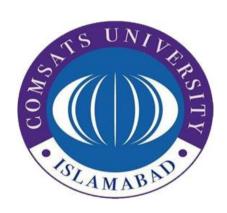
Tender Document

Supply of IT Equipment



COMSATS University Islamabad Park Road, Islamabad

Table of Contents

1.	Tender Notice	3
2.	Key Points	4
	Table # 1	4
3.	General Terms & Conditions of the Tender	4
4.	Contact person and Submission of Bids:	4
5.	Validity of Bids:	4
6.	Price of the Bid:	5
7.	Bid Currencies & Bid Security:	5
8.	Clarification of Bidding Document:	6
9.	Opening of Bids:	6
10.	Influencing the evaluation process:	6
11.	Qualification & Evaluation of Bids:	6
12.	Notification of Evaluation Reports:	7
13.	Corrupt or Fraudulent Practices & Blacklisting:	7
14.	Right to Accept or Reject Bids:	8
15.	Award of Contract:	8
16.	Notification of Award:	8
17.	Delivery Information:	8
18.	Legal Document	9
19.	Declaration Form	10
20.	Technical Evaluation Criteria:	11
	Table # 2: Mandatory Requirements:	11
21.	FINANCIAL PROPOSAL	12
22	Technical Compliance Performa	15

1. Tender Notice

COMSATS University Islamabad

CUI-Proc/(TN-462)/04/2024.

Supply of IT Equipment

- COMSATS University Islamabad (CUI), a Public Sector University invites Bids through e-Pak Acquisition
 & Disposal System (EPADS) https://eprocure.gov.pk on "Single-Stage Two-Envelope" method
 from Income Tax & GST registered Firms/Companies who are on the Active Taxpayer List (ATL)
 for General Sales Tax and Income Tax of FBR for Supply of IT Equipment.
- 2. The Bid Security for the Bid is Rs.200,000/- in the form of Call Deposit/Bank Draft (refundable) drawn in favor of "COMSATS University Islamabad" (FTN/NTN: 9013701-9); scanned copy of which is required to be uploaded through EPADS and hard copy must be submitted physically along with hard-copy of sealed bidding document on the closing date of the tender to COMSATS University Islamabad on the address given below.
- 3. The complete Tendering process shall be carried out through EPADS.
- 4. Interested bidders are requested to register themselves on the EPADS https://eprocure.gov.pk/#/supplier/registration and submit their tender documents.
- 5. For registration and guidance/training on EPADS, you may contact EPADS UAN: 051-111-137-237.
- 6. Closing date of submission is <u>April 02, 2024 by 1100 hours</u>. The bids shall be opened <u>half hour after the closing time</u> in the presence of the bidders who wish to be present, in Room No. G-6/G-8, Ground Floor, Faculty Block-I, COMSATS University Islamabad.
- 7. As per PPRA Rule 33, CUI may reject all bids or proposals at any time prior to the acceptance of a bid or proposal.

Contact Person and Submission



In-Charge Procurement COMSATS University Islamabad

2nd Floor, Faculty Block-II, Park Road, Tarlai Kalan, Islamabad, Tel: 0336-5524334, 051-90495242, 051-9049-5154, 051-9049-5122

Email: wajidkamran@comsats.edu.pk

2. Key Points

Table #1

S.N	Detail	Specification
1.	Validity of Bid	90 Days from the date of Closing of Bids
2.	Award of Contract / W.O	Item-wise Basis
3.	Delivery Time	60 Days from the date of issuance of W.O
4.	Method	Single Stage Two Envelopes
5.	Closing Date & Time	April 02, 2024 by 1100 hours
6.	Opening Date & Time	Half Hour after the Closing Time on the same day
7.	Bid Security Amount (Under Rule 25 of PPRA Rules 2004)	Rs.200,000/- (Refundable)
8.	Delivery Location (Arrangement of Labor included in the cost)	Store Section entry through Gate 1, behind Main Library Building. The Store (Mr. Waheed 051-9049-6035)
9.	Performance Guarantee (Under Rule 39 of PPRA Rules 2004)	10% of the Invoice Cost for ONE YEAR

3. General Terms & Conditions of the Tender

- i. No tender/bid shall be considered if:
 - a) Not uploaded through EPADS;
 - b) Received without required documentation or deficiency in required documentation;
 - c) Received without bid security;
 - d) In contradiction with the specification given by the CUI;
 - e) Received with any condition;
 - f) The bidder is in litigation with CUI or is blacklisted by any organization or is notified as blacklisted on PPRA website.

4. Contact person and Submission of Bids:

i. Contact Person for all inquiries, clarifications and bid submission shall be:

In-Charge Procurement COMSATS University Islamabad

2nd Floor, Faculty Block-II, Park Road, Tarlai Kalan, Islamabad,

Tel: 0336-5524334, 051-90495242, 051-9049-5154, 051-9049-5122

Email: wajidkamran@comsats.edu.pk

5. Validity of Bids:

- i. The Bid shall remain valid as mentioned in **Table 1** of the tender document.
- ii. Any bidder/firm/ company which refuses to accept the Work Order based on market price escalation shall result in forfeiting the bid security. CUI may also impose a ban from business with it for a period of 6 months.

6. Price of the Bid:

- i. Prices quoted by the Bidder shall be fixed during the period of the contract and not subject to variation on any account.
- ii. Applicable Income tax and GST shall be deducted at source and as per rules. In case of exemption, please mention and attach proper documentation duly verified from the concerned tax authorities. However, CUI may accept the exemption certificate. In case of non-acceptance, CUI shall deduct all applicable taxes as per tax rate. CUI shall provide a certificate of tax deduction and the vendor may claim refunds from Tax Authorities/FBR.
- iii. In the case of tie in rates of the bidders, award of contract shall be decided through balloting in the presence of the of the bidders.
- iv. Unit price shall be taken up to 1 decimal point. The total cost shall be round-up to zero decimal.
- v. In case of any conflict in the price/cost quoted by the bidder, the unit cost (Exclusive of GST) quoted by the bidder shall be considered for calculation.
- vi. In case GST is not mentioned, the prices shall be considered as inclusive of GST.

7. Bid Currencies & Bid Security:

- i. Bid prices shall be quoted in Pak Rupees.
- ii. The currency of the bid security shall also be in Pak Rupees.
- iii. The Bidder shall furnish, as part of its bid, bid security as specified in **Table 1** of the tender document. The bid security is required to protect CUI against the risk of Bidder's default which would warrant the security's forfeiture.
- iv. The bid security shall be in favor of **COMSATS University Islamabad (FTN/NTN: 9013701-9)**, in any of the following form:
 - a. Bank Draft
 - b. Pay Order
- v. A scanned copy of bid security is required to be uploaded through EPADS and hard copy must be submitted physically on the closing date of the tender to COMSATS University Islamabad on the address given in the tender notice.
- vi. No personal cheques shall be acceptable at any cost. Also, any previous bid security shall not be considered or carried forward.
- vii. The bid security found deficient of the required amount shall not be considered.
- viii. Unsuccessful bidders' bid security shall be released and returned promptly as the successful bidder gives consent to the work order or signs the contract agreement, whichever is applicable.
- ix. The bid security of the bidder shall be forfeited if the bidder:
 - Requests for withdrawal of his bid during the evaluation process.
 - b. Does not accept the correction of arithmetic errors in its bid.

- x. The bid security of the successful bidder shall be forfeited if the bidder:
 - a. Fails to accept the work order/sign the contract agreement after announced as successful Bidder.
 - b. Fails to comply with the requirement of the bid and contract.

8. Clarification of Bidding Document:

i. During evaluation of the bid(s), CUI may, at its discretion, ask the Bidder for a clarification of its bid and such information imperative for evaluation. The request for clarification and the response shall be in writing, and no change in the prices or substance of the bid shall be sought, offered, or permitted. In case the bidder fails to respond within given deadline, the bidder shall be considered as non-responsive and shall be disqualified from the bidding process.

9. Opening of Bids:

i. CUI shall open all bids through EPADS at the time, date, and place specified in tender notice, in presence of bidders' representatives who wish to attend the meeting and shall sign an attendance sheet as evidence of their presence.

10. Influencing the evaluation process:

- i. No Bidder shall contact CUI on any matter relating to evaluation of its bid, from the time of bid opening to the time evaluation report is made public. If the Bidder wishes to bring additional information or has a grievance to submit, it should do so through EPADS.
- ii. Any effort by a Bidder to influence CUI during bid evaluation may result in disqualification of the bid.

11. Qualification & Evaluation of Bids:

- i. CUI shall determine whether the Bidder is qualified to perform the Contract satisfactorily, in accordance with the criteria & qualification specified in the tender document.
- ii. The qualification shall be based upon an examination of the documentary evidence submitted by the Bidder, as well as such other information as CUI deem necessary and appropriate.
- iii. CUI shall technically evaluate and compare the bids which have been determined to be substantially responsive, as per evaluation criteria given in the tender document.
- iv. The bidder's financial evaluation of a bid shall be based on the lowest evaluated bid inclusive of all prevailing taxes and duties.
- v. CUI shall examine the bids as whether:
 - They are complete in all respect;
 - b. Any computational errors have been made;
 - c. Required financial sureties have been furnished;

- d. The documents have been properly signed.
- vi. Arithmetical errors shall be rectified on the following basis:
 - a. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price (exclusive of tax) shall prevail, and the total price shall be corrected. If the Contractor does not accept the correction of the errors, the bid shall be rejected, and the bid security shall be forfeited.
 - b. If there is a discrepancy between words and figures, the amount in words shall prevail.
- vii. CUI may waive any minor non-conformity, in a bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder.
 - a. Explanation: A minor non-conformity is one that is merely a matter of form and not of substance. It also pertains to some immaterial deficiency in a Bid or variation of a bid from the exact requirements of the tender document that can be corrected or waived without being prejudicial to other bidders. The deficiency is immaterial when the affect on quantity, quality, or delivery is negligible when contrasted with the total cost or scope of the supplies or services being acquired. CUI shall either give the bidder an opportunity to correct any deficiency in a bid or waive the deficiency, whichever is advantageous to CUI.
- viii. Prior to the detailed evaluation, CUI shall determine the substantial responsiveness of each bid to the bidding documents. For the purposes of these clauses, a substantially responsive bid is one which conforms to all the terms and conditions of the bidding documents without material deviations.
- ix. Deficiency in bid security, Applicable Law and Taxes and Duties shall be deemed to be a material deviation. The CUI's determination of a bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence.
- x. If a bid is not substantially responsive, it shall be rejected and may not subsequently be made responsive by the Bidder by correction of the non-conformity.

12. Notification of Evaluation Reports:

The evaluation report shall be notified through EPADS.

13. Corrupt or Fraudulent Practices & Blacklisting:

i. The bidders shall be required to observe the highest standard of ethics during the procurement and execution of contracts. For the purpose of this provision, the terms set forth below are defined as under:

- a. "Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution;
- b. "Fraudulent practice" means a misrepresentation of facts to influence a procurement process or the execution of a contract to the detriment of CUI;
- c. "Collusive practice" is an arrangement among bidders (prior to or after bid submission) designed to establish bid prices at artificial, non-competitive levels for any wrongful gains, and to deprive CUI of the benefits of free and open competition.
- ii. CUI shall have the right to reject a proposal for award if it determines that the bidder had been engaged in corrupt or fraudulent practices in the past with any organization.
- iii. Any bidder/firm/company which is blacklisted by any organization and/or notified as blacklisted by PPRA shall be considered disqualified from the bidding process unless and until it is de-notified on PPRA website.
- iv. If it at any time, CUI determines that the firm has engaged in corrupt, fraudulent, or collusive practices in competing for, or in executing the contract, it shall sanction/ban a bidder/firm/company, in accordance with prevailing Blacklisting procedures under Federal Public Procurement Rules.

14. Right to Accept or Reject Bids:

i. Under PPRA Rule 33(1), CUI may reject bids or proposals at any time prior to the acceptance of a bid or proposal, without incurring any liability to the bidder(s).

15. Award of Contract:

- iii. After scrutiny of all bidding documents, the final evaluation report shall be uploaded to EPADS, and the work order/purchase order shall be issued on the basis of most advantageous bid as mentioned in **Table 1** of the tender document.
- ii. The successful bidder shall immediately sign a contract agreement / give consent to the Work Order/Purchase Order. The bidder shall bear all the stamp duties and expenses for the purpose of contract agreement/Work Order/Purchase Order, if any.

16. Notification of Award:

- i. The notification of award shall constitute the formation of the Agreement/Work Order/Purchase Order.
- ii. Upon the successful bidder's signing the contract agreement/acceptance/consent to the Work Order/Purchase Order, CUI will promptly notify the unsuccessful bidder(s) and will release its bids security.

17. Delivery Information:

i. The supply shall be made to CUI as mentioned in Table 1 of the tender document.

- ii. In case of delay in delivery, the vendor may submit a written request for extension in delivery time, giving valid justification with proof.
- iii. CUI may extend the delivery time according to the reason of delay with the condition of deductions in percentage (0% to 10%) from the total bill as penalty. The decision shall be communicated to the vendor for extension along with [percentage of deduction, if any]. In case of non-responsiveness/non-acceptance by the vendor, the work order shall automatically be cancelled, the bid security shall be forfeited. CUI may also impose a ban from business with it for a period of six months.
- iv. CUI may reject the request for extension, in which case, the work order shall be cancelled, the bid security shall be forfeited. CUI may also impose a ban from business with CUI for a period of six months.
- v. The supply shall be made to CUI as mentioned in **Table 1** of the tender document.
- vi. The bills along with delivery challan (duly signed by authorized official of CUI) shall be submitted to the Procurement Office for further necessary payment process. Any deficiency in bill/supporting documentation shall be removed by the vendor.
- vii. Any defective item(s) shall be replaced by the vendor during the warranty period, free of cost, within one-week is time. In case of failure to supply the specific item, CUI shall purchase the item on risk and cost of the supplier, to be deducted from the bidder's bid security or performance guarantee.
- viii. Payment shall be made as per actual quantity delivered & accepted to CUI.
- ix. Samples are mandatory where specifically demanded and bid without samples shall be considered non-responsive. No sample(s) shall be accepted after the closing date of the tender. Sample(s) other than the demanded item(s) shall not be considered.
- x. After technical evaluation of bids, sample(s) provided by bidders may be picked up from the procurement section within 30 days from the date of technical bid evaluation announcement. Failure on the part of the bidder(s) to collect his samples within the stipulated time shall allow CUI to dispose-off the samples.

18. Legal Document

i. The Tender document and Contract agreement/Work Order/Purchase Order altogether shall have legal binding on all bidders.

19. Declaration Form

(THIS FORM IS TO BE PROVIDED WITH THE BID)

All the terms & conditions have been carefully read and understood and are hereby unconditionally accepted and it is declared that:

- a) I understand that by inserting any condition in my bid consciously or unconsciously shall automatically disqualify me from the bidding process.
- **b)** By altering/adding/deleting any point, clause, condition in the documents provided shall automatically disqualify me from the bidding process.
- c) All the information furnished by me here-in is correct.
- d) I have no objection if enquiries are made about the work listed by me/us in the accompanying sheets /annexure.
- e) I agree that the decision of CUI in selection shall be final and binding to me.
- f) I have read the instructions appended to the proforma and I understand that if any false information in the document is noticed at a later stage, CUI is at liberty to act in a manner in accordance with the applicable rules and terms & conditions of the tender, which may include Penalty AND/OR forfeiting of bid security AND/OR blacklisting for future tendering with CUI AND/OR bar from business with CUI for a period of six months.

Tender Title	
Name of Firm/ Company	
Year of Establishment in this business	
Name of Authorized agent	
Office Address	
Office Address	
GST No.	
NTN.	
Valid Cell No.	
Valid E-mail (For all official correspondence)	
Signature & Stamp (Authorized Representative)	

20. Technical Evaluation Criteria:

Table # 2: Mandatory Requirements:

	Detail	Criteria
1.	Draft of Bid Security (To be Physically Submitted to Purchase Section on the Closing Date)	Mandatory
2.	Financial Bid / Quotation (Strictly as per CUI pattern) Any alteration/addition/deletion shall dis-qualify the bidder from the bidding process	Mandatory
3.	Declaration Form	Mandatory
4.	Active Taxpayer List (ATL) of FBR Status as "Active" in I.T and Compliance Level is 100% in GST	Mandatory
5.	Proof of non-blacklisting: Affidavit on legal paper of appropriate value (duly attested from notary public) OR letterhead that the firm/company is neither blacklisted nor in litigation with any public sector client	Mandatory
6.	Compliance with CUI requirement/Specification Mentioning of Brand Name is mandatory. Blank technical sheet shall be treated as non- compliance and may result rejection of tender / bid	Mandatory
7.	Professional Experience List of 5 executed/ similar contracts of over Rs.500,000/-each for Different Clients in the last 5 Year (10 Marks each)	50 Marks
8.	Authorize Dealer/Reseller of the Brand being offered. The bidder must provide valid authorized dealership/re-seller certificate of the brand.	Mandatory
9.	Warranty One Year	Mandatory

- Failing in any of the mandatory requirement shall disqualify the bidder from the bidding process.
- To be qualified, securing at least 70% Marks in technical evaluation is Mandatory.
- After evaluation/marking of bidders in technical evaluation process, financial bids of technically qualified bidders shall be only opened later on prior notice.
- DO NOT attach any information or portfolio which is not requested. Only provide the demanded information

21. FINANCIAL PROPOSAL

(On Company's Letterhead)

Ref No:		NTN:	
Date:	_	GST:	

Supply of IT Equipment

SN	Specification	Qty	Unit Price (GST Excl)	GST Amount (If any)	Unit Price (GST Incl)	Total Cost (GST Incl)
1	Form Factor: 2U rack. Processor: quad-core or Equivalent and Xeon® processor 5500 Series or Equivalent Processor Sockets: 2 Cache: Up to 12MB Chipset: Intel® 5520 Memory1: Minimum 128 GB, or equivalent I/O Slots: 2 PCle x8 + 2 PCle x4 Gen2 or 1 x16 + 2 x4 Gen2 RAID Controller: Internal Controllers: PERC H200 (6Gb/s) PERC H700 (6Gb/s) (nonvolatile battery-backed cache: 512MB, 1G) SAS 6/iR PERC 6/i (battery-backed cache: 256MB) RAID Controller: External Controllers: PERC H800 (6Gb/s) (non-volatile battery-backed cache: 512MB, 1G) PERC 6/E (battery-backed cache: 512MB, 1G) PERC 6/E (battery-backed cache: 256MB, 512MB) External HBAs (non-RAID): 6Gb/s SAS HBA SAS 5/E HBA LSI2032 PCle SCSI HBA Minimum Internal Storage: 10TB Hard Drives1: 2.5" SAS (10,000 rpm): 146GB, 300GB, 600GB 2.5" SAS (15,000 rpm): 73GB, 146GB 2.5" SATA II (7,200 rpm): 160GB, 250GB, 500GB, 1TB 2.5" nearline SAS (7,200 rpm): 500GB, 1TB 2.5" nearline SAS (7,200 rpm): 1TB 3.5" SATA (7,200 rpm): 250GB, 500GB, 1TB, 2TB, 4TB 3.5" SATA (5,400 rpm): 27B 3.5" SAS (10,000 rpm): 146GB, 300GB, 450GB, 600GB 3.5" nearline SAS (7,200 rpm): 500GB, 1TB, 2TB, 4TB 3.5" SAS (15,000 rpm): 146GB, 300GB, 450GB, 600GB 3.5" nearline SAS (7,200 rpm): 500GB, 1TB, 2TB, 4TB 2.5" SATA SSD: 50GB, 100GB 2.5" SAS SSD: 149GB Solid State Storage Cards: Fusion-io® 160IDSS—160GB ioDrive PCle solid state storage card Fusion-io® 640IDSS—640GB ioDrive Duo PCle solid state storage card. Communications: Four embedded Broadcom® NetXtreme II™ 5709C Gigabit Ethernet NICs with failover and load balancing; TOE (TCPIP Offload Engine) supported on Microsoft® Windows Server® 2003 SP1 or higher with Scalable Networking Pack;	1 No				

Video: Matrox® G200 with 8MB of cache Firewall: (Equivalent or above) IPS Throughput: 14 Gbps Threat Protection: 11 Gbps Interfaces: 1 x USB 1 x Console 2 x GE RJ45 MGMT 16 x GE RJ45 Ports 4 x 10E/10CE SFP+ 4 x 10GE SFP+ 8 x 1GE SFP Onboard Storage: 2 x 512 GBs SSD Firewall Throughput (Packets per second): 105 Mpps 2 Firewall Latency: 4 us to 2.5 us Concurrent Sessions (TCP): 8 million Firewall Policies: 30000 IPsec VPN Throughput: 55 Gbps Gateway-to-Gateway IPsec VPN Tunnels: 2000 Client-to-Gateway IPsec VPN Tunnels: 50 000 SSL-VPN Throughput: 3.6 Gbps SSL Inspection Concurrent Session:800 000 Application Control Throughput: 28 Gbps SSL Inspection Concurrent Session:800 000 Application Control Throughput: 28 Gbps AC Power Consumption (Maximum): 190 W AC Power Input: 100–240V Redundant Power Supplies: Yes	Optional 1GBe and 10GBe add-in NICs: Broadcom® NetXtreme II™ 57711 Dual Port Direct Attach 10Gb Ethernet PCI-Express Network Interface Card with TOE and iSCSI Offload, Intel® Gigabit ET Dual Port Server Adapter and Intel® Gigabit ET Quad Port Server Adapter Dual Port 10GB Enhanced Intel Ethernet Server Adapter X520-DA2 (FcoE Ready for Future Enablement) Optional add-in NICs: Brocade® CNA (1020) Dual Port Server Adapter Optional add in HBAs: Brocade® 8 GB HBAs Emulex® OCE10102-IX-DCNA iSCSI HBA stand-up adapter. Power Supply: Energy Smart: redundant hot-plug high-efficient 570W or High Output: redundant hot-plug 870W					
Total Cost (Inclusive of GST)	Firewall: (Equivalent or above) IPS Throughput: 14 Gbps Threat Protection: 11 Gbps Interfaces: 1 x USB 1 x Console 2 x GE RJ45 MGMT 16 x GE RJ45 Ports 4 x 1GE/10GE SFP+ 4 x 10GE SFP+ 8 x 1GE SFP Onboard Storage: 2 x 512 GBs SSD Firewall Throughput (Packets per second): 105 Mpps 2 Firewall Latency: 4 us to 2.5 us Concurrent Sessions (TCP): 8 million Firewall Policies: 30000 IPsec VPN Throughput: 55 Gbps Gateway-to-Gateway IPsec VPN Tunnels: 2000 Client-to-Gateway IPsec VPN Tunnels: 50 000 SSL-VPN Throughput: 3.6 Gbps SSL Inspection Throughput: 8 Gbps SSL Inspection Concurrent Session:800 000 Application Control Throughput: 28 Gbps AC Power Consumption (Maximum): 190 W AC Power Input: 100–240V	1 No	Take	I Coot (Incl)	sive of CST	

- The bid is submitted without any conditions.
- All the terms and conditions set forth by COMSATS University Islamabad in this tender are acceptable unconditionally, including **bid validity, delivery time & warranty.**

Name of Authorized Person:		
	- 13 -	Signature & Seal of the Bidder

Date:	
Signature	
Official Company Seal:	

22. Technical Compliance Performa

(On Company's Letterhead)

Ref No:	NTN:	
Date:	GST:	

Supply of IT Equipment

ON	Ourselfication	Brand Name	0	Non-	Higher if
SN	Specification	being offered	Compliance	Compliance	any
	Branded Server				
	Form Factor: 2U rack				
	Processor: quad-core or Equivalent and Xeon®				
	processor 5500 Series or Equivalent				
	Processor Sockets: 2				
	Cache: Up to 12MB				
	Chipset: Intel® 5520				
	Memory1: Minimum 128 GB, or equivalent				
	I/O Slots: 2 PCle x8 + 2 PCle x4 Gen2 or 1 x16 + 2				
	x4 Gen2				
	RAID Controller: Internal Controllers: PERC H200				
	(6Gb/s) PERC H700 (6Gb/s) (nonvolatile battery-				
01	backed cache: 512MB, 1G) SAS 6/iR PERC 6/i				
	(battery-backed cache: 256MB)				
	RAID Controller: External Controllers: PERC H800				
	(6Gb/s) (non-volatile battery-backed cache: 512MB,				
	1G) PERC 6/E (battery-backed cache: 256MB,				
	512MB) External HBAs (non-RAID): 6Gb/s SAS HBA				
	SAS 5/E HBA LSI2032 PCIe SCSI HBA				
	Minimum Internal Storage: 10TB				
	Hard Drives1: 2.5" SAS (10,000 rpm): 146GB,				
	300GB, 600GB 2.5" SAS (15,000 rpm): 73GB, 146GB				
	2.5" SATA II (7,200 rpm): 160GB, 250GB, 500GB,				
	1TB 2.5" nearline SAS (7,200 rpm): 500GB, 1TB 2.5"				
	nearline SAS (7,200 rpm): 1TB 3.5" SATA (7,200				

	rpm): 250GB, 500GB, 1TB, 2TB, 4TB 3.5" SATA
	(5,400 rpm): 2TB 3.5" 6Gps SAS (7,200 rpm): 2TB
	3.5" SAS (10,000 rpm): 146GB, 600GB, 3.5" SAS
	(15,000 rpm): 146GB, 300GB, 450GB, 600GB 3.5"
	nearline SAS (7,200 rpm): 500GB, 1TB, 2TB, 4TB
	2.5" SATA SSD: 50GB, 100GB 2.5" SAS SSD: 149GB
	Solid State Storage Cards: Fusion-io® 160IDSS—
	160GB ioDrive PCIe solid state storage card Fusion-
	io® 640IDSS—640GB ioDrive Duo PCle solid state
	storage card.
	Communications: Four embedded Broadcom®
	NetXtreme II™ 5709C Gigabit Ethernet NICs with
	failover and load balancing; TOE (TCPIP Offload
	Engine) supported on Microsoft® Windows Server®
	2003 SP1 or higher with Scalable Networking Pack;
	Optional 1GBe and 10GBe add-in NICs: Broadcom®
	NetXtreme II™ 57711 Dual Port Direct Attach 10Gb
	Ethernet PCI-Express Network Interface Card with
	TOE and iSCSI Offload, Intel® Gigabit ET Dual Port
	Server Adapter and Intel® Gigabit ET Quad Port
	Server Adapter Dual Port 10GB Enhanced Intel
	Ethernet Server Adapter X520-DA2 (FcoE Ready for
	Future Enablement) Optional add-in NICs: Brocade®
	CNA (1020) Dual Port Server Adapter Optional add in
	HBAs: Brocade® 8 GB HBAs Emulex® OCE10102-
	IX-DCNA iSCSI HBA stand-up adapter.
	Power Supply: Energy Smart: redundant hot-plug
	high-efficient 570W or High Output: redundant hot-
	plug 870W
	Video: Matrox® G200 with 8MB of cache
	Firewall
	IPS Throughput: 14 Gbps
	Threat Protection: 11 Gbps
	Interfaces:
02	1 x USB
	1 x Console
	2 x GE RJ45 MGMT
	16 x GE RJ45 Ports 4 x 1GE/10GE SFP+
	4 x 10GE SFP+

8 x 1GE SFP
Onboard Storage: 2 x 512 GBs SSD
Firewall Throughput (Packets per second): 105
Mpps
Firewall Latency: 4 us to 2.5 us
Concurrent Sessions (TCP): 8 million
Firewall Policies: 30000
IPsec VPN Throughput: 55 Gbps
Gateway-to-Gateway IPsec VPN Tunnels: 2000
Client-to-Gateway IPsec VPN Tunnels: 50 000
SSL-VPN Throughput: 3.6 Gbps
SSL Inspection Throughput: 8 Gbps
SSL Inspection Concurrent Session:800 000
Application Control Throughput: 28 Gbps
AC Power Consumption (Maximum): 190 W
AC Power Input: 100–240V
Redundant Power Supplies: Yes

- The bid is submitted without any conditions.
- All the terms and conditions set forth by COMSATS University Islamabad are acceptable unconditionally, including **bid validity**, **delivery time & warranty**.
- I understand that blank technical sheet / non-mentioning of Brand and Model shall make my bid non-responsive and may result rejection of my bid.

Name of Authorized Person:	
Date:	
Signature	
Official Company Seal:	