Tender

For

Layer 3 Access Switches

At

All India Institute of Medical Sciences, Jodhpur

NIT No.	:	Admn/Tender/57/2019-AIIMS.JDH
NIT Issue Date	:	06th November, 2019
Pre Bid Meeting	:	15th November, 2019 at 11.00 AM
Last Date of Online Submission	:	28th November, 2019 at 03.00 PM
Bid Opening Date	:	29th November, 2019 at 03.00 PM

Tender documents may be downloaded from web site www.aiimsjodhpur.edu.in, (for reference only) and CPPP site https://eprocure.gov.in/eprocure/app

All India Institute of Medical Sciences, Jodhpur

Basni Phase - II, Jodhpur – 342005, Rajasthan
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www.aiimsjodhpur.edu.in

ALL INDIA INSTITUTE OF MEDICAL SCIENCES, JODHPUR

NOTICE INVITING TENDER

01	Name of the Item	Layer 3 Access Switches
02	Tender No.	Admn/Tender/57/2019-AIIMS.JDH
03	Delivery period	30 days
04	Estimated Cost	Rs. 1,95,00,000 (Rupees One Crore Ninety Five Lakh Only)
05	Earnest money deposit	Rs. 3,90,000/- (Rupees Three Lakh Ninety Thousand Only)
06	Performance Security	@ 10% of Total Order Value
07	Tender documents Download from	www.aiimsjodhpur.edu.in https://eprocure.gov.in
08	Website for online submission	https://eprocure.gov.in/eprocure/app.
09	Pre-bid meeting	15th November, 2019 at 11:00 AM at AIIMS, Jodhpur
10	Last date and time for online submission	28th November, 2019 upto 03:00 PM on https://eprocure.gov.in/eprocure/app.
11	Date and time for Opening Bid	29th November, 2019 after 03:00 PM

All India Institute of Medical Sciences (AIIMS), Jodhpur, Rajasthan, an apex healthcare institute established by an Act of Parliament of India under aegis of Ministry of Health & Family Welfare, Government of India, invites **Online bids in two bid system** for Tender for Layer 3 Access Switches at AIIMS, Jodhpur. You are requested to quote your best offer along with the complete details of specifications, terms & conditions.

S. No.	Item Description	Qty.	Total Estimated value	EMD (in Rs.)
01.	Layer 3 Access Switches (24 Port)	67 Nos.	1,95,00,000	3,90,000
02.	Layer 3 Access Switches (48 Port)	42 Nos.		

(Refer Details as per Annexure – "I")

Instructions for the Tenderer/ Contractor/ Bidders:-

1. **Bids shall be submitted online only at CPPP website: https://eprocure.gov.in/eprocure/app.**

2. The complete bidding process in online. Bidders should be possession of valid digital Signature Certificate (DSC) of class II or III for online submission of bids. Prior to bidding DSC need to be registered on the website mentioned above. For any assistance for e-bidding process, if required, bidder may contact to the helpdesk at 0291-2740741.

3. **Tenderer/Contractor/Bidders are advised to follow the instructions provided in the 'Instructions to the Contractors/Tenderer/Bidders for the e-submission of the bids online through the Central Public Procurement Portal for e Procurement at https://eprocure.gov.in/eprocure/app'.**

4. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

5. **EMD Payment:**
   The bidder shall be required to submit the Earnest Money Deposit (EMD) for an amount of **Rs. 3,90,000/- (Rupees Three Lakh Ninety Thousand Only)** by way of demand drafts or Bank Guarantee only. The demand drafts or Bank Guarantee shall be drawn in favour of "**All India Institute of Medical Sciences, Jodhpur**". The EMD of the successful bidder shall be returned after the successful submission of Bank Guarantee/ Security Deposit and for unsuccessful bidder(s) it would be returned after award of the contract. **The demand drafts or Bank Guarantee for EMD must deliver to AIIMS, Jodhpur on or before last date/time of Bid Submission (submitted only in Dispatch/Received section).**

   a) Tenderer shall not be permitted to withdraw his offer or modify the terms and conditions thereof. In case the tenderer fail to observe and comply with stipulation made herein or backs out after quoting the rates, the aforesaid amount of earnest money will be forfeited.

b) The Firm who are registered with National Small Industries Corporation (NSIC) / OR Small Scale Industries (SSI) are exempted to submit the EMD (Copy of registration must be provide along with technical bid)

c) The EMD, in case of unsuccessful Bidders shall be retained by AIIMS, Jodhpur till the finalization of the tender. No interest will be payable by AIIMS, Jodhpur on the EMD.

6. **The Hard Copy of original instruments in respect of cost of earnest money deposit etc. must be delivered to the AIIMS, Jodhpur on or before last date/time of Bid Submission as mentioned above (submitted only in Dispatch/Received section). The bid without EMD will be summarily rejected.**

7. **Submission of Tender:**

The tender shall be submitted online in two part, viz., technical bid and financial bid (in attached BOQ in CPP portal). All the pages of bid being submitted must be signed and sequentially numbered by the bidder irrespective of nature of content of the documents before uploading.

The offers submitted by Telegram/Fax/email shall not be considered. No correspondence will be entertained in this matter.

I. **Technical Bid**

The following documents are to be furnished by the bidder along with **Technical Bid** as per the tender document:

a) Copy of constitution or legal status of the bidder manufacturer / Sole proprietorship / firm / agency etc.
b) **The technical bid should be accompanied by Demand draft of Rs. 3,90,000/- (Refundable) against EMD. The Demand Draft of EMD should be prepare separately and drawn in favour of All India Institute of Medical Sciences, Jodhpur.**
c) **Financial Status: -** Bidder must have an average annual turnover of **Rs. 2 Crore** during the last 3 financial years (Documentary proof like financial statement /Balance sheet from Chartered Accountant/ equivalent statutory authority to be submitted).
d) Copy of PAN Registration No.
e) Copy of GSTIN Registration Certificate.
f) Manufacturer Authorization Certificate must be attached by Bidder.
g) Copy of Income Tax Return Acknowledgement for last Three years.
h) Bidder shall submit a copy of the tender document and addenda thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the tender enquiry document.
i) Signed and Scanned copy of documents like Earnest Money Deposit.
j) Certificate as per given Annexures.
k) Duly Signed Tender document and their annexures.

II. **Financial Bid - Bidder must submitted the financial bid in attached BOQ in CPP Portal.**

General Term & Conditions

1. **"PRE –BID Meeting" with the intending bidders shall be held on 15th November, 2019 from 03:00 P.M. onwards at AIIMS, Jodhpur**. All the prospective bidders are requested to send comments/ representations on or before pre-bid meeting. Intending bidder will be allowed to seek clarification on specification, Conditions of Contract, etc. in writing to AIIMS, Jodhpur, within 48 hours after the pre-bid meeting.

2. **Rate:** Prices of individual items should be inclusive of all taxes and duties including, Customs Duty, Excise Duty, etc. It should also include packing, forwarding, transport, etc. GST/Other taxes shall be extra. Rate should be quoted only in Indian Rupees (INR) on DOOR Delivery Basis at AIIMS, Jodhpur, Rajasthan, Inclusive of all the Charges, with break-ups as:
   - Basic Cost.
   - GST/ Other taxes.
   - Total Cost (F.O.R. at AIIMS, Jodhpur).

   Note : No other charges would be payable by the Institute except mentioned in BOQ.

3. **Taxes:** Any taxes if payable should be clearly mentioned otherwise no taxes/charges will be paid by the Institute.

4. **Specification:** The Contractor must confirm in writing that the goods supplied & installed by them shall be as per specification of goods mentioned in Annexure – "I" and in case of any variation, the contract shall be liable to be cancelled immediately. The Security cum Performance Guarantee will also be forfeited.

5. **Validity:** The quoted rates must be valid for a period for 180 days from the date of closing of the tender. The overall offer for the assignment and bidder(s) quoted price shall remain unchanged during the period of validity. If the bidder quoted the validity shorter than the required period, the same will be treated as unresponsive and it may be rejected.

   In case the tenderer withdraws, modifies or change his offer during the validity period, bid is liable to be rejected and the earnest money deposit shall be forfeited without assigning any reason thereof. The tenderer should also be ready to extend the validity, if required, without changing any terms, conditions etc. of their original tender.

6. **Authority of person signing document:** A person signing the tender form or any documents forming part of the contract on behalf of another shall be deemed to warranty, that he has authority to bind such other and if, on enquiry, it appears that the person so, signing had no authority to do so, the AIIMS, Jodhpur may without prejudice to other Civil and criminal remedies cancel contract and held the signatory liable for all cost and damages.

7. **Delivery & Installation:** The firm must supply & install the required item within 30 days from the issue of supply order. All the aspects of safe delivery shall be the exclusive responsibility of the supplier.

   All the aspects of safe delivery, installation and commissioning shall be the exclusive responsibility of the supplier. If the supplier fails to deliver, install and commission the goods on or before the stipulated date, then a penalty at the rate of 0.5% per week or a part thereof of the total order value shall be levied subject to maximum of 10% of the total order value. The successful tenderer will also provide required training for supplied items at AIIMS Jodhpur.

8. **Performance Security:** The successful tenderer will be required to furnish a Performance Security Deposit of 10% of total order amount in the form of Fixed Deposit Receipt (FDR) or irrevocable Bank Guarantee (BG) from any Nationalized/ Scheduled Bank duly pledged in the name of the "**All India Institute of Medical Sciences, Jodhpur**". Performance Security will be discharged after 60 days from the date of successful delivery and installation of ordered material.

   The security deposit can be forfeited by order of this Institute in the event of any breach or negligence or non–observance of any condition of contract or for unsatisfactory performance or non–observance of any condition of the contract.

9. **Technical Evaluation:**
   (a) Detailed technical evaluation shall be carried out by Institute pursuant to conditions in the tender document to determine the substantial responsiveness of each tender. For this clause, the substantially responsive bid is one that conforms to all the eligibility and terms and condition of the tender without any deviation. The Institute's determination of bid's responsiveness is to be based on the contents of the bid itself without recourse to extrinsic evidence. The Institute shall evaluate the technical bids also to determine whether they are complete, whether required sureties have been furnished, whether the documents have been properly signed and whether the bids are in order.

   (b) AIIMS Jodhpur shall have right to accept or reject any or all tenders without assigning any reasons thereof.

10. **Financial Evaluation:**
    (a) The financial bid shall be opened of only those bidders who have been found to be technically eligible.

    (b) If, in the price structure quoted for the required goods, there is discrepancy between the unit price and total price (which is obtained by multiplying the unit price by the quantity), the unit price shall prevail and the total price corrected accordingly.

    (c) If there is a discrepancy between words and figures, the amount in words shall prevail.

(d) Bidder must quote for all the items otherwise bid will be treated as unresponsive and will be rejected. Further, the financial evaluation would be done on composite basis and AIIMS, Jodhpur will award the contract accordingly.

(e) After due evaluation of the bid(s) AIIMS, Jodhpur will award the contract to the lowest evaluated responsive tenderer on individual basis. Conditional bid will be treated as unresponsive and will be rejected.

(f) Bidder must quote the financial bid as specified in BOQ.

11. **Award of Contract:** The Institute shall consider placement of orders for jobs on those bidders whose offers have been found technical and financially acceptable. The Institute reserves the right to counter offer price(s) against price(s) quoted by any bidder.

12. **Right of acceptance:** The AIIMS, Jodhpur reserve the right to accepting the whole or any part or portion of the bid; and the bidder shall provide the same at the rates quoted. The AIIMS Jodhpur reserve the right to reject any or all tenders /quotations or all offers received in response to the tender or cancel or withdraw the tender notice without assigning any reason thereof and also does not bind itself to accept the lowest quotation or any tender and no claim in this regard shall be entertained.

13. **Guarantee / Warrantee Period:** Bidder must provide Five (05) year comprehensive on-site warranty and it will be started from the date of the satisfactory installation / commissioning of goods, against the defect of any manufacturing, workmanship and poor quality of the components. No offer of the bidder will be accepted without warranty/ guarantee of their supplied/ installed goods.

14. **Inspection:**

(a) AIIMS, Jodhpur shall have the right to inspect and/or to test the goods to confirm their conformity to the NIT Specifications at no extra cost to the Purchaser.

(b) AIIMS, Jodhpur right to inspect, test and, where necessary, reject the Goods after the goods arrival at the final destination shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by AIIMS, Jodhpur prior to the goods shipment.

(c) The Director, AIIMS Jodhpur shall be the final authority to reject full or any part of the supply which is not confirming to the specification and other terms and conditions.

(d) No payment shall be made for rejected Stores. Rejected items must be removed by the Bidders within two weeks of the date of rejection at their own cost and replaced immediately. In case these are not removed, these will be auctioned at the risk and responsibility of the suppliers without any further notice.

15. **Payment Term:** The Bill in triplicate may be send to this office for settlement after satisfactorily delivery & installation/ commissioning of the material. The bill should have full particulars of the items. No Payment shall be made in advance nor shall the loan from any or financial institutions be recommended on the basis of the order of award of work. The Contractor shall submit the bill only after supply & installation/ commissioning of the material to the satisfaction of the AIIMS Jodhpur. The case of issuing sanction and passing of bill for payment will be initiated on receipt of a pre-receipted invoice from the Contractor. No payment will be made for goods rejected.

16. **Specification:** Bids which are not meeting the bid specifications are not permitted and will be rejected.

17. **Arbitration:** If any difference arises concerning this agreement, its interpretation on payment to the made there-under, the same shall be settled out by mutual consultation and negotiation. If attempts for conciliation do not yield any result within a period of 30 days, either of the parties may make a request to the other party for submission of the dispute for decision by an Arbitral Tribunal containing Sole Arbitrator to be appointed by the Secretary, Department of Legal Affairs. Such requests shall be accompanied with a panel of names of three persons to act as the sole arbitrator. In case of such arbitrator refusing, unwilling or becoming incapable to act or his mandate having been terminated under law, another arbitrator shall be appointed in the same manner from among the panel of three persons to be submitted by the claimant. The provision of Arbitration and Conciliation Act, 1990 and the rule framed there under and in force shall be applicable to such proceedings.

18. **Breach of Terms and Conditions:** In Case of breach of any terms and conditions as mentioned above, the Competent Authority, will have the right to reject the bid at any stage without assigning any reason thereof and nothing will be payable by AIIMS, Jodhpur in that event the EMD shall also stands forfeited.

19. **Subletting of Work:** The firm shall not assign or sublet the work/job or any part of it to any other person or party without having first obtained permission in writing of AIIMS, Jodhpur, which will be at liberty to refuse if thinks fit. The tender is not transferable. Only one tender shall be submitted by one tenderer.

20. **Insolvency etc:** In the event of the firm being adjudged insolvent or having receiver appointed for it by a court or any other order under the Insolvency Act made against them or in the case of a company the passing any resolution or making of any order for winding up, whether voluntary or otherwise, or in the event of the firm failing to comply with any of the conditions herein specified AIIMS, Jodhpur shall have the power to terminate the contract without any prior notice.

21. The Purchase Committee will reject the quotations of the bidders whose quotation will not found of quality required by AIIMS, Jodhpur. AIIMS, Jodhpur reserves the right to accept/ reject any quotation either in part or full without assigning any reason thereof, or award the contract to different supplier(s), for different item(s), if feasible after considering the credentials, manufacturing, capability, quality and distribution rights of the item(s). The firm are, therefore, requested to attach their credentials in regard to supply of items and experience in the field, distribution rights and their annual turnover.

22. The quantity of item given in the tender is tentative, which may be increased or decreased as per the institute's requirement.

23. The Tenderers should furnish a copy of PAN Card and GSTIN registration number. Tenders not complying with this condition will be rejected.

24. Signed & stamped compliance sheet of the technical specification of the goods with technical printed literature must be enclosed with the bid.

25. After due evaluation of the bid(s) Institute will award the contract to the lowest evaluated responsive tenderer.

26. Conditional bid will be treated as unresponsive and it may be rejected.

27. The Income Tax/ Any other Taxes as applicable shall be deducted from the bill unless exempted by the Income-tax department.

28. GST/Other taxes if payable extra should be clearly mentioned otherwise no GST /Other taxes charges will be paid.

29. The items will have to be supplied at AIIMS, Jodhpur. No transportation/ cartage charges will be provided for the same.

30. Bidder shall submit a copy of the tender document and addendum/corrigendum thereto, if any, with each page of this document should be signed and stamped to confirm the acceptance of the entire terms & conditions as mentioned in the tender enquiry document.

31. The Institute reserves the right to accept in part or in full or reject any or more tender(s) without assigning any reasons or cancel the tendering process and reject all tender(s) at any time prior to award of contract, without incurring any liability, whatsoever to the affected bidder or bidder(s).

32. The AIIMS, Jodhpur reserve the right to accepting the whole or any part or portion of the bid; and the bidder shall provide the same at the rates quoted. The AIIMS Jodhpur reserve

the right to reject any or all tenders /quotations or all offers received in response to the tender or cancel or withdraw the tender notice without assigning any reason thereof and also does not bind itself to accept the lowest quotation or any tender and no claim in this regard shall be entertained.

33. **Applicable Law:**

- The contract shall be governed by laws and procedures established by Govt. of India, within the framework of applicable legislation and enactment made from time to time concerning such commercial dealings/ processing.

- Any disputes are subject to exclusive jurisdiction of competent court and forum in Jodhpur, Rajasthan, India only

- The Arbitration shall be held in accordance with the provision of the Arbitration and conciliations Act, 1996 and the venue of arbitration shall be at Jodhpur. The decision of the Arbitrator shall be final and binding on the both parties.

- Force Majeure: Any delay due to Force Majeure will not be attributable to the supplier.

Administrative Officer
AIIMS, Jodhpur

Annexure – I

Technical Specifications for Network Switch 48 ports			
Sr. No.	**Technical Specifications**	**Compliance (Yes/No)**	**Remarks**
1	**Architecture**		
1.1	The switch should have 48 100/1000 Base-TX, auto-negotiating and auto sensing, Non POE+ ports.		
1.2	The switch should have at least 4x 10G SFP+ uplink ports in addition to the above ports. It should be supplied with 4x 10G SR SFP+		
1.3	The switch should have at-least one RJ-45 (with RS232 signaling)/USB 2.0 port for OS management (uploading, downloading and configuration).		
1.4	The switch should be rack mountable and should not take space more than 1 Rack Unit (RU).		
1.5	The switch architecture should be stackable with at-least 9 switches in a single stack, using additional stacking port. Stacking module, cable to be included.		
1.6	The switch Stack Architecture should allow the end user to stack 24 Port switch with 48 Port of the same model/family offering POE/POE+ and Non-POE models.		
2	**Performance**		
2.1	The switch should have at-least 2 GB Flash and usb slot, and 2 Gbps of SDRAM.		
2.2	The switch should support Jumbo Frames of at-least 9198 bytes.		
2.3	The switch should support at-least 190 Gbps of switching bandwidth.		
2.4	The switch should have at-least 150 Mpps of forwarding rate.		
2.5	The switch should support at-least 40 Gbps dedicated stacking bandwidth using dedicated stacking ports, stacking modules and cables to be included.		
2.6	The switch should support at-least 4000 Active VLAN ID's.		
2.7	The switch should support at-least 16000 MAC Addresses.		
3	**Layer 2 and Layer 3 Features**		
3.1	The switch should be able to discover (on both IPv4 & IPv6 Network) the neighboring device giving the details about the platform, IP Address, MAC address etc. and should be able to detect duplicate IP address.		
3.2	The switch hardware should be able to run both IPv4 & IPv6 simultaneously.		
3.3	The switch should support OpenFlow 1.3 capabilities to enable software-defined networking (SDN).		
3.4	The switch should have the capability to monitor link connectivity and shut down ports at both ends if uni-directional traffic is detected, preventing loops.		
3.5	The switch should support Link Aggregation Control Protocol (LACP) to allow creation of Ethernet channeling.		
3.6	The switch should support Internet Group Management Protocol (IGMP) snooping for IPv4 and IPv6.		
3.7	The switch should support Per-Port Broadcast, Multicast, and Unicast Storm Control.		
3.8	The switch should support Voice VLAN, Port based, Private, Dynamic VLans		
3.9	The switch should support Remote Switched Port Analyzer (RSPAN) or equivalent.		

3.10	The switch should support Bridge protocol data unit (BPDU) Guard, Root Guard or equivalent.		
3.11	The switch should support link redundancy & link load-balancing feature.		
3.12	The switch should support Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP).		
3.13	The switch should support Link Layer Discovery Protocol (LLDP).		
3.14	The switch should support Dynamic Host Configuration Protocol (DHCP) Support at Layer 2.		
3.15	The switch should have static routing, RIP v1/v2, RIPng, from day 1		
4	**Network Security Features**		
4.1	The switch should support port security to secure the access to a trunk/access port based on MAC address.		
4.2	The switch should support Dynamic ARP inspection to ensure user integrity by preventing malicious users from exploiting the insecure nature of ARP.		
4.3	The switch should support IP source guard to prevent a malicious user from spoofing or taking over another user's IP address by creating a binding table between the client's IP and MAC address, port, and VLAN.		
4.4	The switch should support downloadable Standard ACL, Extended ACL and Time based ACL.		
4.5	The switch should support Access Control List (ACL) on all VLANs preventing unauthorized data flows from being bridged within VLANs.		
4.6	The switch should support IPv6 ACLs that can be applied to filter IPv6 traffic.		
4.7	The switch should support Port-based ACLs for Layer 2 interfaces to allow security policies to be applied on individual switch ports.		
4.8	The ACL should be able to configure and Manage Access control, Define Filters and re-sequence data flow and patterns, Traffic management, Route Distribution, QoS, Cos, Policy Maps, Policy based routing, Logging and flow based monitoring for IPv4 and IPv6 packets.		
4.9	The switch should support authentication feature like Terminal Access Controller Access Control System (TACACS) and/or Remote Authentication Dial-In User Service (RADIUS) or equivalent to facilitate centralized control of the switch and to restrict unauthorized users from altering the configuration.		
4.10	The switch should support Multi level security on console access to prevent unauthorized users from altering the switch configuration.		
4.11	The switch should support Dynamic VLAN, Multi-Authentication VLAN Assignment and MAC Based Filtering.		
4.12	The switch should support port security, DHCP snooping and IP source guard.		
4.13	The switch should support flexible multiple authentication using 802.1x and MAC Authentication bypass.		
5	**Quality of Service**		
5.1	The switch should support Class of Service (CoS) and differentiated services code point (DSCP) field classification.		
5.2	The switch should support at-least eight egress queues per port.		
5.3	The switch should support Rate Limiting.		
6	**Manageability**		
6.1	The switch should allow administrators to remotely monitor ports in a Layer 2 switch network from any other switch in the same network.		

6.2	The switch should support Remote Monitoring on every port covering the following four groups (Statistics, Alarm, Event, and History).		
6.3	The switch should support sFlow or equivalent.		
6.4	The switch should provide Embedded Remote Monitoring (RMON) software agent supporting four RMON groups (History, Statistics, Alarms and Events) for enhanced traffic management, monitoring, and analysis Web browser setup utility allows one-click initialization for IP addresses and passwords.		
6.5	The switch should provide Auto-configuration for ease of deployment of switches in the network by automatically configuring multiple switches across a network via a boot server/DHCP server or external management server.		
6.6	The switch should have Auto-sensing on each non GBIC port detects the speed of the attached device and automatically configures the port for 100/1000 Mbps operation, easing the deployment of the switch in mixed 100/1000 BaseT environments.		
6.7	The switch stack architecture should have centralized control and management with non-stop forwarding feature.		
6.8	The switch should support four RMON groups (history, statistics, alarms, and events).		
6.9	The switch should support Network Assistant software for network management application.		
6.10	The switch should support SNMPv1, v2c, and v3.		
7	**Standards and Compliance**		
7.1	The switch should be compliant with IEEE compliance: IEEE 802.1W (RSTP), IEEE 802.1S (MSTP), IEEE 802.1D (Bridging, STP), IEEE 802.1P (L2 Prioritization), IEEE 802.1Q (VLAN Tagging, Double VLAN Tagging, GVRP), IEEE 802.1ab (LLDP), IEEE 802.3 (10 BASE-T specification), IEEE 802.3X (Flow Control), IEEE 802.3ab (Gigabit Ethernet (1000BASE-T) with QSA or breakout), IEEE 802.3ad (Link Aggregation with LACP), IEEE 802.3u (Fast Ethernet (100Base-TX) on mgmt ports), IEEE 802.3x (Flow Control), IEEE 802.3z (Gigabit Ethernet (1000Base- X) with QSA), RMON I and II, SNMP v1, SNMP v2c, and SNMP v3. Safety compliance: UL/EN/IEC/CAN/CSA-C22.2 60950-1 60950-1 (Information Technology Equipment - Safety - Part 1: General Requirements), EN 60825-1 (Safety of Laser Products Part 1: Equipment Classification Requirements and User's Guide), EN 60825-2 (Safety of Laser Products-Part 2: Safety of Optical Fibre Communication Systems), RoHS Compliance. EMI and EMC Compliance: FCC (CFR 47, Part 15) Class A, ICES-003 Class A, EN 55022 Class A, VCCI Class A, EN 61000-3-2 (Harmonic Current Emissions), EN 61000-3-3 (Voltage Fluctuations and Flicker), EN61000-4-2 (ESD), EN61000-4-3 (Radiated Immunity), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (Low Frequency Conducted Immunity).		
7.2	Switch shall have common criterion NDPP certification		

Technical Specifications for Network Switch 24 ports			
Sr. No	**Technical Specification**	**Compliance (Yes/No)**	**Remark**
1	**Architecture**		
1.1	The switch should have 24 100/1000 Base-TX, auto-negotiating and auto sensing non POE+ ports.		
1.2	The switch should have at least 4x 10G SFP+ uplink ports in addition to the above ports. It should be supplied with 4x 10G SR SFP+		
1.3	The switch should have at-least one RJ-45 (with RS232 signaling)/USB 2.0 port for OS management (uploading, downloading and configuration).		
1.4	The switch should be rack mountable and should not take space more than 1 Rack Unit (RU).		
1.5	The switch architecture should be stackable with at-least 9 switches in a single stack, using additional stacking port. Stacking module, cable to be included.		
1.6	The switch Stack Architecture should allow the end user to stack 24 Port switch with 48 Port of the same model/family offering POE/POE+ and Non-POE models.		
2	**Performance**		
2.1	The switch should have at-least 2 GB Flash and usb slot, and 2 Gbps of SDRAM.		
2.2	The switch should support Jumbo Frames of at-least 9198 bytes.		
2.3	The switch should support at-least 150 Gbps of switching bandwidth.		
2.4	The switch should have at-least 105 Mpps of forwarding rate.		
2.5	The switch should support at-least 40 Gbps dedicated stacking bandwidth using dedicated stacking ports, stacking modules and cables to be included.		
2.6	The switch should support at-least 4000 Active VLAN ID's.		
2.7	The switch should support at-least 16000 MAC Addresses.		
3	**Layer 2 and Layer 3 Features**		
3.1	The switch should be able to discover (on both IPv4 & IPv6 Network) the neighboring device giving the details about the platform, IP Address, MAC address etc. and should be able to detect duplicate IP address.		
3.2	The switch hardware should be able to run both IPv4 & IPv6 simultaneously.		
3.3	The switch should support OpenFlow 1.3 capabilities to enable software-defined networking (SDN).		
3.4	The switch should have the capability to monitor link connectivity and shut down ports at both ends if uni-directional traffic is detected, preventing loops.		
3.5	The switch should support Link Aggregation Control Protocol (LACP) to allow creation of Ethernet channeling.		
3.6	The switch should support Internet Group Management Protocol (IGMP) snooping for IPv4 and IPv6.		
3.7	The switch should support Per-Port Broadcast, Multicast, and Unicast Storm Control.		
3.8	The switch should support Voice VLAN, Port based, Private, Dynamic Vlans		
3.9	The switch should support Remote Switched Port Analyzer (RSPAN) or equivalent.		

3.10	The switch should support Bridge protocol data unit (BPDU) Guard, Root Guard or equivalent.		
3.11	The switch should support link redundancy & link load-balancing feature.		
3.12	The switch should support Spanning Tree Protocol (STP), Rapid Spanning Tree Protocol (RSTP) and Multiple Spanning Tree Protocol (MSTP).		
3.13	The switch should support Link Layer Discovery Protocol (LLDP).		
3.14	The switch should support Dynamic Host Configuration Protocol (DHCP) support at Layer 2.		
3.15	The switch should static routing, RIP v1/v2, RIPng, from day 1		
4	**Network Security Features**		
4.1	The switch should support port security to secure the access to a trunk/access port based on MAC address.		
4.2	The switch should support Dynamic ARP inspection to ensure user integrity by preventing malicious users from exploiting the insecure nature of ARP.		
4.3	The switch should support IP source guard to prevent a malicious user from spoofing or taking over another user's IP address by creating a binding table between the client's IP and MAC address, port, and VLAN.		
4.4	The switch should support downloadable Standard ACL, Extended ACL and Time based ACL.		
4.5	The switch should support Access Control List (ACL) on all VLANs preventing unauthorized data flows from being bridged within VLANs.		
4.6	The switch should support IPv6 ACLs that can be applied to filter IPv6 traffic.		
4.7	The switch should support Port-based ACLs for Layer 2 interfaces to allow security policies to be applied on individual switch ports.		
4.8	The ACL should be able to configure and Manage Access control, Define Filters and re-sequence data flow and patterns, Traffic management, Route Distribution, Qos, Cos, Policy Maps, Policy based routing, Logging and flow based monitoring for IPv4 and IPv6 packets.		
4.9	The switch should support authentication feature like Terminal Access Controller Access Control System (TACACS) and/or Remote Authentication Dial-In User Service (RADIUS) or equivalent to facilitate centralized control of the switch and to restrict unauthorized users from altering the configuration.		
4.10	The switch should support Multi level security on console access to prevent unauthorized users from altering the switch configuration.		
4.11	The switch should support Dynamic VLAN, Multi-Auth VLAN Assignment and MAC Based Filtering.		
4.12	The switch should support port security, DHCP snooping and IP source guard.		
4.13	The switch should support flexible multiple authentication using 802.1x and MAC Authentication bypass.		
5	**Quality of Service**		
5.1	The switch should support Class of Service (CoS) and differentiated services code point (DSCP) field classification.		
5.2	The switch should support at-least eight egress queues per port.		
5.3	The switch should support Rate Limiting.		
6	**Manageability**		
6.1	The switch should allow administrators to remotely monitor ports in a Layer 2 switch network from any other switch in the same network.		

6.2	The switch should support Remote Monitoring on every port covering the following four groups (Statistics, Alarm, Event, and History).		
6.3	The switch should support sFlow or equivalent.		
6.4	The switch should provide Embedded Remote Monitoring (RMON) software agent supporting four RMON groups (History, Statistics, Alarms and Events) for enhanced traffic management, monitoring, and analysis Web browser setup utility allows one-click initialization for IP addresses and passwords.		
6.5	The switch should provide Auto-configuration for ease of deployment of switches in the network by automatically configuring multiple switches across a network via a boot server/DHCP server or external management server.		
6.6	The switch should have Auto-sensing on each non GBIC port detects the speed of the attached device and automatically configures the port for 100/1000 Mbps operation, easing the deployment of the switch in mixed 100/1000 BaseT environments.		
6.7	The switch stack architecture should have centralized control and management with non-stop forwarding feature.		
6.8	The switch should support four RMON groups (history, statistics, alarms, and events).		
6.9	The switch should support Network Assistant software for network management application.		
6.10	The switch should support SNMPv1, v2c, and v3.		
7	**Standards and Compliance**		
7.1	The switch should be compliant with IEEE compliance: IEEE 802.1W (RSTP), IEEE 802.1S (MSTP), IEEE 802.1D (Bridging, STP), IEEE 802.1P (L2 Prioritization), IEEE 802.1Q (VLAN Tagging, Double VLAN Tagging, GVRP), IEEE 802.1ab (LLDP), IEEE 802.3 (10 BASE-T specification), IEEE 802.3X (Flow Control), IEEE 802.3ab (Gigabit Ethernet (1000BASE-T) with QSA or breakout), IEEE 802.3ad (Link Aggregation with LACP), IEEE 802.3u (Fast Ethernet (100Base-TX) on mgmt ports), IEEE 802.3x (Flow Control), IEEE 802.3z (Gigabit Ethernet (1000Base- X) with QSA), RMON I and II, SNMP v1, SNMP v2c, and SNMP v3. Safety compliance: UL/EN/IEC/CAN/CSA-C22.2 60950-1 60950-1 (Information Technology Equipment - Safety - Part 1: General Requirements), EN 60825-1 (Safety of Laser Products Part 1: Equipment Classification Requirements and User's Guide), EN 60825-2 (Safety of Laser Products-Part 2: Safety of Optical Fibre Communication Systems), RoHS Compliance. EMI and EMC Compliance: FCC (CFR 47, Part 15) Class A, ICES-003 Class A, EN 55022 Class A, VCCI Class A, EN 61000-3-2 (Harmonic Current Emissions), EN 61000-3-3 (Voltage Fluctuations and Flicker), EN61000-4-2 (ESD), EN61000-4-3 (Radiated Immunity), EN61000-4-4 (EFT), EN61000-4-5 (Surge), EN61000-4-6 (Low Frequency Conducted Immunity).		
7.2	Switch shall have common criterion NDPP certification		

Administrative Officer
AIIMS, Jodhpur

Annexure-II

(In Separate sealed cover-I super scribed "Technical Bid")

S.No.	Details of the Tenderer/Bidder	Page No.	Remarks
1	Name and Address of the Tenderer/Bidder		
2	Complete Address:		
3	State clearly whether it is sole proprietor or Partnership firm or a company or a Government Department or a Public Sector Organization		
4	Details of the Earnest Money Deposit (EMD) (Yes/No) DD No: Dated: Drawn on Bank: Amount: (Rupees……)		
5	Copy of ITR for last three year		
6	Authenticated balance sheet for the past three years enclosed		
7	Manufacturer Authorization Certificate		
8	Copy of GSTIN Registration		
9	Copy of PAN No.		
10	Certificate as per given annexure		
11	Manufacturer Authorization Certificate		
12	Email ID		
13	Contact No.		

Date: Name :

Place: Business Address :

Signature of Bidder :

Seal of the Bidder :

Annexure - III

CERTIFICATE

(To be submitted on letter head of the company/ firm)

I hereby certify that the above firm has not been ever blacklisted by any Central/State Government/Public Undertaking/Institute on any account.

I also certify that the above information is true and correct in any every respect and in any case at a later date it is found that any details provided above are incorrect, any contract given to the above firm may be summarily terminated and the firm blacklisted.

I also certify that firm will be supplied the item as per the specification given by institution and also abide all the terms & conditions stipulated in tender

Date:

Place:

Name :

Business Address :

Signature of Bidder :

Seal of the Bidder :

Annexure – IV

Quantity

S. No.	Item Description	Qty.	Specifications
01.	Layer 3 Access Switches (24 Port)	67 Nos.	As per Annexure – 1
02.	Layer 3 Access Switches (48 Port)	42 Nos.	

Administrative Officer
AIIMS, Jodhpur

Annexure – V

TENDER ACCEPTANCE CERTIFICATE

(To be given on company letter head)

1. I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' form the website(s) namely: - Tender for Layer 3 Access Switches at AIIMS, Jodhpur.

2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents (including all documents like annexure(s), schedule(s), etc.) which from part of the contract agreement and I/we shall abide hereby the terms/conditions/clauses contained therein.

3. The corrigendum(s) issued from time to time by your Institute too have all been taken into consideration, while submitting this acceptance letter.

4. I/we hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in it's totally/entirely.

5. In case any provision of this tender are found violated, then your Institute shall without prejudice to any other right or remedy be at liberty to reject this tender/bid including the forfeiture of the full said earnest money deposit absolutely.

Date: Name :

Place: Business Address :

Signature of Bidder :

Seal of the Bidder :