

DETAILED SPECIFICATIONS OF BOS

Sl.No.	Components	Specification
1	Surface/Submersible cables	For 2HP 2.5 sq.mm. , 3HP 4 sq.mm. & for 5HP 4 sq.mm. 3 core flat ISI mark copper cable of make Polycab, KEI, Ri-flex, RR Kabel, XPRO etc. and equivalent make shall be used . Sine wave filter should be used as and when required.
2	Cable for Panel	Wiring with MC4 connector 6/4 sq.mm. copper flexible universal DC cable with MC4 connector.
3	HDPE pipe for Submersible	Pump set- ISI 100% virgin with minimum PE100, DN63, PN8 as per IS 4984 of 1995 as suggested by MNRE for 2HP &3HP and PN10 for 5HP Pump set.
4	Suction and delivery pipe for surface pump	IS 15265 as suggested by MNRE PVC pipes hoses for suction line for agriculture.
5	Rope wire/ Garware safety Rope or other standard make	Rope wire of suitable size and Stainless steel/ standard/ Garware make. 8mm for 2 HP to 3HP & 10mm for 5HP.
6	EarthingKit-1 and EarthingKit-2	Chemical earthing as per IS 3043 as suggested by MNRE. The chemical earthing rod used in the system must be at least 3 meters in length & 16 sq.mm. dia. If it is not feasible to install a 3 meter rod due to hard rock or other constraints, three 1-meter rods should be installed with a delta/triod connection. For connecting with chemical earthing only GI strips should be used; GI wires or Copper wires will not be accepted. The earthing resistance shall not exceed 5 ohms.
7	lighting arrestor	LA 14 ft. GI pipe with 30mm GI strip.
8	SS theft proof Nut Bolt	SS304 anti-theft Nut bolt with washer
9	Other Nut bolt and washer	suitable Stainless Steel SS 304 grade or Hot dipped galvanized 8.8 grade
10	Conduit pipe/ black drip pipe	2mm thick PVC conduit pipe ISI make or black drip pipe made up of linear-low-density polyethylene for covering panel wiring.
11	Cable Tie	UV protected cable tie of standard make.
12	Foot Valve, Coupler	ISI/standard make PVC foot valve and standard make Clamp.
13	Bend and Union	ISI B Class
14	Clamp, Bore cap	Bore cap & clamp must be of good quality and standard make.
15	Instruction manual	DO & Don'ts, O&M instruction after Installation with SI,DO and CREDA toll free number etc.
16	Sticker	As per CREDA design.
17	Cleats/Clamps	Each and every solar module shall be affixed with 04 clamps of approved design with theft proof S.S. nut bolts in addition to the theft proof S.S. nut bolts required for fitting the modules to the MMS frame.

Note:

- Selection of Pump should be as per bore testing and for maximum discharge. Pump also supports minor irrigation system minimum drip irrigation system positively.
- HDPE pipe and cables should be as per depth of bore/requirement of site but **it shall be minimum 50 metres for 02 HP Pumps, minimum 70 meters for 03 HP pumps and minimum 100 metres for 05 HP Pumps.**
- Each System Integrator shall have to provide their own Toll free number and depict it on the controller.