

INDIAN INSTITUTE OF ENGINEERING SCIENCE & TECHNOLOGY
(Formerly Bengal Engineering and Science University, Howrah)
P.O. Botanic Garden, Howrah – 711 103, INDIA.
(Tel: 91-33-2668 4561 Extn. 600)

TENDER NOTICE INVITING QUOTATIONS FOR
Supply & Installation of SERVERS, UPS and PCs

Advt. No. JA/D(AA)/17/07

Dated. 20.01.2017

You are invited to submit your most competitive quotations for supply and installation of the following items/ equipment for Examination Section and Mathematics Department.

SPECIFICATION FOR THE SERVER , UPS and PC

A. Server : Mid-range servers : TWO

General

- Form Factor: Rack-mountable - 2U
- Embedded Security: Trusted Platform Module (TPM 1.2) Security Chip
- Hot-Swap Bays Qty: 12

Processor / Chipset: 2 x Intel Xeon E5-2620V4

RAM: 64GB Registered DDR4@ 2,133 Mhz (Capable 768GB, Minimum Empty Slot 12)

Storage Controller: SAS 3.0; supporting RAID 0, RAID 1, RAID 1 ADM, RAID 10, RAID 10 ADM, RAID 5, RAID 50, RAID 6, RAID 60; 16 Channel; Buffer Size 4GB

Storage Capability: 24 SFF or 12 LFF Hot-Pluggable Bays

HDD: 3 x 2 TB 2.5" SAS Hot-Pluggable

Optical Drive: DVD-RW

Extension BUS: 6 x PCIe 3.0 with both x8 and x16 options along with riser cards if required.

Networking

- Data Link Protocol: Ethernet, Fast Ethernet, Gigabit Ethernet
- Ethernet Ports: 4 x Gigabit Ethernet
- Remote Management Controller with standard features
- Supporting Wake on LAN (WoL), PXE

USB 3.0 Ports: 1 front + 4 back

Graphics Controller

- Form Factor: integrated
- Graphics Processor: Matrox G200eH2 or Better
- Video Interfaces: VGA

Power

- Type: hot-plug

- Power Redundancy: yes (1+1)
- Installed Qty: 2
- Max Operating Temperature: 95 °F or more
- 80 PLUS Platinum Certification

Environmental Parameters

- Humidity Range Operating: 8 - 90% (non-condensing)
- Maximum Sound Emission: 23 dBA

Miscellaneous

- UEFI BIOS, administrator password, power-on password, serial port I/O control
- Compliant Standards
ACPI 2.0b, FCC Class A certified, GB 9254, ICES-003, IEC 60950-1, WEEE, CISPR 22, CNS 13438, EN 60950-1, EN 61000-3-2, EN 61000-3-3, EN55022, EN55024, FCC CFR47 Part 15
- Complete Rack Mount Kit with Cable manager
- For HDD Bays: The drive carrier should have intuitive icon based display along with "DO NOT REMOVE" caution indicator that gets activated automatically in order to avoid data loss/downtime due to wrong drive removal.
- Secure Encryption: System should support Encryption of the data on both the internal storage and cache module of the array controllers using encryption keys. Should support local key management for single server and remote key management for central management for enterprise-wide data encryption deployment.
- Server Management: Management software should support integration with popular virtualization platform management software like vCenter, SCVMM and Red Hat RHEV.

Manufacturer Warranty: 3 years comprehensive onsite warranty

Operating System / Software

- OS Certified: Canonical Ubuntu, Citrix XenServer, Microsoft Windows Server, Oracle Solaris, Red Hat Enterprise Linux, SuSE Linux Enterprise Server
- Installed: Red Hat Enterprise Linux (Latest Version with full virtualization support)

One Set of Keyboard Mouse and Monitor (21") from the same OEM as that of Servers

Sixteen (16) Port USB KVM Switch of Aten Make (or Equivalent) with 16 compatible KVM cables.

Server Rack

- 42U EPW President Make or Equivalent Server Rack with Fan(s) and 4 Power Bars from the same OEM

B. Uninterrupted Power Supply : One

10 KVA on line UPS system stand alone /rack mountable working on three phase input single phase output, IGBT based double conversion with three years warranty.

| TECHNICAL SPECIFICATION FOR 10 KVA ONLINE UPS Systems | | |
|--|----------------------------------|--|
| SI No | Technical Parameters | |
| 1 | UPS Capacity | 10 kVA UPS System |
| 2 | Topology | True On-line Double Coverstion UPS |
| 3 | Output power capacity | 9000 W |
| 4 | Input | |
| 4.1 | Voltage Range | 190 - 478 VAC based on the load percentage |
| 4.2 | Frequency | 50 Hz |
| | Frequency Range | 46 to 54 Hz |
| 4.3 | Power Factor | ≥ 0.99 at full load and nominal input Voltage And >.95 above 25% load |
| 4.4 | Current THD | < 5% (with full Load) |
| 4.5 | Isolation Transformer | only Inbuilt. To be connected at the input side of the UPS |
| 5 | Output | |
| 5.1 | Voltage | 230 VAC |
| 5.2 | Voltage Regulation | + / - 1% |
| 5.3 | Frequency (Free Running Mode) | 50 Hz ± 0.1 Hz |
| 5.4 | Frequency (Synchronisation Mode) | 45 to 55 Hz |
| 5.5 | Harmonic Distortion (THD) | ≤ 2% (linear load) |
| | | ≤ 5% (non-linear load) |
| 5.6 | Output Waveform | Sine wave |
| 5.7 | Crest Factor | 3:1 |
| 5.8 | Inverter Efficiency | ≥ 90% |
| 5.9 | Power Factor | 0.9 Lagging |
| 5.10 | Overload | 101% - 109% for 5 minutes |
| | | 110% - 129% for 1 minute |
| | | 130%-150% for 10 Sec |
| 5.11 | System DC Voltage | ≥288 VDC |
| 6 | Battery | |
| 6.1 | Battery Type | 12 V Sealed Lead Acid Maintenance Free |
| 6.2 | Battery make | PANASONIC or Equivalent |
| 6.3 | Back up time | 30 Mins Backup |
| 6.4 | Charger | Built-in solid state three stage recharge (Constant Current, |
| | | Constant Voltage with float charge) and with temperature compensation. |

| | | |
|------|-----------------------------------|---|
| 6.5 | VAH Required | ≥12096 |
| 7 | Efficiency | |
| | AC/AC (overall efficiency) | ≥ 94 % (at full Load) |
| 8 | Features | |
| 8.1 | Eco mode | Should be available |
| 8.2 | Overload capacity | Should be available |
| 8.3 | Converter mode | Should be available |
| 8.4 | Bypass parameters configurable | Should be available |
| 8.5 | Display | LCD Display |
| 8.6 | Bypass | Static Bypass should be provided |
| 8.7 | Cold Start | UPS shall start up On DC Supply without mains input |
| 8.8 | Automatic Restart | UPS should start up automatically on mains resumption after battery low shutdown |
| 8.9 | Self Diagnosis | UPS should be capable to carry out self test of Rectifier / Charger / Battery & Inverter sections during start-up |
| 9 | Mechanical | |
| | Ingress protection | IP 20 |
| 10 | General | |
| 10.1 | Operating Temperature | 0 to 45 Deg. C only for UPS |
| 10.2 | Noise level | < 55 dB @ 1 meter |
| 10.3 | LCD Display & Indication | Input Voltage |
| | | Output Voltage |
| | | Input Frequency |
| | | Output Frequency |
| | | Battery Charging / Discharging Level |
| | | Load Level |
| | | Input High / Normal / Low / Fail |
| | | Output Overload |
| | | Output Short Circuit |
| | | Output Fault |
| 10.4 | LED Display & Indication | Normal Mode |
| | | Load on Battery |
| | | Load on Bypass |
| | | system fault |
| 10.5 | Audible Alarm | Mains Failure alarm |
| | | Low Battery Alarm |
| | | Overload |
| | | Fault |
| | | Bypass Mode |
| | | UPS Warning |
| 10.6 | Bypass | Static Bypass |

| | | |
|------|--|---|
| 10.7 | Maintenance Bypass | Available |
| 10.8 | DSP Based technology | Required |
| | | |
| 11 | Communication Interface | |
| 11.1 | Serial Communication RS232 and USB Port (selectable) | RS232 Port and optional USB port |
| 11.2 | Interface to NMS (Network Management System) | SNMP Card for connecting the UPS to LAN |
| | | |
| 12 | Certification | |
| 12.1 | ISO 9001 : 2008 | Required |
| 12.2 | OHSAS 18001 : 2007 | Required |
| 12.3 | ISO 14001 : 2004 | Required |
| 12.3 | Performance | IEC 62040-3 |

C. PERSONAL COMPUTER (HP/DELL or equivalent) : 10 to 20

| | |
|---------------------------|---|
| Processor | Intel Core i3 Latest Generation CPU |
| Chipset | Q Series Chipset, Motherboard architecture should be 64 bit compatible. |
| Motherboard | OEM LOGO Embossed (no sticker) |
| Memory | 1 x 4 GB DDR 4 RAM, expandable up to 64 GB, 4 DIMM Slots. |
| Hard Disk | 1 TB 7200 rpm SATA |
| Optical Drive | DVD RW |
| Operating System | DOS |
| Graphics | Integrated |
| Security | TPM 1.2 |
| Audio | HD Audio with Internal Speaker |
| Certifications | Energy Star, EPEAT India Certified, TCO 06 for TFT, ECO Declaration, Win 7,8 & 10 Certification, ROHS |
| PCI Slots | 1 PCIe x 16; 2 PCIe x 1 or higher. |
| Ports | USB 2.0; 1 headphone/microphone 1 DVI-D; 1 microphone; 1 power connector; 1 PS/2 keyboard; 1 PS/2 mouse; 1 RJ-45; 1 VGA; 2 USB 2.0; 4 USB 3.0; 1 audio in; 1 audio out |
| Monitor | 18.5 (or more) wide TFT |
| Keyboard | OEM Standard Keyboard |
| Mouse | OEM Standard Optical Mouse |
| Support | Drivers should be available for download from OEM site for at least 3 years from the date of purchase order |
| Power Supply | 300W or Higher |
| Information Accessibility | Brochure and specification sheets of the product to be available in public domain. |
| Profitability | OEM should have positive net worth for last 3 financial years. |
| Warranty | (3) Three years on-site comprehensive warranty from OEM |

1. Specify make and model number of the quoted items.
2. See the conditions given in the Annexure I
3. Quantities are approximate.

INDIAN INSTITUTE OF ENGINEERING SCIENCE & TECHNOLOGY, Shibpur

Terms, Conditions and Important Instructions for Vendors Quoting against

Advt. No. JA/D(AA)/17/07

Dated. 20.01.2017

1. The original tender document with technical specifications is available at www.iiests.ac.in.
2. Quotations are to be submitted in sealed cover, noting Advt. No. on the top of the envelope along with vendor's name, address, phone no. etc. in the office of the Dean (ACADEMIC). (1st Floor Main Building)
3. Quotations are to be submitted in original after accepting the terms and conditions.
4. Vendor's Bank account no, with IFSC code, Photo copy of PAN Card & certificate of VAT are to be attached with the quotations.
5. Copy of similar type of order received from any other similar Educational Institute, during the last one year, can be submitted for credential.
6. In a bid, for any item, a single product from a particular OEM has to be quoted. That is, not more than one product can be quoted against any particular item.
7. Vendor should ensure compliance against each technical specification along with proper evidence.

8. Submission of quotations closes at 2 PM (Feb. 10, 2017) The tender opening schedule is 2 hours after the closing. Venue for opening the office of Dean (Ac.) Room No. N255.
9. Equipment and other items, to be supplied, should be as per the specification and approved by the appropriate authority.
10. The quoted price shall include additional charges, if any, for all comprehensive warranty extended up to the period mentioned.
11. Price should be quoted item-wise in Indian currency and inclusive of all taxes, duties and levies as applicable with 3 years warranty. Type and amount of these taxes, duties and levies are to be mentioned clearly.
12. Equipment/items are to be delivered within 21 days from the date of issue of the purchase order.

13. The supplier is responsible for any breakage, damage or defect in equipment/items, detected subsequently, prior to final commissioning.
14. Bills and challans in duplicate should be presented for payment within 15 days of supply of equipment or completion of work. All bills are to be accompanied by copy of orders and receipt or challan. Order number no. with date, VAT no. and PAN no. are to be mentioned on both Challan and Bills.
15. Payment will be made by a/c payee cheque or by Account transfer after submission of proper bills and challans. No cash payment will be made under any circumstances. No advance payment can be made.
16. All payments are subjected to statutory deductions as and when applicable.

17. Documents to be submitted with the quotations
 - Put tick marks, in the list of items, against the items quoted.
 - Terms and conditions (given below), in original, duly signed by the authorized personnel, on behalf of the vendor, as a token of acceptance of terms and conditions of the Tender.
 - Copy of the latest Income Tax, Sales Tax, Professional Tax clearance certificate along with VAT No & Trade License.
 - Price quoted in a sealed envelope in separate page(s) and duly signed.
 - Valid authorization certificates of distributorship from Principal Manufacturer whenever applicable.
- f) Tender Specific authorization from OEM/Manufacturer for the quoted item.

18. Terms and Conditions

a. All the Equipment/Items shall carry a guarantee for a minimum period of 3 years from the date of successful installation (if any item or parts of it is not covered under the warranty or related clause then it must be clearly indicated in the bid / offer/quotation).

b. Supply of Equipment includes installation, erection, commissioning, demonstration & training whenever applicable.

c. Indian Institute Of Engineering, Science and Technology, Shibpur, Howrah, reserves the right to reduce or enhance the quantity of item(s) to be procured as mentioned in the tender document. One or more item(s) may be canceled too.

d. Indian Institute of Engineering, Science and Technology, Shibpur, Howrah, reserves the right to accept/reject all or any of the tender items without assigning any reason whatsoever.

I/we accept the above terms and conditions.

Signature of the Appropriate authority of the Vendor with Seal
