

राष्ट्रीय पादप जीनोम अनुसंधान संस्थान

अरुणा आसफ अली मार्ग, एन.आई.पी.जी.आर. परिसर, नई दिल्ली – 110 067

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फ़ाइल संख्या: एन.आई.पी.जी.आर./इंजीनियरिंग/5/14/2018-19

दिनांक: 18.01.2019

CORRIGENDUM

Name of work: Supply, Installation, Testing & Commissioning of VRF system for Tissue Culture Labs of New Lab Block at NIPGR Campus, New Delhi.

The following additions / amendments are hereby incorporated in the **Tender No. 2019_NIPGR_426430_1** dated 03.01.2019.

- **Date of pre-bid meeting:** 25.01.2019 at 11:30 A.M.
- **Date of sale of tender:** 05.02.2019 at 3:00 P.M.
- **Date of submission of tender:** 06.02.2019 at 3:00 P.M.
- **Date of opening of tender:** 07.02.2019 at 3:00 P.M.
- **The revised Financial Bid / BOQ / General Conditions are enclosed.**

All other conditions shall remain unaltered.

सलाहकार अभियंता



GENERAL CONDITIONS

1. Online tenders are hereby invited from qualified contractors for the work of: **Name of Work: Supply, Installation, Testing & Commissioning of VRF system for Tissue Culture Labs of New Lab Block at NIPGR Campus, New Delhi.**
2. **PRE-BID MEETING:-** All the tenderers who are eligible as per terms & conditions of tender and wish to quote are advised to visit this Institute on 11.01.2019 at 1200 hrs. with all related documents / details pertaining to subject work with detailed specifications of each items with abstract of quantity to satisfy Institute and tenderer themselves with the scope of work and terms & conditions of contract.
3. The tender document consists of Tender form, Notice inviting tender, Instructions to bidders, General Information, General Conditions of contract Agreement, technical specification and Schedule /Bill of quantities etc. which can be had at a cost of ₹ 500.00 (₹ Five hundred only) in cash from 01.01.2019 to 21.01.2019 from the NIPGR office, Aruna Asaf Ali Marg, New Delhi. **Tender documents can also be downloaded from our website www.nipgr.ac.in free of cost.** The tender document is obligatory on the part of the tenderers & bid in no other form will be accepted.
4. The time allowed for the completion of work is 45 **Days** to be reckoned from the 10th day after the date of written order to commence the work.
5. Every tender shall be accompanied by earnest money for ₹ 90,000.00 (₹. Ninety thousand only) in the form of demand draft drawn in favour of the Director, NIPGR ,payable at New Delhi. Any tender not accompanied by such earnest money will be rejected straight away.
6. The contractor will submit his tender after examining the tender documents, scope of work, specifications, clauses, additional terms of contract agreement, special terms & conditions, bill/Schedule of quantities, instructions to bidders, general information, and instruction for on-line bid, etc.
7. The rates shall remain valid for 90 days from the date of opening of Tender. The value of tender can be increased or decreased and any item can be added, deleted, withdrawn or substituted without any notice as per the requirements of without assigning any reason.
8. The validity of accepted rates is extendable for 180 days after issue of work order, with the mutual consent of both the parties.
9. If a tenderer whose tender is accepted fails to undertake the work as per terms of the contract within 10 days to be reckoned from the date of issue of work order, the earnest Money deposited will be forfeited.
10. NIPGR does not bind itself to accept the lowest or any tender and reserves the right to reject any or all tenders without assigning any reason as well as for the transportation of samples.
11. NIPGR will not pay any expense, whatsoever incurred by tenderer for the preparation and submission of tenders.
12. This notice inviting tender, will form part of the contract agreement to be executed by the successful tenderer.
13. The successful tenderer shall have to sign the contract agreement within 15 days of the allotment of work.
14. All the correspondence on the tender shall be addressed to the Director, NIPGR.
15. The uploaded documents / certificates shall be verified with originals after opening of Technical Bid.
16. Payment will be released after deduction of tax at source as per Rule in force.

Consultant Engineer
NIPGR

Seal & Signature of Contractor

92

2

BILL OF QUANTITY						
Name of Work- SITC of VRF SYSTEM FOR Tissue Culture Labs of New Lab Block at NIPGR Campus ,New Delhi						
SI No.	Description	Unit	Qty	Rate (Rs)	Amount (Rs)	MAKE
1	Variable Refrigerant Flow System					
	Supply, Installation, Testing and Commissioning of Modular type VRF Outdoor Units Equipped with Highly Efficient Scroll Compressor with 100 % inverter technology, special heat exchanger, outdoors sB(A) level less than 66 at a distance 1 meter, Centrifugal Fan for condensor, Outdoor Units having front Suction & Top Discharge with Y branch as required					VOLTAS / Bluestar / Daikin / Carrier / Mitsubishi Heavy/ Toshiba
	Outdoor Unit					
	Supply/ Installation/ Testing & Commissioning of Modular type VRF Outdoor units , equipped with Full Inverter Scroll compressor, equipped with Advanced Permanent Magnet DC Motor special acryl precoated heat exchanger, low noise condenser fan, auto check function for connection error, auto address setting, microprocessor panel, Minimum COP 3.7 at 100% Load at 35 Deg C Outside and 27 Deg C inside with capacities as mentioned below :					
A	36 HP (Heating + Cooling) (18 HP X 2 No)	Nos.	1			
B	24 HP (Heating + Cooling) (12 HP X 2 No)	Nos.	1			
2	Indoor Units -4 Way Standard Cassette Type					
	Supply / Installation/ Testing & Commissioningof Indoor units equipped with pre-filter, fan section with low noise fan, multispeed motor, coil section with DX coil, outer cabinet, drain pan, insulation, pipe connections. of various capacities as per specifications and drawings. Capacities should be designed at 19 Deg C WBT Inside Condition.					VOLTAS / Bluestar / Daikin / Mitsubishi Heavy/ Carrier/ Toshiba
a	4 TR	Nos.	15			
3	Supply/ Installation/ Testing & Commissioning of Y-joints for Indoor units	No	13			
4	Refrigerant Piping					
	Supplying & Installation of interconnecting following size of refrigerant copper pipe & required all fitting duly insulated with Elastometric Nitrile rubber insulation as per tender specification between each set of indoor & outdoor units as per specification all piping inside the room shall be properly supported with M.S. Hanger. Exposed pipe should be UV coated					MANDEV/ MAX FLOW
	41.3 mm dia with 19 mm thick insulation	Rmt.	15			
	38.1 mm dia with 19 mm thick insulation	Rmt.	10			
	34.9 mm dia with 19 mm thick insulation	Rmt.	30			
	31.8 mm dia with 19 mm thick insulation	Rmt.	10			
	28.6 mm dia with 19 mm thick insulation	Rmt.	20			
	25.4 mm dia with 19 mm thick insulation	Rmt.	16			
	22.2 mm dia with 19 mm thick insulation	Rmt.	20			
	19.1 mm dia with 13 mm thick insulation	Rmt.	25			
	15.9 mm dia with 13 mm thick insulation	Rmt.	104			
	12.7 mm dia with 13 mm thick insulation	Rmt.	20			
	9.5 mmdia with 13 mm thick insulation	Rmt.	84			
						NOT TO BE FILLED
5	Providing and fixing 1.6 mm thick Galvanised steel sheet factory fabricated covered cable tray of the following sizes including knock out holes with screws and fixing accessories like bends, tees etc.					RICCO / NATIONAL
A	450 mm wide x 75 mm deep	Rmt	30			
B	300 mm wide x 75 mm deep	Rmt.	100			
6	Drain Piping					
	Providing and fixing rigid PVC Piping complete with fittings, supports as per specification and duly insulation with 6 mm thick closed cell nitrile rubber insulation .					PRINCE / SUPREME
A	40 mm dia	Rmt.	70			
B	32 mm dia	Rmt.	50			
7	Transmission ,Control Wiring					
	Supply ,installation ,testing and commissioning of control cum trans-mission wiring of copper between indoor and outdoor unit .					
	(3 core x1.5 Sq mm)	Rmt.	300			
8	HVAC PANELS (for OutdoorUnits)					
	Supply , Design ,Installation , Testing & Commissioning of LT Panel for Outdoor VRV Unit , floor mounted , indoor type cubical panel made out of 16 SWG thick gland CRCA sheet , dust and vermin proof,lockable hinged doors with 16 SWG thick gland plate. Panel will be powder coated of color siemens grey shed. The Panel including providing and fixing the following switchgear as required.	No	1			Seimens/ L& T/ CPRI make
	INCOMER					
	1 nos.160 A TPN MCCB (KA)with solid neutral link (01 no.)					
	METERING &INDICATION					
	Amp Meter (01 No.)					AE / National
	Volt Meter (01 Set)					AE / National
	Phase Indication Light LED type (01 Set)					
	Control MCB 6 Amp .(03 Nos.)					L & T EE ESC
	Current Transformer 400 / 5S (01 Set)					
	BUS -BAR					
	TPN Aluminium busbar 200 Amp with color coded hest shrinkable sleeves.(01 set)					
	OUTGOINGS					
	63 amps MCCB with ELCB (02 nos.)					L & T EE ESC
	40 amps MCCB with ELCB (02 nos.)					L & T EE ESC
	40 amps Single Phase MCB for indoor (02 nos.)					L & T EE ESC

FINANCIAL BID

Name of work: Supply, Installation, Testing & Commissioning of VRF system for Tissue Culture Labs of New Lab Block at NIPGR Campus, New Delhi.

**CLIENT : DIRECTOR NIPGR
NEW DELHI**

REVISED FINANCIAL BID

Name of Work- SITC of VRF SYSTEM FOR Tissue Culture Labs of New Lab Block at NIPGR Campus ,New Delhi						MAKE
SI No.	Description	Unit	Qty	Rate (Rs)	Amount (Rs)	
1	Variable Refrigerant Flow System Supply, Installation, Testing and Commissioning of Modular type VRF Outdoor Units Equipped with Highly Efficient Scroll Compressor with 100 % inverter technology, special heat exchanger, outdoors sB(A) level less than 66 at a distance 1 meter, Centrifugal Fan for condensor, Outdoor Units having front Suction & Top Discharge with Y branch as required					VOLTAS / Bluestar / Daikin / Carrier / Mitsubishi Heavy/ Toshiba
	Outdoor Unit Supply/ Installation/ Testing & Commissioning of Modular type VRF Outdoor units , equipped with Full Inverter Scroll compressor,equipped with Advanced Permanent Magnet DC Motor special acryl precoated heat exchanger, low noise condenser fan, auto check function for connection error, auto address setting, microprocessor panel, Minimum COP 3.7 at 100% Load at 35 Deg C Outside and 27 Deg C inside with capacities as mentioned below :					
A	36 HP (Heating + Cooling) (18 HP X 2 No)	Nos.	1			
B	24 HP (Heating + Cooling) (12 HP X 2 No)	Nos.	1			
2	Indoor Units -4 Way Standard Cassette Type Supply / Installation/ Testing & Commissioningof Indoor units equipped with pre-filter, fan section with low noise fan, multispeed motor, coil section with DX coil, outer cabinet, drain pan, insulation, pipe connections. of various capacities as per specifications and drawings. Capacities should be designed at 19 Deg C WBT Inside Condition.					VOLTAS / Bluestar / Daikin / Mitsubishi Heavy/ Carrier/ Toshiba
a	4 TR	Nos.	15			
3	Supply/ Installation/ Testing & Commissioning of Y-joints for Indoor units	No	13			
4	Refrigerant Piping Supplying & Installation of interconnecting following size of refrigerant copper pipe & required all fitting duly insulated with Elastometric Nitrile rubber insulation as per tender specification between each set of indoor & outdoor units as per specification all piping inside the room shall be properly supported with M.S. Hanger. Exposed pipe should be UV coated					MANDEV/ MAX FLOW
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	38.1 mm dia with 19 mm thick insulation	Rmt.	10			
	34.9 mm dia with 19 mm thick insulation	Rmt.	30			
	31.8 mm dia with 19 mm thick insulation	Rmt.	10			
	28.6 mm dia with 19 mm thick insulation	Rmt.	20			
	25.4 mm dia with 19 mm thick insulation	Rmt.	16			
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5	Providing and fixing 1.6 mm thick Galvanised steel sheet factory fabricated covered cable tray of the following sizes including knock out holes with screws and fixing accessories like bends, tees etc.					RICCO / NATIONAL
A	450 mm wide x 75 mm deep	Rmt	30			
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6	Drain Piping Providing and fixing rigid PVC Piping complete with fittings, supports as per specification and duly insulation with 6 mm thick closed cell nitrile rubber insulation .					PRINCE / SUPREME
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		Rmt.	300			
8	HVAC PANELS (for OutdoorUnits) Supply , Design ,Installation , Testing & Commissioning of LT Panel for Outdoor VRV Unit , floor mounted , indoor type cubical panel made out of 16 SWG thick gland CRCA sheet , dust and vermin proof,lockable hinged doors with 16 SWG thick gland plate. Panel will be powder coated of color siemens grey shed. The Panel including providing and fixing the following switchgear as required. INCOMER 1 nos.160 A TPN MCCB (KA)with solid neutral link (01 no.) METERING &INDICATION Amp Meter (01 No.) Volt Meter (01 Set) Phase Indication Light LED type (01 Set) Control MCB 6 Amp .(03 Nos .) Current Transformer 400 / 5S (01 Set) BUS -BAR TPN Aluminium busbar 200 Amp with color coded hest shrinkable sleeves.(01 set) OUTGOINGS 63 amps MCCB with ELCB (02 nos.) 40 amps MCCB with ELCB (02 nos.) 40 amps Single Phase MCB for indoor (02 nos.)	No	1			Seimens/ L & T/ CPRI make
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