

Mayo College, Ajmer

Tender Specification for Rooftop Solar PV System (400 kW)

Project Name: Supply, Installation, Testing & Commissioning of Grid-Connected Rooftop Solar PV System on School Dining Hall Roof

System Capacity: 400 kW (AC)

Location: School Campus – Dining Hall Rooftop

Type: On-grid Solar Power System with Net Metering

Execution Time: 90 days from work order

- Welcome details of make and any suggestions from bidders
- To include optimiser

Technical Specifications

S. No.	Component	Description
1	Solar Modules	580–600 Wp, Mono PERC or Topcon, Tier-1, DCR-preferred. Efficiency $\geq 21\%$
2	Module Make (Approved)	Jakson Make Send Two Quotations – Quotation 1: In case Solar Panels are provided by us (Owner-Supplied Panels) Quotation 2: In case Solar Panels are supplied by you (Vendor-Supplied Panels)
3	Inverter	Approved make
4	Mounting Structure	GI or Aluminium, Hot Dip Galvanized, Wind Load ≥ 150 kmph, Roof-Type Adjustable
5	DCDB	IP65 Enclosure with SPD, MCB, DC Fuses
6	ACDB	MCCB, SPD, EFR, Energy Meter
7	DC Cables	Cu, 4 sqmm armoured
8	AC Cables	Al/Cu, 3.5 core, 240 sqmm
9	Earthing System	3 m Copper-bonded rods with GI strips – 12 Nos.
10	Lightning Protection	ESE LA with 100 m radius
11	Net Metering	3-phase, bi-directional; Liaison support included
12	Remote Monitoring	Online monitoring via Mobile/Web dashboard; inverter-integrated or external logger
13	AMC	10 years, includes cleaning, inverter check, and generation reports
14	Warranty	Modules: 25 years
15	Performance Guarantee	Minimum Performance Ratio (PR) $\geq 75\%$
16	Completion Time	90 Days from PO
17	Payment Terms	50% after material supply, 35% after installation, 10% post commissioning, 5% after Defect Liability Period (5 years)

BOQ Format – Rooftop Solar PV System (400 kW)

S. No.	Item Description	Unit	Qty	Rate (INR)	Amount (INR)	Make
1	Solar PV Modules (580–600 Wp Bifacial) (Jakson Make – To be Provided by us)	kWp		₹ _____	₹ _____	
2	String Inverter (Total 400 kW)			₹ _____	₹ _____	
3	Mounting Structure	kWp		₹ _____	₹ _____	
4	DCDB with Protection	Nos.		₹ _____	₹ _____	
5	ACDB with MCCB, SPD	Nos.		₹ _____	₹ _____	
6	DC Cable (4 sqmm Cu, Armoured)	Mtr.		₹ _____	₹ _____	
7	AC Cable (3.5C, 240 sqmm)	Mtr.		₹ _____	₹ _____	
8	Earthing System – Copper Rod with Strip	Set		₹ _____	₹ _____	
9	Lightning Arrestor (ESE Type)	Nos.		₹ _____	₹ _____	
10	Net Meter + Liaisoning	Lot		₹ _____	₹ _____	
11	Installation, Testing & Commissioning	Lot		₹ _____	₹ _____	
12	10-Year AMC	Year		₹ _____	₹ _____	

Total (Excl. GST): ₹ _____

GST @18%: ₹ _____

Total (Incl. GST): ₹ _____