

072204T4SPV

SOLAR PV INSTALATION LEVEL 4

ENG/OS/PVI/CR/05

Maintain Solar PV Systems

July/August 2025



**TVET CURRICULUM DEVELOPMENT, ASSESSMENT AND CERTIFICATION  
COUNCIL (TVET CDACC)**

**CUTTING LIST**

S/NO	ITEMS	QUANTITY (per candidate)	PROVIDED BY
1.	100W solar module	1	Institution
2.	10/20A charge controller	1	
3.	50Ah solar battery	1	
4.	300W inverter	1	
5.	Complete 4-way plastic CCU	1	
6.	Complete 2ft AC fluorescent	1	
7.	2 gang two way switch	2	
8.	20A single socket outlets	3	
9.	Single switch box	5	
10.	3-way circular box	1	
11.	Hacksaw with blade	1	
12.	20mm heavy gauge PVC conduits	1	
13.	PVC male and female bushes	Enough	

14.	20mm PVC spacer bar saddles	15	Candidate
15.	½ inch gypsum screws	Enough	
16.	1.5mm <sup>2</sup> PVC singles cable R/B	2 Meters each	
17.	2.5mm <sup>2</sup> PVC singles R/B/Y	3 Meters each	
18.	4.0mm <sup>2</sup> PVC singles R/B/Y	4 Meters each	
19.	Foolscap papers	Enough	
20.	Insulation resistance tester	1 per 4 candidates	
21.	Multi-meter/ continuity tester	1 Per 4 candidates	
22.	Leveling tool	1	
23.	Electrical hammer	1	
24.	Mega-ohm meter	1 per 4 candidates	
25.	Screw driver	1	
26.	Pliers	1	
27.	Tape measure	1	
28.	Electrical claw hammer	1	
29.	Relevant PPEs		

### Instructions to the institution.

1. The above stated resources are for pre-installing solar PV system shown in Figure 1.
2. The circuit in Figure 1 should be pre-installed using PVC conduit wiring system such that;
  - a) Lamps L1 and L2 are controlled from two independent positions by switches S1 and S2.
  - b) Socket outlets are wired as ring with a spur.
3. The institution is to provide enough pre-installed circuits of Figure 1 based on the number of candidates.

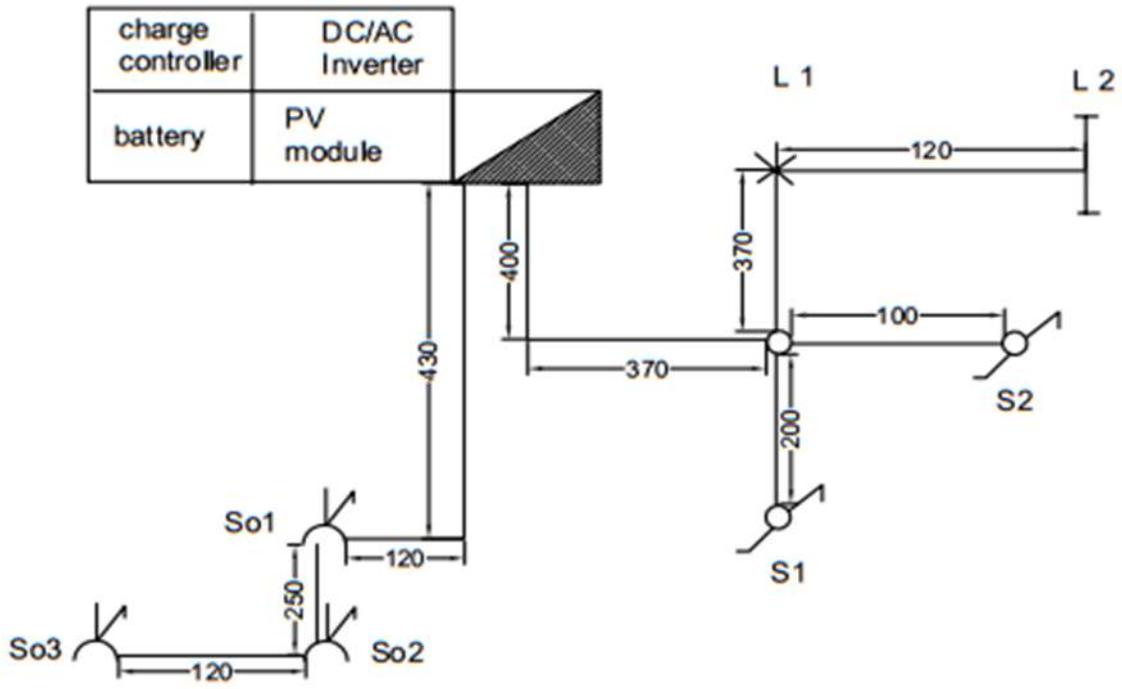


Figure 1