

**OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY
DIBRUGARH :: ASSAM
PIN: 786 004**



BID DOCUMENT

FOR

**NAME OF THE WORK: Supply installation and commissioning of Workstation and
Online UPS under DST SERB**

e-TENDER No: DU/DST-SERB & DU/DERB-SURE/01 dated: 13/06/2024

CUT-OUT SLIP

Technical Bid

NAME OF THE WORK: Supply installation and commissioning of Workstation and Online UPS under DST SERB

e-TENDER No: DU/DST-SERB & DU/DERB-SURE/01 **dated:** 13/06/2024

SUBMISSION DUE DATE & TIME : 15/07/2024 up-to 05.30 P.M.

FROM:

TO:

NAME & ADDRESS:

THE REGISTRAR
DIBRUGARH UNIVERSITY
DIBRUGARH, ASSAM

(To be pasted on the envelope containing hardcopy of “Technical Bid”)



OFFICE OF THE REGISTRAR :: DIBRUGARH UNIVERSITY :: DIBRUGARH

e-Tender No. DU/DST-SERB & DU/DERB-SURE/01

Date: 13/06/2024

e-Tender Notice

Open tenders are invited through e-tendering process from Manufacturers of nationally / internationally reputed brand or its authorized dealer / distributor for **Supply installation and commissioning of Workstation and Online UPS under DST SERB**. For details, please visit the website [https:// assamtenders.gov.in](https://assamtenders.gov.in).

Detailed specification of the items, terms & conditions *etc.* are given as Annexure at Part-B. Last date of submission of Tender as per annexure at Part-B with all relevant papers is **15/07/2024 up-to 05:30 PM** to be submitted at the office of the Registrar, Dibrugarh University, Dibrugarh, Assam.

Availability of Bid papers	From 18/06/2024	
Last date for receipt of Bid	15/07/2024 upto 5:30 P.M.	
Time & Date of opening of Bid	16/07/2024 at 02:30 P.M.	
Place of opening of Bid	Office of the Registrar, DU	
Cost of Tender Document	Rs. 1000/-(Non-refundable)	To be paid online at assamtenders.gov.in
EMD	Rs. 40,000/-	

The tender should be separately submitted in 02 (two) parts, *i.e.*, **Part - I TECHNICAL BID** and **Part – II FINANCIAL BID**. The technical bid shall be opened on the above-mentioned date and time and the financial bid of only those bidders who qualify in technical bid shall be opened on the same date or at a later date which shall be intimated to the tenderer whose technical bids are found to be valid. Dibrugarh University reserves all the rights to reject any or all the tenders without assigning any reason thereof.

The Bidder shall submit both technical and financial bids on-line at assamtenders.gov.in portal. One hard copy of technical bid along with supporting documents and clearly marked as **“HARD COPY of Technical bid”** shall have to be submitted at the office of the Registrar, D.U. **Hard copy of Financial Bid or Cost of Tender Document/EMD as Draft/Cheque etc, will not be sent to Dibrugarh University under any circumstance.** In the event of discrepancy between online & manual technical bid, sending of hard copy of financial bid or sending of Cost of Tender Document/EMD as Draft/Cheque etc the bid will be disqualified.

Sd/-
Registrar
Dibrugarh University

Copy to:

1. The Chairperson, Tender Opening Committee, D.U., for information.
2. The Deputy Registrar (F&A) i/c, D.U. for information.
3. The Programmer, D.U., with a request to upload the e-Tender Notice at D.U. website.
4. Office File

Sd/-
Registrar
Dibrugarh University

PART A - TERMS AND CONDITIONS

A1. General Information

The tender bids duly complete in all respects, along with the necessary documents should be submitted to the Registrar, Dibrugarh University. The Technical Bids so received shall be opened on **16/07/2024 at 02:30 P.M.** in the Office of the Registrar, Dibrugarh University in the presence of the representatives of the bidders. The Financial bids of the Tenderers shall be opened on the same date or at a later date to be intimated to the tenderers whose Technical Bids are found to be valid. Right to reject any or all Tenders, without assigning any reason thereof is reserved by Dibrugarh University.

A2. Terms and Conditions of Supply:

1. All the manufacturers/ authorized dealers should also give a brief profile about their company and the facilities available with them of the quoted items. Their turnover and important firms/ Government Institutes/ P.S.U.s *etc.* to which they are supplying quoted items, should also be mentioned.
2. The last date and time for the submission of the bids is 15/07/2024 up-to 5:30 P.M and the bids shall be valid for 180 days.
3. Technical specifications of the instruments/equipments are given in **Annexure-I** to these papers (Part B) and the required quantities are listed in **Annexure-II**.
4. Supplier should read carefully and understand all the instructions and terms and conditions, *etc.* before participating in the bid.
5. Suppliers shall mandatorily submit the following documents in their '**Technical Bid**':
 - i) **A Brief Profile of the Company/Firm** along with their addresses and contact details of a responsible representative for any query/correspondence.
 - ii) A duly filled and signed **Check-List** as shown in **Annexure-III**
 - iii) VAT/TIN/GST Registration Certificate.
 - iv) PAN Card
 - v) Proof of submission of Tender Fee/EMD at assamtenders.gov.in or Documentary proof justifying its exemption (e.g., MSME/NSIC/SSI/*etc.*).
 - vi) **Detailed Technical Specifications** of each item/service/work offered by the Supplier. The document should be duly superscribed as "**Offered Technical Specifications**" and presented in the format as suggested in **Annexure-IV**
 - vii) Technical compliance sheet in a tabular format as shown in **Annexure-V** and duly superscribed as "**Technical Compliance Sheet.**"
 - viii) **Technical Literature** regarding the offered products including Brochures/Datasheets/ Pictures/Sketch/Diagrams *etc* with a cover page duly superscribed as "**Technical Literature**".
 - ix) Valid Authorization from Original Equipment Manufacturer (OEM) or Declaration in case OEM itself is the bidder.
 - x) All valid documentary proof of eligibility as per '**Bidders Eligibility Criteria**' mentioned in this Tender Document.
6. **Please read carefully** that the Supplier shall submit their '**Financial Bid**' **ONLINE ONLY** in the BoQ format uploaded to the assamtenders.gov.in portal against this particular tender. They **SHOULD NOT** send the hardcopy of price bid to the University under any circumstance. Defying this clause will lead to **DISQUALIFICATION** of their bid. In the Commercial Bid rates should be mentioned as per BoQ. Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable. Bidders are required to download the BoQ file, open it and complete the unprotected cells with their respective financial quotes, GST as applicable (total GST per item to be inserted in BoQ) and other details (such as name of the bidder). No other cells should be changed. Once the details have been completed, the bidder should save it and submit it online, without

changing the file name. If the BoQ file is found to be illicitly modified by the bidder, the bid will be rejected.

7. The Technical Bid shall be opened, on 16/07/2024 at 02:30 P.M. or on the next working day if the offices of the University remain closed due to any reason.
8. Financial bids of bidders who qualify in the Technical Bid evaluation will be open on the same date or at a later date to be intimated to the bidders. Lowest bidder will be selected on basis of total cost of the work and not item-wise comparison.
9. The bidder selected for award of work order shall have to submit a **Performance Bank Guarantee (PBG)** of the value of 5% of the work order value **within 14 days** of issue of work order. **The PBG shall be valid for a period of 1 year.**
10. The delivery and installation should be completed within 3 month or as specified from placing of the order. No extension shall be granted to the contractors/suppliers for the period of delivery, under any circumstances.
11. If the supplier fails to deliver the article as per the delivery schedule, the University shall be free to procure the balance/undelivered supply, at the risk and cost of the supplier, from other such suppliers.
12. The goods, articles, materials supplied by the supplier shall be accepted after inspection by an officer authorized by the competent authority. No articles/materials which do not conform to the specifications laid down in the terms and conditions or damaged in transit shall be accepted.
13. The bills of the suppliers shall be paid by the University after all the materials/articles/equipments have been received and installed, tested and commissioned along with proper documentation.
14. Vendor must provide an undertaking that any service request will be addressed within three working days. Any delay beyond three days must be compensated by extending the warranty period with equivalent number of days.
15. The tendering firm must provide proof of documents for executing similar works earlier.
16. In the event of any breach of the terms and conditions of the supply, the University may terminate the contract placed with the supplier and forfeit the security deposit of the supplier.
17. Authorization from the respective Original Equipment Manufacturer (OEM) for the quoted products to be provided mentioning the tender enquiry no. and date.
18. Copy of product literature and catalogue, testing report, BEE rating, ISO etc. to be provided.
19. The quantity as mentioned at Part-B (Annexure-II) may be increased or decreased at the time of placing Order as per requirement.
20. Tenderers are advised to study all technical and commercial aspects, instructions, forms, terms and specifications carefully in the tender document. Failure to furnish all information required in the Tender Document or submission of a bid not substantially responsive to the Tender document in every respect will be at the tenderer's risk and may result in the rejection of the bid.
21. This tender document is not transferable.
22. **Participation in the tender process implies that the bidder has read and understood this bid document and that the bidder will abide by the rules and regulations of Dibrugarh University.**

A3. Bidder's Eligibility Criteria:

- 1) The Bidder should be in IT Business in Assam for the last 7 Years. The firm also must have a permanent Registered or Branch office in Assam for the last 7 years.(Relevant valid Govt. documentary evidence like trade license, GST certificate etc. from respective Govt. agency should be submitted). **Delegation or Representation by any third-party firm other than the bidder itself shall not be considered for fulfilling this criterion.**
- 2) Bidders should have net positive worth and an average Turnover of min. 65 Lakh in the last three financial years. Documentary evidence in this regard should be enclosed along with Technical Bid.
- 3) The Bidder should have valid ISO/IEC 27001 and ISO 9001 Certificate. Copy of ISO certificates wherein their certificate number is clearly visible/legible must be enclosed along with the technical bid.

- 4) The Bidder shall submit at least **3** number of order copy for **Supply installation and commissioning of Workstation/Server** from any Central Govt. Organization / Institutes of National Importance / Universities / State Govt. organization / Educational Institutes recognized by UGC/AICTE/etc or PSUs in last four years.
- 5) The Bidder & OEM should not have been blacklisted in anywhere in India or abroad. A self – declaration letter by the Bidder, on the bidders letter head should be submitted along with technical bid

Note:

- a) Tenderers are advised to read carefully the Terms and Conditions of supply before recording the rates in this Schedule.
- b) No erasures or overwriting shall be allowed, unless they are authenticated under the full signature and the seal of the tenderer.
- c) The University reserves the right to:
 - I. Accept/reject any/all tenders without assigning any reason thereof.
 - II. Revise the quantities at the time of placing the order without change in the rate quoted by the bidder.
 - III. Add/modify/relax or waive any of the conditions stipulated in the tender document whenever deemed necessary to ensure greater competition.
 - IV. Award the contract to one or more tenderers for the items covered by the tender.
 - V. Reject any work done by the supplier if found to be of low quality/not conforming to industry standard practices and norms or any other justifiable reason.

Appellate Authority:

First Appellate Authority	Second Appellate Authority
The Registrar Dibrugarh University Dibrugarh-786004, Assam Phone No. 0373- 2370231	Smt. Laya Madduri, IAS, Secretary to the Govt. of Assam, Finance Department Address: 2 nd Floor, F-Block, Finance Department, Janata Bhawan, Dispur, Assam-06 Phone no 0361-2237455

Technical Specification**1. High End GPU workstation**

SI No	Parameter	Minimum required specification
	Make & Model	
1	Form factor	Tower
2	Processor	2 x Intel Xeon Gold- 16 core processor (Base frequency should not be less than 2.0 Ghz, cache memory should not be less than 30MB and minimum speed should be 4400 MT/S)
3	Chipset	Intel C741 chipset or higher
4	RAM	128GB (4x32GB) DDR5 4800 DIMM ECC REG 2CPU Memory, workstation should have minimum 16 DIMM slots and system should support up to 1TB in future.
5	Hard Disk	3 x 1 TB 7200 RPM ENT SATA 3.5 inch
6	Solid State Drive	512GB PCIe-4x4 2280 SED OPAL M.2 SSD
7	Optical Drive	9.5mm DVD-Writer
8	Drive	External: 2 x 5.25" HDD Bay & 1x SLIM ODD BAY Internal: 4 x 3.5" HDD Bay
9	Security Management	System should have Secure Erase, Biosphere, Sure Run, Sure Click, Sure Start and Sure Recover.
10	Graphics Card	2 x NVIDIA RTX A6000 48 GB Graphics card
11	Networking	Intel AX210 Wi-Fi6E non-vPro+BT 5.2 with External Antennae WLAN
12	Slots	Minimum requirement: 1 xPCIe x16 Gen5 2 x PCIe x16 Gen4 1 x PCIe x16 Gen3 1 x PCIe x8 Gen3 2 x PCIe x4 Gen3 Dedicated for M.2 SSD's - 2 x PCIe x8 Gen4 for PCIe over M.2 HDD's up to 4 nos of M.2 SSD's
13	Ports	Front: 4 Super Speed USB Type-A 5Gbps signaling rate; 1 headphone/microphone combo Rear: 6 Super Speed USB Type-A 5Gbps signaling rate; 1 audio-in/out; 2 x 1G, 2 x 10GbE
14	Keyboard and Mouse	OEM USB 320K Keyboard and 120/320M wired mouse (Same make as workstation). No print/No sticker will be allowed.
15	Audio	High Definition Integrated Audio with Internal speaker.
16	Monitor	27 inch-inch monitor (Same make as workstation), with resolution of 1920 x 1080 (FHD).

17	Power Supply	<p>Minimum 1700W Full Height EPA90 200V/10A 15x12V Power Supply.</p> <p>(i) Typical efficiency on 50% load should be 93.40% (Delta efficiency report should be enclosed)</p> <p>(ii) Average efficiency should be minimum 91% (Delta Efficiency report should be enclosed with the technical bid)</p> <p>(iii) 80 Plus Gold compliant required (Valid Document should be enclosed)</p>
18	Certification	<p>(i) TPM 2.0 Embedded Security Chip (Common Criteria EAL4+ Certified), Same must be mention in the technical guide of the model.</p> <p>(ii) System should be ENERGY STAR certified</p> <p>(iii) EPEAT gold</p>
19	Operating System	Ubuntu 22.04
20	Chassis	on tool-less internal chassis mechanisms.
21	Vendor Status	OEM should be ranked within top 3 as per latest published IDC report for any one of the previous four quarter in India for workstation shipment
22	OEM Criterial	Quoted OEM must have service centers in Assam and quoted OEM have presence in India for minimum 10 years. (valid document should be enclosed with the bid)
23	Authorization	Bidder should enclose tender specific authorization certificate by mentioning NIT no in OEM letterhead
24	Bill Of Material	Sealed and signed OEM bill of material should be enclosed with the technical bid in OEM letterhead.
25	Compliance	Technical compliance should be submitted in OEM letterhead with sealed and signed.
26	Warranty	3 years onsite parts and labor warranty for system and monitor

2. 5 KVA online UPS with 60 minutes' backup

SI No	Parameter	Minimum Required specification
Make & Model:		
<p>STANDARDS & CERTIFICATION</p> <p>The UPS and all associated equipment and components shall be manufactured in accordance with the following applicable standards: Safety Requirements: IEC 62040-1 and also the UPS must have BIS Certification as per MeitY CRS Registration scheme. EMC: IEC 62040-2 Performance: IEC 62040-3</p> <p>The UPS shall be CE marked in accordance with EEC directives 73/23 “low voltage” and 89/336 “electromagnetic compatibility” and RoHS Certification for the offered product. The Quality System for the engineering and manufacturing facility certified to conform to Quality System Standard ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 27001:2013, ISO 50001:2011 for the design and manufacturing. UPS must have certified complying to IEC EN61000-4 & 5, IEC 61000-4-2 level 4, IEC 61000-4-8 level 3 & IEC6100-4-6 Level 3</p>		
<p>SYSTEM DESCRIPTION</p> <p>Design Requirements</p> <ol style="list-style-type: none"> 1. The UPS shall be rated to provide a maximum of 5KVA/4KW power capacity. 2. The UPS shall be able to supply all required power to full rated output with power factor from ranging from 0.6 lag to 0.8 leading. 3. Must be True Online double conversion with IGBT based PWM inverter using DSP controlled feature. 4. Must have manual bypass 5. UPS must have inbuilt Cold Start Operation and Generator Compatibility. 6. The UPS shall be of having inbuilt isolation transformer based design, requiring proper isolation between input and output supply and low distortion. 7. The UPS shall have type test certificate from NABL accredited lab in India. <p>Modes of Operation</p> <p>The UPS shall operate in the following modes:</p> <ol style="list-style-type: none"> A. Normal: The critical AC load shall be continuously powered by the UPS inverter. The rectifier/charger shall derive power from the utility AC source to convert DC power and the inverter to AC output. B. Battery: Upon failure of utility AC power, the critical load shall be powered by the inverter, thru battery energy source. C. Recharge: Upon restoration of the utility AC source, the rectifier shall supply power to the output inverter and charge the battery Energy. D. Manual Bypass: The inbuilt manual bypass shall transfer the load to the raw input source in case of maintenance work or complete UPS failure. 		

INPUT		
1	Nominal Voltage	220/230/240VAC, 1-Ph
2	Operating voltage range	120 ~300VAC Load Dependant
3	Operating frequency range	50Hz/60Hz: 45~65Hz (auto sensing)
OUTPUT		
4	Output voltage & Regulation	220/230/240VAC, 1-Ph & ±1%
5	Output frequency	+/- 1%, +/- 2%, +/-3%, +/- 4%, +/- 5%, +/- 10% of the rated frequency(optional); 50Hz/60Hz±0.2% on Battery mode
6	Power Factor	0.8
7	Output voltage(THDv)	<=2% (linear load), <=5% (Non Linear Load)
8	Crest Factor	3:1(max)
9	Efficiency	≥91%
BATTERY		
10	DC Voltage	192V DC
11	Charge Current	Should have 1 ~ 10A charging current as standard auto settable
12	Typical recharge time	6~8 Hours(to 90% of full capacity)
13	Back up time required	Minimum 60Mins under full load condition
14	Minimum VAH	Should be minimum as 8064VAH for required back up time
15	Type	SMF VRLA
16	Make	Exide/Quanta/OEM Approved
17	Recharge Time	6~8 Hrs for 90% after complete discharge
18	Cell cut-off voltage	10.5V for 12V Monobloc
SYSTEM FEATURES		
19	LCD indication	AC Mode, DC Mode, Battery Low, Overload, Input voltage & frequency, Output voltage & frequency, Battery voltage & Load percentage
20	LED indication	Line mode, Backup mode, Battery low, Overload & UPS fault
21	Overload capability	1. Load <= 110% for 10mins; 2. Load <= 125% for 1 min
22	Protections	Battery low voltage, Abnormal power supply, UPS failure, Overload, Short Circuit & Over temperature
ENVIRONMENTAL		
23	Operating temperature	0~40°C
24	Storage Temperature	-25~55 °C
25	Humidity range	0%~95% (non-condensing)
26	Altitude	<1000m No derating
27	Noise Level	<50dB
28	warranty	3 years comprehensive warranty for both the UPS and battery
28	OEM Eligibility Criteria: All the below documents are mandatory to submit(compulsory)	
29	The Bidder has to be submitted Bid specific MAF where Partner have to be authorized Partner by the OEM. Wherever, bid specific MAF to be signed by the person holding the power of attorney. POA have to be submitted	
30	Documentary proof for OEM that relates to being in UPS business for a period of minimum 20 years or more. Incorporation Certificate to be enclosed.	
31	UPS should be manufactured in India and declaration in OEM letterhead certifying product quoted is manufactured in India (DMEP-Domestic Manufactured) productivity certificate	

	from District Industry Centre, for capability assessment for quoted products that the same product is being manufactured at designated factory.
32	OEM must have centralized helpline number (Toll-Free Number) for service call login and complaint center and proper resolution process. Escalation Matrix have to be submitted by the Authorized Bidder.
33	UPS should be manufactured in India and declaration in OEM letterhead certifying product quoted is manufactured in India that the same product is being manufactured at designated factory
34	Technical Compliance/Datasheet of the offered products must be furnished in OEM letter head. 3 years Comprehensive Warranty declaration on Bidders Letterhead.

ELIGIBILITY CRITERIA FOR PARTICIPATING IN THE TENDER

1. The bidder must have local contact / service center (Office/Dealers etc.) situated in Eastern part of India for at least five years. The same must have a well-trained team of Service personals (details needed to be enclosed).
2. The Bidder should have an experience of supplying, installing & maintaining 2 Nos. of GPU workstation/GPU Server.
3. The bidder should submit an Undertaking confirming that they will maintain and provide after sales support for the entire warranty period.
4. Workstation OEM should be ranked within top 3 as per latest published IDC report for any one of the previous four quarter in India.
5. Bidder should provide tender specific authorization letter from each OEM for all the items by mentioning NIT no in OEM letterhead with the technical bid.

Quantities Required**1. Consolidated List of Items Required:**

Sl. No.	Particulars	Quantity
1	High End GPU workstation	1
2	5 KVA online UPS with 60 minutes' backup	1

ANNEXURE-III**CHECK-LIST***(For documents to be mandatorily submitted)*

Sl. No.	Particulars	SUBMITTED Please respond in YES/NO/Remark(if any)
1	Brief profile of the Company/Firm with contact details.	
2	Annexure III (copy of this check-list itself, duly filled-in and signed with company seal)	
3	Copy of PAN Card	
4	Copy of GST Registration Certificate	
5	Proof of submission of Tender Fee/EMD at assamtenders.gov.in or Documentary proof justifying its exemption (e.g., MSME/NSIC/SSI/etc.).	
6	Offered Technical Specifications in tabular format against each item in Annexure I	
7	Technical Compliance Sheet as in Annexure IV	
8	Technical Literature of each offered items.	
9	OEM Authorization/Declaration etc.	
10	Proof of Permanent Establishment in Assam as an IT Solution Provider for last 7 years.	
11	Copy of the audited Profit & Loss Statement & Balance Sheet of the firm and Certificate from the Chartered accountant clearly stating the turnover for last three financial years.	
	The following ISO Certificates: 1) ISO 9001 (Quality Management) 2) ISO 27001 (Information Security)	1) 2)
12	Previous Workstation/Server order copy (3 nos.)	
13	Declaration regarding Non-Blacklist of Bidder/OEM anywhere in India or abroad.	
14	All other Documents to establish eligibility of the Bidder as per ' Bidder Eligibility Criteria ' mentioned in Part A of this Tender Document, viz. Provident Fund Registration, ESIC Registration, etc.	

Offered Technical Specifications

1. High End GPU workstation

Sl. No.	Particulars	Detailed Technical Specifications
1	Form factor	
2	Processor	
3	Chipset	
4	RAM	
5	Hard Disk	
6	Solid State Drive	
7	Optical Drive	
8	Drive	
9	Security Management	
10	Graphics Card	
11	Networking	
12	Slots	
13	Ports	
14	Keyboard and Mouse	
15	Audio	
16	Monitor	
17	Power Supply	
18	Certification	
19	Operating System	
20	Chassis	
21	Vendor Status	
22	OEM Criterial	
23	Authorization	
24	Bill Of Material	
25	Compliance	
26	Warranty	

2. 5 KVA online UPS with 60 minutes' backup

SI No	Parameter	Minimum Required specification
Make & Model:		
<p>STANDARDS & CERTIFICATION</p> <p>The UPS and all associated equipment and components shall be manufactured in accordance with the following applicable standards:</p> <p>Safety Requirements: IEC 62040-1 and also the UPS must have BIS Certification as per MeitY CRS Registration scheme.</p> <p>EMC: IEC 62040-2</p> <p>Performance: IEC 62040-3</p> <p>The UPS shall be CE marked in accordance with EEC directives 73/23 “low voltage” and 89/336 “electromagnetic compatibility” and RoHS Certification for the offered product.</p> <p>The Quality System for the engineering and manufacturing facility certificated to conform to Quality System Standard ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 27001:2013, ISO 50001:2011 for the design and manufacturing.</p> <p>UPS must have certified complying to IEC EN61000-4 & 5, IEC 61000-4-2 level 4, IEC 61000-4-8 level 3 & IEC6100-4-6 Level 3</p>		
<p>SYSTEM DESCRIPTION</p> <p>Design Requirements</p> <ol style="list-style-type: none"> 1. The UPS shall be rated to provide a maximum of 5KVA/4KW power capacity. 2. The UPS shall be able to supply all required power to full rated output with power factor from ranging from 0.6 lag to 0.8 leading. 3. Must be True Online double conversion with IGBT based PWM inverter using DSP controlled feature. 4. Must have manual bypass 5. UPS must have inbuilt Cold Start Operation and Generator Compatibility. 6. The UPS shall be of having inbuilt isolation transformer based design, requiring proper isolation between input and output supply and low distortion. 7. The UPS shall have type test certificate from NABL accredited lab in India. <p>Modes of Operation</p> <p>The UPS shall operate in the following modes:</p> <ol style="list-style-type: none"> A. Normal: The critical AC load shall be continuously powered by the UPS inverter. The rectifier/charger shall derive power from the utility AC source to convert DC power and the inverter to AC output. B. Battery: Upon failure of utility AC power, the critical load shall be powered by the inverter, thru battery energy source. C. Recharge: Upon restoration of the utility AC source, the rectifier shall supply power to the output inverter and charge the battery Energy. D. Manual Bypass: The inbuilt manual bypass shall transfer the load to the raw input source in case of maintenance work or complete UPS failure. 		

INPUT		
1	Nominal Voltage	220/230/240VAC, 1-Ph
2	Operating voltage range	120 ~300VAC Load Dependant
3	Operating frequency range	50Hz/60Hz: 45~65Hz (auto sensing)
OUTPUT		
4	Output voltage & Regulation	220/230/240VAC, 1-Ph & ±1%
5	Output frequency	+/- 1%, +/- 2%, +/-3%, +/- 4%, +/- 5%, +/- 10% of the rated frequency(optional); 50Hz/60Hz±0.2% on Battery mode
6	Power Factor	0.8
7	Output voltage(THDv)	<=2% (linear load), <=5% (Non Linear Load)
8	Crest Factor	3:1(max)
9	Efficiency	≥91%
BATTERY		
10	DC Voltage	192V DC
11	Charge Current	Should have 1 ~ 10A charging current as standard auto settable
12	Typical recharge time	6~8 Hours(to 90% of full capacity)
13	Back up time required	Minimum 60Mins under full load condition
14	Minimum VAH	Should be minimum as 8064VAH for required back up time
15	Type	SMF VRLA
16	Make	Exide/Quanta/OEM Approved
17	Recharge Time	6~8 Hrs for 90% after complete discharge
18	Cell cut-off voltage	10.5V for 12V Monobloc
SYSTEM FEATURES		
19	LCD indication	AC Mode, DC Mode, Battery Low, Overload, Input voltage & frequency, Output voltage & frequency, Battery voltage & Load percentage
20	LED indication	Line mode, Backup mode, Battery low, Overload & UPS fault
21	Overload capability	1. Load <= 110% for 10mins; 2. Load <= 125% for 1 min
22	Protections	Battery low voltage, Abnormal power supply, UPS failure, Overload, Short Circuit & Over temperature
ENVIRONMENTAL		
23	Operating temperature	0~40°C
24	Storage Temperature	-25~55 °C
25	Humidity range	0%~95% (non-condensing)
26	Altitude	<1000m No derating
27	Noise Level	<50dB
28	warranty	3 years comprehensive warranty for both the UPS and battery
28	OEM Eligibility Criteria: All the below documents are mandatory to submit(compulsory)	
29	The Bidder has to be submitted Bid specific MAF where Partner have to be authorized Partner by the OEM. Wherever, bid specific MAF to be signed by the person holding the power of attorney. POA have to be submitted	
30	Documentary proof for OEM that relates to being in UPS business for a period of minimum 20years or more. Incorporation Certificate to be enclosed.	
31	UPS should be manufactured in India and declaration in OEM letterhead certifying product quoted is manufactured in India (DMEP-Domestic Manufactured) productivity certificate	

	from District Industry Centre, for capability assessment for quoted products that the same product is being manufactured at designated factory.
32	OEM must have centralized helpline number (Toll-Free Number) for service call login and complaint center and proper resolution process. Escalation Matrix have to be submitted by the Authorized Bidder.
33	UPS should be manufactured in India and declaration in OEM letterhead certifying product quoted is manufactured in India that the same product is being manufactured at designated factory
34	Technical Compliance/Datasheet of the offered products must be furnished in OEM letter head. 3 years Comprehensive Warranty declaration on Bidders Letterhead.

Technical Compliance Sheet

1. High End GPU workstation

Sl. No.	Particulars	Compliance <i>Please respond in YES/NO/Remarks (if any)</i>
1	Form factor	
2	Processor	
3	Chipset	
4	RAM	
5	Hard Disk	
6	Solid State Drive	
7	Optical Drive	
8	Drive	
9	Security Management	
10	Graphics Card	
11	Networking	
12	Slots	
13	Ports	
14	Keyboard and Mouse	
15	Audio	
16	Monitor	
17	Power Supply	
18	Certification	
19	Operating System	
20	Chassis	
21	Vendor Status	
22	OEM Criterial	

23	Authorization	
24	Bill Of Material	
25	Compliance	
26	Warranty	

2. 5 KVA online UPS with 60 minutes' backup

SI No	Parameter	Minimum Required specification
Make & Model:		
<p>STANDARDS & CERTIFICATION The UPS and all associated equipment and components shall be manufactured in accordance with the following applicable standards: Safety Requirements: IEC 62040-1 and also the UPS must have BIS Certification as per MeitY CRS Registration scheme. EMC: IEC 62040-2 Performance: IEC 62040-3 The UPS shall be CE marked in accordance with EEC directives 73/23 “low voltage” and 89/336 “electromagnetic compatibility” and RoHS Certification for the offered product. The Quality System for the engineering and manufacturing facility certificated to conform to Quality System Standard ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, ISO 27001:2013, ISO 50001:2011 for the design and manufacturing. UPS must have certified complying to IEC EN61000-4 & 5, IEC 61000-4-2 level 4, IEC 61000-4-8 level 3 & IEC6100-4-6 Level 3</p>		
<p>SYSTEM DESCRIPTION Design Requirements 1. The UPS shall be rated to provide a maximum of 5KVA/4KW power capacity. 2. The UPS shall be able to supply all required power to full rated output with power factor from ranging from 0.6 lag to 0.8 leading. 3. Must be True Online double conversion with IGBT based PWM inverter using DSP controlled feature. 4. Must have manual bypass 5. UPS must have inbuilt Cold Start Operation and Generator Compatibility. 6. The UPS shall be of having inbuilt isolation transformer based design, requiring proper isolation between input and output supply and low distortion. 7. The UPS shall have type test certificate from NABL accredited lab in India.</p> <p>Modes of Operation The UPS shall operate in the following modes: A. Normal: The critical AC load shall be continuously powered by the UPS inverter. The rectifier/charger shall derive power from the utility AC source to convert DC power and the inverter to AC output. B. Battery: Upon failure of utility AC power, the critical load shall be powered by the inverter, thru battery energy source. C. Recharge: Upon restoration of the utility AC source, the rectifier shall supply power to the output inverter and charge the battery Energy. D. Manual Bypass: The inbuilt manual bypass shall transfer the load to the raw input source in case of maintenance work or complete UPS failure.</p>		

INPUT		
1	Nominal Voltage	220/230/240VAC, 1-Ph
2	Operating voltage range	120 ~300VAC Load Dependant
3	Operating frequency range	50Hz/60Hz: 45~65Hz (auto sensing)
OUTPUT		
4	Output voltage & Regulation	220/230/240VAC, 1-Ph & ±1%
5	Output frequency	+/- 1%, +/- 2%, +/-3%, +/- 4%, +/- 5%, +/- 10% of the rated frequency(optional); 50Hz/60Hz±0.2% on Battery mode
6	Power Factor	0.8
7	Output voltage(THDv)	<=2% (linear load), <=5% (Non Linear Load)
8	Crest Factor	3:1(max)
9	Efficiency	≥91%
BATTERY		
10	DC Voltage	192V DC
11	Charge Current	Should have 1 ~ 10A charging current as standard auto settable
12	Typical recharge time	6~8 Hours(to 90% of full capacity)
13	Back up time required	Minimum 60Mins under full load condition
14	Minimum VAH	Should be minimum as 8064VAH for required back up time
15	Type	SMF VRLA
16	Make	Exide/Quanta/OEM Approved
17	Recharge Time	6~8 Hrs for 90% after complete discharge
18	Cell cut-off voltage	10.5V for 12V Monobloc
SYSTEM FEATURES		
19	LCD indication	AC Mode, DC Mode, Battery Low, Overload, Input voltage & frequency, Output voltage & frequency, Battery voltage & Load percentage
20	LED indication	Line mode, Backup mode, Battery low, Overload & UPS fault
21	Overload capability	1. Load <= 110% for 10mins; 2. Load <= 125% for 1 min
22	Protections	Battery low voltage, Abnormal power supply, UPS failure, Overload, Short Circuit & Over temperature
ENVIRONMENTAL		
23	Operating temperature	0~40°C
24	Storage Temperature	-25~55 °C
25	Humidity range	0%~95% (non-condensing)
26	Altitude	<1000m No derating
27	Noise Level	<50dB
28	warranty	3 years comprehensive warranty for both the UPS and battery
28	OEM Eligibility Criteria: All the below documents are mandatory to submit(compulsory)	
29	The Bidder has to be submitted Bid specific MAF where Partner have to be authorized Partner by the OEM. Wherever, bid specific MAF to be signed by the person holding the power of attorney. POA have to be submitted	
30	Documentary proof for OEM that relates to being in UPS business for a period of minimum 20years or more. Incorporation Certificate to be enclosed.	
31	UPS should be manufactured in India and declaration in OEM letterhead certifying product quoted is manufactured in India (DMEP-Domestic Manufactured) productivity certificate	

	from District Industry Centre, for capability assessment for quoted products that the same product is being manufactured at designated factory.
32	OEM must have centralized helpline number (Toll-Free Number) for service call login and complaint center and proper resolution process. Escalation Matrix have to be submitted by the Authorized Bidder.
33	UPS should be manufactured in India and declaration in OEM letterhead certifying product quoted is manufactured in India that the same product is being manufactured at designated factory
34	Technical Compliance/Datasheet of the offered products must be furnished in OEM letter head. 3 years Comprehensive Warranty declaration on Bidders Letterhead.

All responses regarding Technical Compliance of above-mentioned items are true and hides no underlying condition/information/etc.

Signature & Seal of Bidder