

## Tender document

**Department of IME  
Indian Institute of Technology Kanpur  
Kanpur (UP) 208016 India**

<b>Date of Publishing</b>	09-03-2022
<b>Last Date and time of uploading of Bids</b>	21-03-2022 Time: 17:00Hrs.

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Enquiry date: 09-03-2022

Enquiry No: **IITK/IME/2021-2022/ 320**

Quotations are invited for **Rack Server** The detailed technical specification is described below.:

S.No	Component	Technical Specifications for (Rack Server) Qty-1
01	Make & Model	(Specify)
02	Regulatory Compliance	The OEM for the proposed server must be registered with Bureau of Indian Standards.
03	ISO Certification	Manufacturing facility/brand should be ISO 9001, ISO 14001 & ISO/IEC 27001 certified.
04	Chipset	Intel C620 series of chipset or better
05	Form Factor	Max. 2U (including all units) rack mounted with sliding rails
06	Configured CPU	Two Intel® Xeon® Scalable processors with 36 or more cores per processor, each operating at minimum 2.3Ghz or more
07	Memory slots	24 DDR4 DIMM slots, min. 3200MHz or more. Scalability up to 2TB or more memory.
09	Memory configured	8 no's x 64GB RDIMM, 3200MHz, Total of 512GB RAM Capacity
10	Disks Bays	At least 12 x SAS & SATA supported HDD bays. All must be hot swap and support SAS drives. And Two or more drive bays must have native support for NVMe drives. NVMe controller must be available in server from day one. Total drives can be provided thru primary or secondary unit/enclosure from day one.
11	RAID Controller	SAS 12Gbps controller with provision to support up to 250+ HDDs, and supports RAID 0, 1, 10, 5, 50, 60 & 6 with dedicated 4GB cache memory. Must Support SSP, SMP, STP protocols or more. RAID Cache must be battery backed.
12	Disks configured	6 no's x 3840GB SATA SSDs Hot-plug Drives with 1 drive writes per day endurance rating and with 500+ MBps sequential write and read bandwidth respectively.
13	I/O slots	At least 4 no. of PCI-E 4.0 x16 slots, At least 2 no. of PCI-E 4.0 x8 slot And 1 x additional PCI-E 4.0 slot for M.2
14	Accelerator	1 x Computational with on board GPU Memory 16GB or more, NVIDIA Quadro P5000 or newer model, Must be compatible with Adobe Premier Pro CC



15	Ethernet ports and other ports	2 x 10GbE -RJ45 and 4 x 1GbE -RJ45 based controller and 1 x 1G (IPMI) dedicated port thru an add on controller or on board to be provided, 1 x VGA, 1 x COM, 2 x USB 3.0 Ports or more, 14 SATA Ports.
16	OS Supports	Windows Server, Ubuntu Server And Red Hat Enterprise Linux Supported Server
7	Power Supply	1000W(N+1) or more 80 Plus Titanium rated redundant Power Supplies. Secondary enclosures if offered with system must also have redundant power supplies of optimum wattage (with lesser efficiency is acceptable) as per the requirement of OEM and are permitted to meet requirement.
18	DISK ON Modules slots	At least 1 or more with all required accessories
19	Power & temperature	Real-time power meter, graphing, thresholds, alerts & capping with historical log data. Temperature monitoring vide indicators
20	Configuration & management	<ul style="list-style-type: none"> <li>• Real-time out-of-band hardware performance monitoring &amp; alerting</li> <li>• Agent-free monitoring, driver updates &amp; configuration, power monitoring &amp; capping, RAID management, external storage management, &amp; system health</li> <li>• Out-of-band hardware &amp; firmware inventory</li> <li>• auto deploy a baseline server configuration profile</li> </ul>
21	Management (continued)	Out of band Management Capabilities, Stack with a full IPMI implementation , Hardware Health monitor , Remote power control, Console Redirection with multi language support HTML web Console Redirection. Serial Over LAN, Media Redirection , CD/DVD redirection , USB 2.0 or 3.0 -based drive redirection with support for USB Key , VLAN functionality supports Reading Log Events, SMTP Support, Sensor read methodology, Email Alerting methodology, User management functionality with SSL based security , Multi User Permission Levels, Multi User Profiles, LDAP Support, Windows Active Directory and Open LDAP support, Common Information Methodology with class handling , Core Support with creation of class , instances and workability with instances. WSMAN Support with common information model support. Provision for Getting , discovering, enumeration and subscribing features. Product datasheet/manual/manual/manual must confirm the compliance.
22	Server Security	Should provide effective protection, reliable detection & rapid recovery using: <ul style="list-style-type: none"> <li>- Silicon-based Hardware Root of Trust</li> <li>- Signed firmware updates</li> <li>- Secure default passwords</li> <li>- Configuration and firmware drift detection</li> <li>- Persistent event logging including user activity</li> <li>- Secure alerting</li> <li>- Automatic BIOS recovery</li> <li>- Rapid OS recovery</li> <li>- System erase</li> </ul>
23	Utility	Unified system management/monitoring toolset for configuration, diagnosis and management of the system. Toolset/Manager must be capable of supporting package and image based provisioning, intuitive web interface for managing and customize the node, And tool set with provisioning, monitoring, and reporting capabilities. With scheduling capabilities on single node for CLI and GUI based selected applications. Utility must be only from the H/W OEM.



24	Installation	Installation, Testing, Training and Implementation cost for all above mentioned solution must be included from day one. (Should be done by certified engineer)
25	Warranty	Minimum 3 years comprehensive Part, Labour, Onsite service calls must be attended by OEM engineer directly
26	Cooling Subsystem	Monitoring of cooling sub system of server thru metering utility , with speed control, and PWM.
27	Other Features	<ul style="list-style-type: none"> <li>- Security of the system is based on the protection and secrecy of the cryptographic info, especially against reading out or manipulation of the key material.</li> <li>- Tick counter with tamper detection</li> <li>- Protection from Dictionary Attack</li> <li>- Must support RSA Secure ID</li> <li>- Encrypted File System</li> <li>- RSA Compliant embedded software</li> </ul> Root of Trust Management

**Terms & Conditions:**

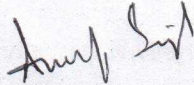
1. The price of each item should be quoted separately (Any item can be cancelled at any time).
2. Quotation must be valid for 30 days, in case of import this should be valid for 90 days
3. All prices are to be for **IIT Kanpur**.
4. Please provide official e-mail id for conversation post quotation opening.
5. Delivery period must be within 4 weeks from purchase order date.
6. The institute is exempted for payment of Excise duty under notification No. 10/97 & partially custom duty (@5.15%), under notification 51/96 and a road permit will be provided, if applicable. The Concessional Form 'C/D' have been abolished w. e. f. Apr 01, 2007.
7. Our standard payment terms and conditions is **90%** on installation and **10%** after inspection and approval.
8. The **Penalty** @1% per week or part thereof subject to max 10% of the delivery price will be deducted from the balance payment, if supply is not completed within aforesaid delivery period.
9. Preference will be given to only those vendors who have Service/ Repairing center stationed at Kanpur (Single point of contact in Kanpur for any service related issues).
10. No Call Locking will be entertained (in/out stationed). If at all it is required then it will be performed by local Maintenance Engineer.
11. Testing of the product onsite is mandatory.
12. In no case, the suppliers shall be provided with remote access of the servers.
13. It is mandatory to quote for above given optional, else the quotation may be rejected.
14. Reporting time should not be more than 2 hours.
15. Resolving time should not be more than 2 days.
16. At any time prior to the deadline for submission of bid, the Institute may, for any reason, at its own initiative, modify the bid document by amendments. Such amendments shall be uploaded on the website through corrigendum and shall form an integral part of bid document. The relevant clauses of the bid document shall be treated as amended accordingly. It shall be the sole responsibility of the prospective bidders to check the



website from time to time for any amendment in the tender document. In case of failure to get the amendments, if any, the Institute shall not be responsible for it.

17. A higher warranty may be given preference.
18. The Institute reserves the right for accepting and rejecting any quotation without assigning any reason thereof. Also, The Institute reserves the right to reject or accept all or any of the offer made above.
19. IIT Kanpur has the right to accept the whole or any part of the tender or portion of the quantity offered or reject it in full without assigning any reason.
20. Vendors are requested to quote only in Indian currency (Rupees). If the vendor wants to quote in an alternate currency, the vendor should seek an explicit permission from the department before sending the bid.
21. If all or any of the components of the equipment is/are to be imported, the vendor holds its full responsibility for its delivery at IIT Kanpur and that too in the stipulated time period. If for any reason the vendor does not want to deliver to IIT Kanpur, the vendor needs to seek an explicit permission from the department, **before** sending the bid.
22. Maximum educational discount should be offered wherever applicable.
23. Mention the country of origin and product should not belongs to PRC.
24. IIT Kanpur is partially exempted from payment of GST (@5% only), IIT Kanpur will provide GST exemption certificate for the same. Institute is partially exempted from GST and the same should be offered in your bid as well. Items used for research & development purpose as specified in column 3 of notification no. 45/2017 & 47/2017 dated 14 Nov 17 will be partially exempted for GST.

**Quotations should be in the name of: -**



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