



# भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली

मानव संसाधन विकास मंत्रालय, भारत सरकार द्वारा स्थापित

सैक्टर-81, नॉलेज सिटी, प० ओ० मनोली, एस० ए० एस० नगर, मोहाली, पंजाब 140306

**INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI**

(Established by Ministry of Human Resource Development, Govt. of India)

Sector-81, Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

PAN No. - AAAAI1781K GSTIN No:- 03AAAAI1781K2ZS

• Phone : +91-172-2240086 & 2240121 • Fax : +91-172-2240124, 2240266 • <http://www.iisermohali.ac.in> • Email: [stores@iisermohali.ac.in](mailto:stores@iisermohali.ac.in)

CPPP/Institute Website

IISERM (1368)20/21-Pur

Dated: 12<sup>th</sup> May, 2020

## **NOTICE INVITING E-TENDER**

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** for the **Supply & installation of Smart 6000 VA UPS** as per technical specification and details given below and BOQ list from the original manufacturer/supplier at CPPP i. e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website [www.iisermohali.ac.in](http://www.iisermohali.ac.in).

-sd-

(Mukesh Kumar)  
Assistant Registrar (P&S)



भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली  
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## **E-TENDER NOTICE**

Tender Ref.- IISERM(1368)20/21-Pur	Dated :- 12 <sup>th</sup> May, 2020
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### **Critical Date Sections**

Sr.	Description	Date	Time
1.	Tender Publishing Date and time	12 <sup>th</sup> May, 2020	6:00pm
2.	Tender Document download start Date & Time	12 <sup>th</sup> May, 2020	6:00pm
3.	Bid Submission start Date & Time	12 <sup>th</sup> May, 2020	6:00pm
4.	Bid Submission End date and Time	11 <sup>th</sup> June 2020	Upto 11:00am
5.	Tender opening Date and Time	12 <sup>th</sup> June 2020	At 11:30am

Online tenders are invited on behalf of Director, IISER Mohali in **TWO BID SYSTEM** {Technical and commercial separately} for the following item(s) from the original manufacturer/supplier at CPPP i.e. <https://eprocure.gov.in/eprocure/app>. Tender documents may please be downloaded from the E-procurement portal website <https://eprocure.gov.in/eprocure/app> & Institute website [www.iisermohali.ac.in](http://www.iisermohali.ac.in). Tender fee in shape of DD/Banker Cheque of Rs 590/- (Non-refundable) and **EMD of Rs.2500/-** should be submitted by DD /Banker Cheque/FDR/ Bank Guarantee in favour of the Registrar, IISER Mohali payable at Mohali. However, scanned copy of the both tender fee and EMD should be upload on website along with technical bid part. The hard copy of the same in original to be send to the address mentioned below duly superscribing the supply/work name and reference/ tender ID on the envelope and same must reach before opening the bid and if not received within due date the bid will be rejected summerly.

### **The Original EMD and Tender Fee should be sent to:**

Assistant Registrar (P&S)  
Indian Institute of Science Education and Research Mohali  
Sector-81, Knowledge City, SAS Nagar, Mohali, Punjab,  
India, Pin: 140306

**Non-receipt of original EMD and Tender Fee will lead to rejection of tender.**

**Item Details: -**

Sr.	Description	Qty. (in units)																																																																
1.	<p><b>Supply and installation of Smart UPS RC 6000VA/5400W</b></p> <p>VRLA Battery 12V, 26Ah (16), Approx 25 to 30 min backup:4992 VAH/ Battery cabinet along with interlinks &amp; fuse (1), Changeover switch (1),</p> <p><b><u>Make: APC/Panasonic/Merlin gerlin/Socomec/VERTIVE or Equivalent</u></b></p> <p><b><u>Technical Specifications:</u></b></p> <table border="1" data-bbox="279 504 1337 2096"> <thead> <tr> <th data-bbox="284 510 603 566">A) <u>UPS PARAMETER</u></th> <th data-bbox="603 510 1332 566"><u>REQUIRED SPECIFICATION</u></th> </tr> </thead> <tbody> <tr><td>1. Topology</td><td>True Online Double Conversion Power Recreation</td></tr> <tr><td>2. Rectifier Design</td><td>Fully Controlled</td></tr> <tr><td>3. Charger Design</td><td>Dual-Step (Float/ Boost), Low Ripple CVCC Battery Charging</td></tr> <tr><td>4. Inverter Design</td><td>Advanced Sine-weighted High Frequency PWM using IGBT with Instantaneous Sine-wave Control</td></tr> <tr><td>5. Duty</td><td>Continuous Operation.</td></tr> <tr><td>6. Paralleling Capability</td><td>Required</td></tr> <tr><td>7. Rack &amp; Tower Convertibility</td><td>Required</td></tr> <tr><td>8. AC-AC Efficiency</td><td>Better than 93% in Double-Conversion Mode <u>Better than 98% in Eco-Mode</u></td></tr> <tr><td>9. Battery Charger Capacity</td><td>Minimum 1200 Watts without Output Capacity derating</td></tr> <tr><td>10. Communications</td><td>Required USB, RS232 and Smart-Slot</td></tr> <tr><td>11. Battery Temperature Sensor Based Charger Compensation</td><td>Required</td></tr> <tr><td>12. Emergency Power Off Interface</td><td>Required</td></tr> <tr><td>13. Local Monitoring</td><td>Digital Display with UPS Parameter Monitoring such as Input, Output, Load, Alarms, Status required</td></tr> <tr><td>14. Event Logger</td><td>Required accessible through Display and through Communication Ports</td></tr> <tr><td colspan="2"><b><u>B) INPUT</u></b></td></tr> <tr><td>1. Voltage Range</td><td>170 to 270 V, Single Phase</td></tr> <tr><td>2. Frequency Range</td><td>45 to 55 Hz</td></tr> <tr><td>3. Input Power Factor</td><td>Better than 0.97</td></tr> <tr><td colspan="2"><b><u>C) OUTPUT</u></b></td></tr> <tr><td>1. Power Rating</td><td>6 KVA, 230 V, 1 Phase</td></tr> <tr><td>2. Output Current</td><td>Output Current per Phase @ 230 V AC = 26 A Continuous</td></tr> <tr><td>3. Voltage Regulation</td><td>+ 1%</td></tr> <tr><td>4. Efficiency</td><td>Better than 93% in Double-Conversion Mode <u>Better than 98% in Eco-Mode</u></td></tr> <tr><td>5. Waveform</td><td>Sine Wave</td></tr> <tr><td>6. Harmonic Distortion</td><td>Less than 3% on linear load</td></tr> <tr><td>7. Power Factor</td><td>Unity to 0.7 lag within specified power ratings</td></tr> <tr><td>8. Load Crest Factor</td><td>3:1 without derating</td></tr> <tr><td>9. Overload Rating</td><td>125% for 1 minutes 150% for 10 seconds The UPS should not trip in case of Start-up of Workstations</td></tr> <tr><td colspan="2"><b><u>D) INTERNAL AUTOMATIC BYPASS</u></b></td></tr> <tr><td>1. Static Bypass</td><td>Required</td></tr> <tr><td>2. Separate / Split</td><td>Required</td></tr> </tbody> </table>	A) <u>UPS PARAMETER</u>	<u>REQUIRED SPECIFICATION</u>	1. Topology	True Online Double Conversion Power Recreation	2. Rectifier Design	Fully Controlled	3. Charger Design	Dual-Step (Float/ Boost), Low Ripple CVCC Battery Charging	4. Inverter Design	Advanced Sine-weighted High Frequency PWM using IGBT with Instantaneous Sine-wave Control	5. Duty	Continuous Operation.	6. Paralleling Capability	Required	7. Rack & Tower Convertibility	Required	8. AC-AC Efficiency	Better than 93% in Double-Conversion Mode <u>Better than 98% in Eco-Mode</u>	9. Battery Charger Capacity	Minimum 1200 Watts without Output Capacity derating	10. Communications	Required USB, RS232 and Smart-Slot	11. Battery Temperature Sensor Based Charger Compensation	Required	12. Emergency Power Off Interface	Required	13. Local Monitoring	Digital Display with UPS Parameter Monitoring such as Input, Output, Load, Alarms, Status required	14. Event Logger	Required accessible through Display and through Communication Ports	<b><u>B) INPUT</u></b>		1. Voltage Range	170 to 270 V, Single Phase	2. Frequency Range	45 to 55 Hz	3. Input Power Factor	Better than 0.97	<b><u>C) OUTPUT</u></b>		1. Power Rating	6 KVA, 230 V, 1 Phase	2. Output Current	Output Current per Phase @ 230 V AC = 26 A Continuous	3. Voltage Regulation	+ 1%	4. Efficiency	Better than 93% in Double-Conversion Mode <u>Better than 98% in Eco-Mode</u>	5. Waveform	Sine Wave	6. Harmonic Distortion	Less than 3% on linear load	7. Power Factor	Unity to 0.7 lag within specified power ratings	8. Load Crest Factor	3:1 without derating	9. Overload Rating	125% for 1 minutes 150% for 10 seconds The UPS should not trip in case of Start-up of Workstations	<b><u>D) INTERNAL AUTOMATIC BYPASS</u></b>		1. Static Bypass	Required	2. Separate / Split	Required	01
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Bypass		
3. Hot-standby Option	Required	
4. Maintenance Bypass	Required	
<b>E) <u>EXTERNAL MAINTENANCE BYPASS</u></b>		
1. External Manual Bypass	Required	
2. Rating of Maintenance Bypass	40 A, 2 Pole	
<b>F) <u>BATTERY</u></b>		
1. Type	Sealed Lead Acid Maintenance Free	
2. Back-up Time	30 Minutes on full load. Battery Required : For 6 KVA Load : 4800 VAh Minimum	
3. Battery Housing / Cabinet	For Safety of the user, either the batteries should be built-in OR external Powder-coated battery cabinet with castor-wheels should be supplied.	
4. Battery Cabinet Protection	IP10	
5. Battery Cabinet Wheels / Castors	Heavy Duty Industrial Castors to be provided to carry weight of Batteries as well as UPS	
6. Cabinet Castor Lock ability	Required	
7. Cabinet Cable Entry Protection	Proper Sized Cable Gland to be provided	
8. Cabinet Ventilation	Suitable Louvers to be Provided	
9. Cabinet Painting	Textured Powder Coating	
10. Cabinet Color	Black	
<b>G) <u>BATTERY Interconnectors &amp; Protection</u></b>		
1. Type	Uninyvin Type Professionally Sleeved with Lugs	
2. Battery Path Fuse	Required with Insulated Base and Holder	
3. Fuse Rating	40A	
4. Cable Rating	60 A	
<b>H) <u>PROTECTIONS</u></b>		
1. Input Over Current	Input Under/ Over Voltage	Output Under/ Over Voltage
2. Over Temperature	Battery Under/ Over Voltage	Output Overload & Short Circuit
<b>I) <u>ENVIRONMENTAL</u></b>		
1. Operating Temperature	0 to 40 deg C (50 deg C Peak)	
2. Relative Humidity	Upto 95% Non-condensing	
3. Audible Noise	< 55 dB at 1 metre	
4. Ingress Protection	IP21	
5. Cooling	Forced Air Cooling	
<b>J) <u>WARRANTY</u></b>		
1. For UPS	24+36 months	
2. For Battery	24+36 months including replacement	

**A) IMPORTANT NOTES:-**

- I. The online updated Price BOQ is in INR format. If bidder want to quote other than INR please specify the quoted currency in the technical bid/part and fill the amount in same updated BOQ.**
  
- II. The Online bids should be submitted directly by the original manufacturer/Service Provider,**

**If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company.**

**III. All MSME/NSIC/Startup Units shall be considered as per provisions/rules prescribed by Govt of India.**

**IV. Kindly do not quote end of life model.**

**B) SUBMISSION OF TENDER**

- I. All bid/ tender documents are to be uploaded online at Central Public Procurement portal i.e. <https://eprocure.gov.in/eprocure/app> only and in the designated cover/ part on the website against tender ID. Tenders/ bids shall be accepted only through online mode and no manual submission of the same shall be entertained except tender fee and EMD. Late tenders will not be accepted.
- II. The online bids shall be opened at the office of the Assistant Registrar (P&S), IISER Mohali, on above given date and time. If the tender opening date happens to be on a holiday or non-working day due to any other valid reason, the tender opening process will be attended on the next working day at same time and place. IISER Mohali will not be responsible for any error like missing of schedule data while downloading by the Bidder.
- III. The bidder shall upload the tender documents duly filled in and stamped by the authorized signatory on each and every page. Tender not submitted/uploaded in the prescribed form and as per the tender terms and conditions shall be liable for rejection.
- IV. The bidder shall upload scanned copy of the PAN Card, GST number duly signed and stamped. **Also bidders applying against ‘MSME/NSIC Certificate’ issued by appropriate Authority, should ensure that the certificate attached is relevant to the area of service/supply. For example, If the tender is for “supply & installation of Desktop” the certificate should be issued for activity/area of “Computer supply and services activities etc” otherwise bid will be REJECTED without notice.**
- V. E-procurement system ensures locking on the scheduled date and time. The system will not accept any bid after the scheduled date and time of submission of bid.

**C) INSTRUCTIONS**

1. The Online bids should be submitted directly by the original manufacturer/supplier, If quotation is submitted/filled by any representative/agent/dealer then they must upload a authority certificate from the principal company for quoting the price otherwise such quotation will be rejected.
2. The quantity mentioned in this inquiry is and shall be deemed to be only approximate and will not in any manner be binding on the Institute. Before the deadline for submission of the online bid, IISER Mohali reserves the right to modify the tender document terms and conditions. Such amendment/modification will be notified on website against said tender ID.
3. The rates offered should be FOR Chandigarh/Mohali in case of firms situated outside Chandigarh/Mohali, and free delivery at the Institute premises in case of local firms. Supplier from outside India should mention the Ex-works/FOB/FCA/CIF/CIP price clearly. Conditional tenders will be summarily rejected.
4. In case of Ex-godown terms the amount of packaging forwarding freight etc. should clearly be indicated by percentage or lump sum amount. Institute has policy not to make any advance payments towards any purchase, Letter of credit can be opened if required.
5. THE INSTITUTE IS EXEMPTED FROM CUSTOM DUTY under notification no- TU/V/RG/-CDE(1062)/201 CUSTOM DT.12.10.2018.
6. Tax: This Institute is not exempted from the payment of GST. The current rate (i.e. percentage of

GST should be clearly indicated (included or excluded) wherever chargeable. Please also provide/upload the copy of PAN card, GST number duly self-attested.

7. Concessional GST is applicable for all the items purchased for Research labs vide Ministry of Finance, notification no. 45/22017 dated 14.11.2017 and 47/2017 dated 14.11.2017.
8. Bidder/s quoting in currency other than **Indian Rupee (INR)** should explicitly mention the currency in which tender quoted wherever applicable in Technical Bid along the tender documents.
9. The delivery period should be specifically stated. Earlier delivery will be preferred.
10. The firms are requested to provide/upload detailed description and specifications together with the detailed drawings, printed leaflets and literature of the article quoted. The name of the manufacturer and country of manufacture should also invariably be stated. In the absence of these particulars, the quotation is liable for rejection.
11. Validity of offer: 90 days. The warranty period after satisfactory installation should be mentioned and firm should replace all manufacturing defect parts/ whole item under warranty without any extra cost including clearance, freight, taxes. Security deposit/ Bank Performance Guarantee @ 10 % of the value of supply order as per norms may be sought from the firms.
12. The right to reject all or any of the quotation and to split up the requirements or relax any or all the above conditions without assigning any reason is reserved by the IISER Mohali. For any corrigendum and addendum please be checked the website <https://eprocure.gov.in/eprocure/app> and <http://www.iisermohali.ac.in>
13. Disputes, if any, shall be subject to jurisdiction in the court of Mohali only.

-sd-  
(Mukesh Kumar)  
Assistant Registrar (P&S)