

कृषि विज्ञान केन्द्र, गुरूग्राम Krishi Vigyan Kendra, Gurugram (भा.कृ.अनु.परि.–भारतीय कृषि अनुसंधान संस्थान) (ICAR-Indian Agricultural Research Institute) हीकोहपुर, गुरूग्राम (हरियाणा)–122004 Shikohpur, Gurugram(Haryana)-122004 Email:head_kvkggn@iari.res.in, head.kvkggn@gmail.com



F.No.KVK/2-3/2019-20/ 253

Dated: 15.02.2020

TENDER NOTICE

Subject: Online Tender for the Supply and Installation testing (02 Set) 10 HP Solar water pump set at KVK Shikohpur Gurugram.

Online Bids are invited from relevant manufacture/Dealer/Supplier in two bid system (i) Technical bids (ii) Financial bids on behalf of the Director, ICAR-IARI from eligible bidders for supply, installation, testing & commissioning and on-site support for the equipment/goods listed below at KVK Shikohpur Gurugram.

The last date for submission of bid 10-03-2020 at 01:00 PM.

Technical Bid will be opened on 11-03-2020 at 10:00 AM and Financial Bid will be opened later on

Sl. No.	Description of Goods	Reqd. Qty.	Bid Security in INR (₹)
1.	Supply Installation testing onsite support of 10 HP		
	Solar water Pump with all accessories and as per	2 set	25,000/-
	requirement of Annexure - VI		

NOTE:- TENDER FOR EACH OF THE AFORESAID EQUIPMENT/GOODS SHALL BE QUOTED FOR EMD WILL ALSO HAVE TO BE PROVIDED BY HAND / SPEED POST IS TO BE DEPOSITED HEAD KVK, SHIKOHPUR GURUGRAM ON OR BEFORE SUBMISION DATE OF TENDER FAILING WHICH BIDS SHALL BE LIABLE TO BE REJECTED OUTRIGHTLY.

All bidders are requested to thoroughly study the tender documents and ensure compliance to all required documents and annexures; correctly filled, sign and stamp the document where applicable; before submitting the same to avoid rejection of their bids.

Bidders are advised to carefully go through all the conditions and documents attached with this tender enquiry, before filling in the tender. All tender documents attached with the tender are sacrosanct for considering any offer as a complete offer. <u>All tender</u> <u>documents must be duly completed, signed by authorized signatory on each page</u> This tender is not transferable.

The tender documents along with detailed scope of work and other relevant document forms the part of tender are available at our website www.iari.res.in and CPP Portal (*www.eprocure.gov.in*) which may be downloaded and submitted online.

Annexure I

1. Eligibility for Responding

- i) Only those firms should respond who are the original equipment/goods manufacturers or their Indian subsidiaries or authorized dealers/distributors/agents of the stores specified in the tender specifications.
- ii) Submit a certificate from the original equipment/goods manufacturer of Authorization
- iii) Price Validity 180 Days Minimum
- iv) The tenderer must Submit latest Gst/PAN/ITR 3 YEARS.
- 2. **Delivery requirement**: Installation and commissioning of the equipment/goods must be completed within 10 days from the award of contract.
- 3. Earnest/Security Deposit: Must be deposited for Rs -25,000/- Twenty Five Thousand only in the form of DD/Bank Guarantee in favour of Director, ICAR-IARI. There will be no exemption for paying earnest money. However, Firms registered with the Central Purchase Organization/NSIC only are exempted from submitting bids without EMD (proof of registration must be attached without which exemption shall not be considered). In case, if any tenderer fails to deposit the Earned Money the tender will be rejected straightway.
- 4. Guarantee/Warranty: One-year comprehensive on-site warranty must be provided by the OEM/Auth Supplier. Warranty period will start from the date of successful installation of items. In case at installation /part are found defective/damaged during or after delivery to consignee, the suppliers will replace under warranty at consignee's location free of cost. All expenses in this regard will be borne by the supplier.
- **5. Performance Security**: Successful bidder will have to submit a performance security of equivalent to 10% of the contract/order value
- **6. Liquidated Damages**: In case the firm does not complete the supply within the agreed delivery period as per contract, liquidated damages @ 0.5% per week or part thereof subject to a maximum of 10% of the contract value will be charged. However, the Institute reserves the right to either further extend or cancel the contract after expiry of delivery date and recover the liquidated damages from the dues of the firm or by legal means.
- 7. Dispute settlement : Any dispute arising out of this contract shall be subject to the jurisdiction of Indian laws & court at New Delhi. Sole arbitrator is appointed by the Director IARI/Secretary, ICAR, New Delhi. His decision will be final and binding to both parties (Supplier and Purchaser).
 - i) Self-Attested copy of GST and Pan is to be attached
 - ii) The installation and warranty services are required at site The bidder should submit along with the technical bid; The bidders should have their own branch office/ service centre in Gurugram/Delhi/NCR to provide Promptly service, an undertaking to this effect should be submitted along with the technical bid. The details viz. name, address, contact person, telephone/fax, email etc. should be provided Undertaking to the effect that all the tender terms & Details of rates, taxes, duties, discounts, if any, quoted by the bidder, should be submitted
- **8. Evaluation of the bids:** A two stage bid evaluation procedure as detailed below will be adopted:
 - **a)** Evaluation of Technical Bids)
 - **b)** Tenderers must ensure that they upload all technical literature and detailed documentary proofs which specifically bring out the compliance of the equipment being offered against the specifications.
 - c) In case it is not possible to verify compliance of equipment as per technical bid due to lack of adequate documents, in original no reference will be made to tenderer and the bid will not be considered further and **treated as cancelled**.

9. Corrupt or fraudulent: No Bidder shall contact the Purchaser on any matter relating practices to

their bid from the time of the bid opening to the time the contract is awarded. Any effort by a bidder to influence the purchaser in the purchaser's bid evaluation, bid comparison or contract award decisions may result in the rejection of the bid.

Signature of Tenderer with office seal

Annexure II

Cheklist for Bidders

Before submission of tender documents, Tenderers should check they have complied with the following requirements: -

Sl. No	Requirements to be checked before submission of the tender	Attached <u>Yes / No</u>	If complied to Page number in which the relevant document enclosed must be written
1.	Latest Income Tax 3 years /PAN No./Gst certificate/copy of tender duly Signed to Attach.		
2.	Bid security/EMD submission		
3.	Authorization Certificate From oem		
4.	Acceptance of conditions of contract		
5.	offer validity as required in tender has been accepted & clearly mentioned in tender document.		
6.	Delivery Terms & Period as per tender have been accepted and mentioned in tender		
7.	Warranty terms as per tender accepted.		
8.	The tenderer has clearly mentioned in writing duly signed on Non judicial Stamp Paper that business dealings with their firms have not been banned by any Govt./Private agency.		
9.	Free Training on use of equipment after supply, as specified tender, has been accepted in writing		

Annexure-III

FINANCIAL BID

(Financial bid may be submitted on line as per BOQ)

То

The Head,KVK, Shikohpur Gurugram ,Haryana 122004

Sir,

Tender for the Supply and Installation testing 10 HP Solar water pump set at KVK Shikohpur Gurugram.I/We wish to submit our Tenders for on the following rates.

FINANCIAL BID

Supply Installation testing onsite support of 10HP Solar water Pump	Total Amount for 02 Set
Supply Installation testing onsite support of (02 set)10HP Solar water Pump As per Annexure -	Total Rates including item/installation/ transportation/Ta xes/Service charges etc. may be submitted online as per BOQ

Kindly note that the rates quoted invariably must contain all the taxes, services charges and total cost for the item /goods. The lowest bidder would be chosen on the <u>aggregate of all the</u> <u>services</u> (including all the taxes).

I/We agree to forfeit of the earnest money if I/We fail to comply with any of the terms and conditions in whole or in part laid down in the Tender form. I/We have carefully read the terms and conditions of the Tender and are agreed to abide by these in letter and spirit. I/ we hereby undertake that we shall make good the loss/ damage to IARI/KVK property, if caused due to negligence on our part. I/we also agree that the decision of the Director, IARI in this regard as well as the matter of dispute arising due to the provision of this contract shall be final and binding on me/ us. I/we undertake not to make any representation against the decision of the Director, IARI.

Bidder's Undertaking

To, Director, ICAR-IARI, New Delhi - 110 012

Tender No. : _____ Due Date : _____

Having examined the Bidding Documents including., if any issued _____, the receipt of which is duly acknowledged, we, the undersigned, offer to supply and deliver _____ (Description of goods/equipment/machinery) in conformity with said bidding documents.

We, undertake, if our bid is accepted, to deliver the goods in accordance with the delivery and Installation schedule specified in the aforesaid bid document.

If our bid is accepted, we will submit performance security in a sum of equivalent to 10% of the Contract Price for the due performance of the contract.

We agree to abide by this bid for a period of 180 days after the date fixed for bid opening and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

Until a formal contract is prepared and executed, this bid together with your written acceptance thereof shall constitute a binding contract between us.

We accept all your terms and conditions stipulated in this bid document without deviations, both technical & techno-commercial.

Dated this _____ (Date) Day of _____ (month) 2020

Duly authorised to sign Bid for and on behalf of

Annexure -V

CERTIFICATE TO BE SIGNED BY THE TENDRER

CERTIFICATE

It is certified that I have read and understood and will comply with all instruction contained in all terms and condition of this tender document. All pages submitted with these tender document from page have been filled properly and sign with seal of the firm/company.

	Signature of tendrer
	name in block latter
	name of firm
	full address
i)	Telephone No
ii)	Moblie No
iii)	Fax No
iv)	email id
v)	Website

Signature of tendrer with seal

Annexure -VI Technical Details for 10HP Solar Water Pump with following Components.

- I. Submersible AC motor pump set 10HP
- II. Solar Pv Panels 10,000/- watts with complete Structure
- III. Junction Box
- IV. Solar Inverter with Rms

MOUNTING STRUCTURES and TRACKING SYSTEM

The PV modules will be mounted on metallic structures of adequate strength and appropriate design, which can withstand load of modules and high wind velocities up to 150 km per hour.

The modules support structure shall be mild steel/ hot dipped galvanized (120 micron) iron for holding the PV modules. The size of angle iron should not be less than 50x50x5 mm. All nuts and bolts should be made of very good quality and should be corrosion resistant. Each panel frame structure shall be so fabricated as to be grouted on ground or roof on its legs. It will withstand severe cyclone/ storm with the speed of 150 Km/Hr. Each panel frame shall be complete with a weatherproof junction box as per the relevant BIS specifications, the inverter must have IP 40 protection or must be housed in a cabinet having at least IP54 protection.

Scope of Work.

The scope of work includes supply, installation & commissioning of Solar PV 10 HP Water Pumps. The suction/ delivery pipe (GI/HDPE), electric cables, floating assembly, civil work/ Boring till water Level and other fittings required to install the system on bore-well. The whole system including submersible/ surface pumps /Vfd /Solar Panels /Rms with Structure, shall be onsite warranty for 1 years, The PV Modules must be warranted for output wattage, which should not be less than 80% at the end of 3Years.

Site conditions

Direct sunshine, dust, no corrosive gas, no oil must, steam, dripping or salinity etc.

Provision

Provision for remote monitoring of the installed pumps must be made in the controllers or the inverters either through an integral arrangement or through an externally fitted arrangement. It should be possible to ascertain the daily water output, the power generated by the PV array,

S.no	Details Specifications For 10HP Solar water Pump	Qty
1	Submersible AC motor pump set 10 HP	2nos
2	Accessories cables wires connectors	As required
3.	Solar Pv Panels (10,000/- watts) with complete Structure	2sets
4	Junction Box with Rms	2nos
5.	Solar Inverter	2nos

1. Pv Module

Specifications Pv Module		Compliance yes/No
PV Module 320W		
Positive Power Tolerance Modules.		
Highly Classified A-Grade Solar Cells for Lesser		
Degradation and High Energy.		
Micro Crack Free Panels-100% EL Tested Before and		
After Lamination.		
High Conversion Efficiency based on Leading Innovative Photo Voltaic Technologies.		
PID Free Modules with Long Term Reliability.		
Anti-Reflective Coating Glass Available.		
Advance IP67/IP68 Junction Box for long-term weather endurance.		
RFID Tag Available.		
Sustain Heavy Wind and Snow Loads (2400Pa and 5400Pa).		
Excellent Performance in Low Light.		
Salt Mist, Ammonia, Blowing Sand and Hail Resistant.		
Ideal for Off-Grid as well as On-Grid Applications.		
IP67 rated MC4 Compatible Connectors.		
EVA Encapsulation and Anti Reflection Coating for better Module Protection.		
Certified co	ISO 9001:2015 ISO 14001:2015	
Heavy duty Anodized Aluminum Frames with pre- drilled holes for Quick Installation.		
Manufactured with Premium Quality Input Materials.		
Length x Width x Thickness (LxWxT) – mm	1955x991x35	
Mounting Holes Pitch (Y) - mm	978	
Mounting Holes Pitch (X) – mm	946	
Solar Cells per Module (Units) / Arrangement	72 / (12 x 6)	
Solar Cell Type	Multi Crystalline Silicon	
Front Cover (Material / Thickness)	Tempered & Low Iron Glass / 3.2mm	
Encapsulate	Ethylene Vinyl Acetate	
Frame Material	Anodized Aluminum Alloy	
Junction Box	IP67/IP68 Enclosure with Bypass Diodes	
Modules must qualify to IEC 61730 Part I and II for safety qualification testing.IEC 61215. IEC 61701		

2.10HP Motor

10HP Motor Specification		compliance Yes/No
Stage	16	
Mechanical Watt	8500	
Voltage	380	
Mechanical Watt	2	
Discharge outlet in Inch	2	
Head (in meters)	120	
Discharge in LPM	200	
Shut Off Head	155	
Overall effciency	60	
Outer Dia.	140	
Maximum AMP	17	
Size of cable	1*3*4.0	
RPM	2800	
Impeller	noryl	
Stage casting	noryl	
Pump Jacket	SS	
Pump Bearing Bush	Bronze	
Pump Shaft	Ss410	
Suction Bracket	cast Iron	
Pump Hardware	ss310	
Motor Shaft	Ss410	
Motor Bearing Bush	Ltb 5 Grade	
Thrust bearing	Ss410	
Winding Wire	copper	
Motor Hardware	ss304	

Solar Inverters Technical Details

	Solar inverters reclinical Details	
PV Input		Compliance/ yes or no
		with make Technical
		brochure to Attach
Maximum Input DC Voltage	800VDC	
Recommended Voc Range	500~700VDC	
Recommended MPPT Voltage	450~600VDC	
Range		
Starting Voltage Range	250~800VDC	
Grid or Backup Generator Input		
Input Voltage	Three Phase 380V (-15%~30%)	
Output Specification		
Rated Output voltage	3PH-220V for VSR 23 & 380V for	
Output Frequency	0~600.00Hz (Default 0 50.00Hz)	
Protection		
Built-in Protection	Lighting Protection, over-current,	
	over voltage, output phase-lose,	
	under-load, under voltage, short	
	circuit, overheating, water pump	
	run dry etc.	
General Parameters		
Site conditions	No direct sunshine, no dust,	
	corrosive gas, combustible gas, oil	
	must, steam, dripping or salinity	
	etc.	
Altitude	0~200m (above 1000m, derate the	
	capacity by 1% per 100m)	
Environment Temperature	-10°C~40°C (40°C~50°C with	
	duration)	
Humidity	5~95%, non-condensation	
Vibration	Less than 5.9 m/s2 (0.6g)	
Storage Temperature	-20°C~+70°C	
Efficiency	Rated Power Run <u>></u> 93%	
Installation	Wall or rail mounting	
Protection Grade	IP20	
Cooling	Forced air Cooling	
Communication	Modbus 485	
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