

TECHNICAL BID PROFORMA
Item Name: Solar Photovoltaic system

1.0 Bidder Eligibility Criteria:

I	Bidder Eligibility Criteria-I (Public Procurement – Preference to Make in India)	Class I / Class II	Local Content value	Reference, Page No.
I	Only 'Class-I local suppliers' and 'Class-II local suppliers', as defined under DIPP, MoCI Order No. P-45021/2/2017-PP (BE II) dated 16 th September 2020 and other subsequent orders issued therein.			
II	Bidder Eligibility Criteria-II	Compliance (Yes/No)	Reference Page No.	Remarks, If any
1	The bidder/OEM should have supplied at least 5 similar items to IITs, NITs, IISERs, CSIR Labs or other Govt. R&D organizations in the last 10 years, PO copies or installation certificates along with contact details of end user need to be submitted as the proof of supply. IIT Madras reserves its right to verify the claims submitted by the bidder and the feedback from the previous customers will be part of technical evaluation.			

2.0 Technical Compliance:

Si. No	Description	Specifications	Complied/Not Complied	Reference Page No
A.	Solar PV array capacity	11.5 kW		
1.	Type of PV module	Poly Crystalline		
2.	No. of modules	34 + 2		
3.	Module rating	325 Watts + 340 Watts		
4.	Module efficiency	97 %		
5.	Open circuit voltage	44 V		
6.	Short circuit current	6.05 A		
7.	V _{max}	35.8 V		
8.	I _{max}	5.60 A		
9.	No. of cells	72 S		
10.	Module dimensions L x B x T (mm)	1495 × 990 × 36		
B.	Battery bank	Battery backup for half hour		
1.	Battery rating	12 V, 150 Ah		
2.	Type of battery	Lead acid tubular battery		

3.	No. of batteries	10 no's		
C.	Power conditioning unit	Minimum 9.5 kW output		
1.	Inverter output voltage	3 phase 415 Volts		
2.	Inverter output frequency	50 Hz		
3.	Inverter efficiency	>80%		
4.	Waveform	Pure sine wave		
D	Cables	Cables running between solar panels and array junction box should be 4 Sq. mm copper flexible. Power cables of adequate voltage and current insulation rating used. Cable trays provided as per requirement.		
E	Junction Box / Combiners	Dust and water proof junction boxes of adequate rating and adequate terminal facility made of fire resistant plastic (FRP) provided.		
F	Module Mounting structure	Modules shall be mounted on a non-corrosive support structures towards due south and at a suitable inclination to maximize annual energy output. Suitable grouting provided for installing over the ground.		
G	DC distribution board (DCDB)	Provide between PCU and Solar array.		
H	AC distribution board (ACDB)	Control the AC power from PCU and should have necessary surge arrestors.		
I	Warranty -1 Year Standard Warranty			

(Note: It is mandatory for the bidders to provide the compliance statement in tabular column format along with catalogue page number (comply/not comply) for the Above points with document proof as required. Failing which bidders will be technically disqualified)

**SIGNATURE OF BIDDER ALONG WITH
SEAL OF THE COMPANY WITH DATE**