



**प्लाज्मा अनुसंधान संस्थान**  
**INSTITUTE FOR PLASMA RESEARCH**  
**परमाणु ऊर्जा विभाग, भारत सरकार का एक सहायता प्राप्त**  
**संस्थान**  
**An Aided Institute of Department of Atomic Energy,**  
**Government of India**



इन्दिरा पुल के पास, भट, गांधीनगर - 382 428 भारत  
दूरभाष: (079) 2396 2020/2021/2028  
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NEAR INDIRA BRIDGE, BHAT  
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Phone: (079) 2396 2020/2021/2028  
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### ENQUIRY

ENQUIRY NO : IPR/EQL/18-19/365  
Date : 16-01-2019

**Due on : 14-02-2019 by 1:00 PM IST**

Please send your offer in sealed envelope specifying Enquiry No, Date & Due Date, ALONG WITH your credentials for the following items:

**Important Note:**

Please note that e-mail quotations are not acceptable however you may send your queries (if any) to [localpurchase@ipr.res.in](mailto:localpurchase@ipr.res.in)

Please ensure your sealed quotation reaches this office not later than above mentioned due date and time.

Kindly go through the following documents properly before quoting which are available on the IPR web portal i.e., [http://www.ipr.res.in/documents/tender\\_terms.html](http://www.ipr.res.in/documents/tender_terms.html) / attached herewith.

- 1) Instructions to the bidders & Terms and conditions (refer Form No: **IPR-LP-01.V4**)
- 2) Bidding format

**GST for Goods and Services (IGST/CGST/SGST TAX BENEFITS):** Please refer **clause no: 8** of Form No: **IPR-LP-01.V4**

### QUOTATION SHOULD BE ADDRESSED TO PURCHASE OFFICER ONLY

Sr No	Description	Quantity
1	Supply, Installation, Testing and Commissioning of 2 TR High Wall split Air conditioner of 3 Star rating by BEE (As per 2018 rating) with cordless remote. Other details as per attached sheet.	6.0 Nos.
2	Supply and installation of MS mounting stands (floor/ wall mounted) made out from 35 X 35 X 5 mm angle / suitable with required stiffeners and channel support structure. Other details as per attached sheet.	6.0 Nos.
3	Providing and Fixing of PVC rectangular Raceway of 100 mm X 50 mm OR Suitable for lying of refrigerant piping and cabling as and where required with end cap.	15.0 Rmts
4	Supply and fixing of Plywood sheet on MS frame of size as per site, of minimum 19 mm thick for fitting of indoor units with painting by IPR approved shade.	3.0 Sq.Mtrs.
5	Supply and laying of set of soft copper pipe (Liquid and suction) for 2.0 TR (Duly insulated). Other details as per attached sheet.	15.0 Rmts

6	Supply and laying of CPVC/ UPVC rigid pipe of size 15 NB/ suitable I.D (Internal Dia.) for condensate water drain.	15.0 Rmts
7	Supply, Installation, Testing and Commissioning of 3Core X 2.5 mm2 PVC insulated flexible electrical cable.	20.0 Rmts

Note: TDS as per CGST Act: As per provisions of section No. 51 of the CGST Act 2017,  
TDS @2% (IGST 2% or CGST 1% and SGST 1%) will be deducted while making payment to the suppliers where total value of orders/contracts/work orders exceeds Rs. 2.5 lakhs, in the event of order in Indian Rupees.  
Necessary TDS Certificate will be issued to the supplier after TDS deduction

Encl: As per attachment.

Sd/-

Mr. D. Ramesh  
Purchase Officer-II

**Information to Vendors:** We are working towards a single platform for our future requirement. Hence, please refer IPR website i.e,  
<http://www.ipr.res.in/documents/tenderseng.html> for our future requirement.

# INSTITUTE FOR PLASMA RESEARCH

(AN AUTONOMOUS INSTITUTE OF DEPARTMENT OF ATOMIC ENERGY, GOVT. OF INDIA)

BHAT, GANDHINAGAR-382 428, INDIA

**SUPPLY, INSTALLATION, TESTING AND COMMISSIONING  
OF ENERGY EFFICIENT 2.0 TR**

**SPLIT AIR CONDITIONERS FOR COMMITTEE ROOMS AT  
IPR.**

(Please note that the bidder should sign on all pages)

### **1. SCOPE OF WORK:**

The scope includes the supply, installation, testing and commissioning of 06 Nos. of 2.0 TR Split Air conditioners, capable of performing cooling, dehumidifying, air circulating & filtering.

All these 2.0 TR Split Air conditioners need to be installed at **IPR Ground Floor committee rooms, Gandhinagar as per instructions of Engineer-Incharge**. Accordingly, the air conditioners have to be delivered.

The scope also includes the supply & fixing of suitable MS mounting stands (for outdoor units), installation of above units, charging of refrigerant (if required), minor civil works, removing of glasses, laying of refrigerant copper piping in PVC raceway/ flexible PVC spring pipes, plywood pelmet/box with painting, hole sealing with PUF spray/ silicon sealant/ white cement, CPVC/ UPVC drain piping, electrical cabling, remote etc. required to complete the overall commissioning. Inside the building the refrigerant pipe, power cable and drain line will be lay in PVC rectangular raceway and outside the building in flexible PVC spring pipes. **No extra payment will be made for flexible PVC spring pipes. Supply of copper piping, drain piping & electrical cabling up to 05 meters for each split AC unit is in vendor's scope.** Vendor as per need basis will supply plywood for indoor units at the time of installation. For plywood installation vendor has to remove glass and to make 08 nos. of M6 or suitable hole in MS frame and to do painting of plywood with colour recommended by IPR. Accessories required for fixing of plywood in MS frame will be provided by vendor.

### **2. RATES QUOTED BY THE CONTRACTOR SHALL INCLUSIVE OF:**

- i. Cost of labour, materials, tools, tackles, etc
- ii. Cost of unloading, transportation, etc of equipments
- iii. Any other expense required for fulfillment of contractor's obligations as entered elsewhere in this tender.

### **3. SCHEDULE OF QUANTITY:**

*Please refer Annexure for Schedule of Quantity in Quotation format*



#### **4. EQUIPMENT SPECIFICATION:**

##### **A. 2.0 TR Split Air-Conditioner**

			<b>Details</b>	<b>Data to be filled by vendor</b>
i.	Air conditioner type	:	High Wall mounted	
ii.	Make / Model	:	<b>Voltas/ Blue Star/ Samsung/ Carrier/ Hitachi/ DAIKIN/ Mitsubishi/ Toshiba/ O-General/ Lloyd</b>	
iii.	Star Rating	:	<b>3 star as per BEE (As per 2018 rating)</b>	
iv.	Nominal cooling capacity (TR)	:	2.0 TR	
v.	Energy Efficient Ratio (W/W)	:	<b>As per 2018 BEE star rating</b>	
vi.	Power supply	:	230 $\pm$ 10% V, 50 Hz, 1 $\phi$ AC supply	
vii.	Compressor type	:	Rotary/ Scroll	
viii.	Indoor Fan speed (minimum)	:	Min. 3 speed	
ix.	<b>Evaporator / Condenser coil tubing</b>	:	<b>Copper</b>	
x.	Remote control	:	LCD/LED, Cordless type	
xi.	R A Filter	:	Washable Polypropylene / Polyethylene / eqvt.	
xii.	Outdoor unit mounting stand	:	MS painted with IPR approved Shade	
xiii.	Warranty	:	One year from the date of successful commissioning	

#### **5. STANDARD OF WORKMANSHIP & MATERIAL USED:**

The contractor shall be required to execute the work in accordance with the standards of specifications for the workmanship and materials as per the relevant Indian Standards. The entire work shall be free from poor and faulty workmanship and the contractor shall be liable to rectify all faults and defects, if occurred and noticed within one year (Defect liability period) from the date of commissioning.

#### **6. TIME PERIOD:**

You are requested to commence the work immediately and complete the same in all respects within **10 weeks** from the date of receipt of the work order.

**7. PAYMENT:**

70% payment (For items sr. no. 1, Supply portion only as in SOQ) will be paid against delivery and balance 30% with 100% of remaining items will be paid within 30 days from the date of final acceptance.

**8. LIABILITY FOR DAMAGES:**

The contractor shall be responsible for making good at his cost to the satisfaction of the institute. The contractor shall be fully responsible for any loss of and any damage to any structures or properties to the institute.

**9. TESTING & ACCEPTANCE:**

Following tests / readings shall be taken for the performance acceptance at operating conditions:

1. Grill temperature
2. Room temperature
3. Amp.

Acceptance is subjected to satisfactory installation (physical inspection), commissioning (free from noise and vibration) and performance testing with respect to our specifications, particularly inside design conditions and technical data provided by the supplier.

Instructions, Operation, Service & Installation manuals need to be supplied along with the units.

**10. SAFETY CODE:**

The contractor shall take all necessary precautions to safety of labourers deployed for the said work and arrange to provide prompt medical assistance, if required. The institute is not in any case responsible for any type of accident during the execution of works and it will be the total responsibility of the contractor.

**11. FREE ISSUE MATERIALS:**

Institute may provide temporary power for drilling, cutting, grinding etc. The cables, electrical fixtures, etc shall be arranged by the contractor. For any mishap due to the negligence, the contractor shall be held responsible and liable.

**12. EQUIPMENT & MACHINERY ON WORK AT SITE:**

Required materials, equipments, tools and tackles as well as testing and measuring instruments shall be made available by the contractor, as and when required.



**SCHEDULE OF QUANTITY**  
(To be filled in by Bidder and returned to IPR)

**Note:**

- 1 Quoted price should be in INDIAN RUPEES.
- 2 The Payment of Copper & drain piping, electrical cable and PVC raceway will be as per actual measurement.
- 3 One RMT of copper pipe indicates 1 m each of suction & liquid lines.

Item No.	Description	Qty	Unit	Supply			Installation and Testing		
				Unit rate Rs.	Amount Rs.	GST %	Unit rate Rs.	Amount Rs.	GST %
1	<p><b>2 TR split Air conditioner – 3 Star (As per 2018 rating)</b></p> <p>Supply, Installation, Testing and Commissioning of <b>2 TR High Wall split Air conditioner – 3 Star rating by BEE (As per 2018 rating)</b> with cordless remote.</p> <p>Scope includes mounting of indoor &amp; outdoor units at the respective locations, laying of refrigerant / drain piping, leak testing, gas charging, electrical cabling, glass removal, making suitable hole in MS frame to fix the plywood for IDU etc. The scope also includes minor civil works like making of one drilled hole in the wall, floor, ground etc. and grouting for Indoor and outdoor units, sand cement plastering, finishing, painting, etc. The holes should be sealed with PUF spray and silicon sealant or white cement for making leak proof. The exposed Refrigerant pipes should be run in suitable flexible PVC spring pipe. No extra payment for flexible PVC spring pipes.</p> <p><b>IMP Note: This also includes the cost of Copper tubes set, drain pipe and power cable up to 5 meters length each.</b></p>	6	Nos.						
2	Supply and installation of MS mounting stands (floor/wall mounted) made out from 35 X 35 X 5 mm angle / suitable with required stiffeners and channel support structure. Primer and painting must be applied on it for	6	Nos.						

	weather protection.								
<b>3</b>	Providing and Fixing of PVC rectangular Raceway of 100 mm X 50 mm OR Suitable for lying of refrigerant piping and cabling as and where required with end cap.	15	RMT						
<b>4</b>	Supply and fixing of Plywood sheet on MS frame of size as per site, of minimum 19 mm thick for fitting of indoor units with painting by IPR approved shade.	3	Sq mtr.						
<b>Charges for the following additional (in excess of 5 meters) items.</b>									
<b>5</b>	Supply and laying of set of soft copper pipe (Liquid and suction) for 2.0 TR (Duly insulated)	15	RMT						
<b>6</b>	Supply and laying of CPVC/ UPVC rigid pipe of size 15 NB/ suitable I.D (Internal Dia.) for condensate water drain.	15	RMT						
<b>7</b>	Supply, Installation, Testing and Commissioning of 3Core X 2.5 mm <sup>2</sup> PVC insulated flexible electrical cable.	20	RMT						
<b>→</b>	<b>Total</b>								

	<u>Indicate percentage except Freight</u>			
	Percentage	Amount	Included	Excluded
Packing and forwarding				
GST on Supply (Rs.)				
GST on Installation and testing (Rs.)				
Insurance				
Freight	Rs.			



❖ Grand total including all taxes: - Rs.....

Total in words.....

Important Note:

- IPR reserves the right to add / delete any or all of the items mentioned in SOQ.
- Understand all the specifications, terms and conditions of this tender thoroughly, visit the site and contact the purchase officer for any clarification if necessary.
- *Deviations if any shall be clearly specified on separate sheet with all details.*
- The bidder should sign all pages in token of acceptance of the terms and condition and return the same to us.

Date:  
Place:

Name & signature of Bidder  
(Office Seal)