs indications. Some switches and MCBs are also provided for manual or accidental cut off of charging. In some charge controllers load terminals are also provided through a low battery charge cut off device so that it can protect the battery bank from deep discharge.