No.	802/Purchase Office/CC/SVBH WiFi Extensior	2016 Date: 18/11/2016
Fax GR	ephone : 91-532-227+1056, 1057	els hy hy ug: jkVh, iš likch l Hihu by lglch) इलाहाबाद—211004 (भारत) Motilal Nehru National Institute of Technology Allahabad Allahabad-211004 (India) An Institute of National Importance as Declared by NIT Act, GOI, 2007
I	NVITATION FOR SUPPLY & INSTALL	TION OF EQUIPMENTS FOR WIFI EXTENSION
1	Closing Date/Time for submission of Quotat	
2 3	Opening Date/Time of Quotations Quotations to be submitted at	09/12/2016; 4:00 Hrs. The Office of Faculty-In-charge (Purchase) M.N.N.I.T. Allahabad, Allahabad-211 004 (U.P.)
4	Place of opening of quotations	The Office of Faculty-In-charge (Purchase) M.N.N.I.T. Allahabad, Allahabad-211 004 (U.P.)
5	Tender Fee	Rs. 200.00 (Non-refundable), in form of a Demand Draft drawn in favor of DIRECTOR, MNNIT Allahabad.
6	Earnest Money Deposit (EMD)	Rs. 59,000/- (Rs. In words Fifty Nine Thousand only), in form of FDR/Bank guarantee, from any of the Commercial Banks, drawn in favour of "Director, MNNIT Allahabad" payable at Allahabad, and valid for a period of 45 days beyond the final bid validity period

To,

Dear Sir

You are invited to submit your most competitive quotation for the following goods/equipments. The quotation should be sent directly to the undersigned under Sealed Cover marked "Quotation Reference No., Date", and "The Due Date:

SI. No.	Brief Description of the Goods	Quantity	Place Of Delivery	Installation Requirement
	LAN Component			
1.	Supply of Rack mountable manageable Layer 2 Access Switch with 24-port 10/100/1000 Mbps ports and having an option of atleast 4 SFP-based Gigabit Ethernet ports in addition to the Copper Ports (Cisco WS-C2960X TS-L or equivalent) with three years of Comprehensive Warranty.	07 Nos.		
2.	1000BASE-T SFP transceiver module compatible with Cisco WS2960X TS-L (Cisco GLC-TSFP)	01 No.		
	Access Points Component			
3.	Supply, Installation and Configuration of Access Points with IEEE 802.11ac, 802.11n, 802.11g, 802.11b, 802.3af, 802.3u, 802.1X (security authentication), 802.1Q (VLAN), 802.1D (Spanning Tree), 802.11i (WPA2 security), 802.11e (wireless Qos), IPv4 (RFC 791), 1 Pv6 (RFC 2460) (CISCO WAP 150 or equivalent), With three year comprehensive warranty.	64 Nos.		
4.	UTP Components			
	1 Supply of CAT 6 UTP cable.	6000 Mts	MNNIT	
	2 Supply of Information Outlet Box with termination, complete in all respect. (I/O with Faceplate)	64 Nos	Allahabad	YES
	3 Supply of 6U Rack.	07 Nos.		
	4 Supply and Installation of Patch Cord 3' UTP CAT6.	64 Nos		
	5 Supply and Installation of Cable Manager.	07 Nos.		
	6 Supply, Installation and Punching of 24 ports Patch Panel Cat6 with proper ferruling.	07 Nos.		
	7 Supply and Crimping of RJ 45 connector.	50 Nos		
5.	Others			
	 Cabling/Wiring of Internet point with CAT 6 Internet cable (AMP) in 1" PVC (ISI Mark) conduit/ Casing-Capping with fixing, termination and pulling etc. Termination of UTP cable at I/O end. Ferruling/ numbering of cable at both ends. Complete in all respect (Payment as per actual) 	6000 Mts		
	2 Installation and Mounting of 6U Rack.	07 Nos.		
	(Detailed Specification attached at 'Annexure-B')			

The sealed tenders must be submitted in the Office of the Faculty In-charge (Purchase), on or before **due date & time as mentioned above** in the office of the undersigned, in the presence of bidder's authorized representatives, who choose to attend and shall sign a register evidencing their attendance.

The tender/quotations NOT submitted in the prescribed format or Incomplete in any respect will be outrightly rejected.

Bid Price

GENERAL TERMS & CONDITION (GCC)

- (a) The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and rewriting.
- (b) All duties, taxes and other levies payable by the contractor under the contract shall be included in the total price.
- (c) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
- (d) The prices should be quoted in Indian Rupees only for indigenous items. For imported items/Equipments, the prices should be quoted in foreign currency.
- (e) Each bidder shall submit only one quotation.

2. Validity of Quotation

Quotation shall remain valid for a period not less than **120 days** after the deadline date specified for submission.

3. Evaluation of Quotations

- (a) The purchaser will evaluate and compare the quotations determined to be substantially responsive, i.e., which (i) are properly signed; and
 - (ii) conform to the terms and conditions, and specifications.
 - (iii) will be with tender fees, and EMD required, if any.
- (b) The Quotations would be evaluated separately for each item.

4. Award of Contract

The Purchaser will award the contract to the bidder whose quotation has been determined to be substantially responsive and who has offered the lowest evaluated quotation price.

- Notwithstanding the above, the Purchaser reserves the right to accept or reject any quotations and to cancel the bidding process and reject all quotations at any time prior to the award of contract.
- The bidder whose bid is accepted will be notified for the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order if falls under Govt. purchase rules, i.e., GFR-2005

5. Formats and Signing of Bid

- Each & every pages of the submitted bid must carry the page numbers.
- The bidders are not allowed to make additional and alteration in the tender document, any additions and alteration in the tender document, any additions and alterations shall be at bidder's risk. Conditional/modified tender are liable to be rejected.
- The tender/quotations NOT submitted in the prescribed format or Incomplete in any respect will be outrightly rejected.
- If the bid submitted without compliance sheet details of equipments the bid will be outrightly rejected.
- The bid shall be typed or written in indelible ink and shall be signed by the Bidder/Tenderer or a person or persons duly authorized to bind the Bidder/Tenderer to the Contract. All pages of the bid, except for unamended printed literature, shall be initialed by the person or persons signing the bid.
- Any interlineations, erasure or overwriting shall be valid only if they are initiated by the persons or persons signing the bid.
- The Bidder shall furnish information as described in the Form of Bid on commissions or gratuities, if any, paid or to be paid to agents relating to this Bid, and to contract execution if the Bidder is awarded the contract.
- 6. <u>Payment condition:</u> 100% Payment shall be made only after satisfactory delivery and installation of the goods. Advance payment is not permitted.
- 7. Normal Commercial warranty/ guarantee shall be applicable to the supplied goods.
- 8. Payment will be cleared through e-payment mode (Format of e-payment form given at Annexure-D)

INSTRUCTIONS/GUIDELINES TO BIDDERS (ITB)

- 1. Bidders who had supplied the Government departments, PSUs/NITs/IITs/IIITs and reputed Institutions and Organizations should only apply.
- 2. The bidder should enclose the cliental list with contact address along with Phone/Fax for reference, for the quoted item.
- 3. Please quote the prices of F.O.R. Motilal Nehru National Institute of Technology Allahabad, Allahabad.
- 4. The Bidders are requested to submit their Quotation with EMD in the form of Demand Draft/ Bank Guarantee/ Short term Deposit of the cost of equipments/items in favor of "The Director, MNNIT, Allahabad" payable at Allahabad. Quotation without EMD will be summarily rejected. EMD's of all Bidders will be returned back after the purchase order /contract agreement is issued to successful bidder.
- 5. Successful Bidders must have to submit the performance security @10% of the purchase order or contract value and it will be retained up to the warranty period.
- 6. The bidder should enclose relevant documents wherever necessary to substantiate his eligibility.
- 7. The Institute is eligible for and can provide necessary documentation for Custom/Excise and Octroi exemption on demand, if permitted under rule.
- 8. Motilal Nehru National Institute of Technology Allahabad, Allahabad, reserves the right to reject, accept any or whole or part of any of the tender without assigning any reason thereof and no claim will be heard. In case of dispute, the decision of The Director, MNNIT, and Allahabad will be final and binding.
- 9. If the successful bidder is not able to supply the goods items within the delivery date specified in the purchase order, the purchase order will be automatically treated as cancelled after expiry of delivery date period. The vendor will have to submit an undertaking in this regard that this condition is acceptable to him. In case of extra ordinary circumstances the vendors must send a request for extension of validity of purchase orders, with proper justification prior to the expiry of validity date for consideration.
- 10. In case of sophisticated equipments, an on-site training needs to be provided with no extra cost.
- 11. The quotation must be accompanied by leaflets/operation manuals/books etc.
- 12. Wherever applicable the vendors must quote the branded /desired items.

CHECK LIST (ON THE LETTER HEAD OF THE BIDDER)

The Bid will be the compilation of following documents, along with required supporting documents. No document in support of minimum eligibility criteria will be accepted / entertained after opening of tender.

SI. No	Documents
1.	Cover letter by bidder (On the Letter Head of the Bidder)
2.	Tender Fee
3.	Earnest Money Deposit (EMD), if required
4.	Cliental List for quoted item
5.	Annexure-A : Bid Proposal Sheet (On the Letter Head of the Bidder)
6.	Annexure-B : Compliance of bidder with reference to various equipments (On the Letter Head of the Bidder)
7.	Annexure-C : PRICE BID (On the Letter Head of the Bidder)
8.	Annexure-D : PROFORMA FOR DIRECT PAYMENT/TRANSFER TO BANK ACCOUNT BY MNNIT ALLAHABAD
9.	OEM Authorization specific to Tender Reference Number.

ANNEXURE-A

BID PROPOSAL SHEET (ON THE LETTER HEAD OF THE BIDDER)

То

Faculty In-charge (Purchase)

MNNIT Allahabad, Allahabad Subject: Supply and Installation of "Equipments for Wifi Extension" at MNNIT Allahabad, Allahabad.

Dear Sir.

We, the undersigned Tenderers, having read and examined in detail the specifications as specified in this document in respect of Supply and Installation of Equipments for Wifi Extension at MNNIT Allahabad, Allahabad do hereby propose to supply the required products and services.

Te	nder	No.

Tenuel No.	Tender No.					
Tender Fees submitted		YES / NO	YES / NO (Please strike off whatever is not applicable			
Amount Mode Date of Issue Name of Bank		Name of Bank	Valid up to			
	Demand Draft					
EMD submitted		YES / NO	(Please strike off whatever is not applicable			
Amount	Mode	Date of Issue	Name of Bank	Valid up to		
	Demand Draft					

ADDITIONAL PURCHASE/WORK ORDER: We understand that the MNNIT Allahabad, Allahabad, in case of the (i) requirements may also place repeat purchase order/work order on the company. In such cases, we shall accept and execute all the purchase/work order placed on us by MNNIT Allahabad, Allahabad.

- BID PRICING: We further declare that the prices stated in our proposal are in accordance with your Terms & Conditions (ii) in the bidding document. We further understand that the quantities as specified in this Tender may increase or decrease at the time of Award of Purchase Order as per the requirements of MNNIT Allahabad, Allahabad.
- QUALIFYING DATA: We confirm that we satisfy the qualifying criteria and have attached the requisite documents as (iii) documentary proofs. In case you require any further information/documentary proof in this regard during evaluation of our bid, we agree to furnish the same in time to your satisfaction.
- CONTRACT PERFORMANCE SECURITY: We hereby declare that in case the contract is awarded to us, we shall (iv) submit the performance Guarantee Bond in the form of Bank Guarantee for the amount mentioned at clause No. 5 in ITB of the total order value.
- PAYMENT TERMS: We hereby declare that in case the contract is awarded to us, we agree with payment terms (v) specified in the tender documents.

(vi) CERTIFICATE AND DECLARATION:

- a) I/We certify that no addition/modification/alteration has been made in the Original Tender Document. If at any stage addition /modification /alteration is noticed in the Original Document, I/We will abide by the terms and conditions contained in the original tender document, failing which MNNIT Allahabad reserves the right to reject the tender and/or cancel the contract
- b) It has been certified that all information provided in tender form is true and correct to the best of my knowledge and belief. We hereby declare that our proposal is made in good faith, without collusion or fraud. No forged /tampered document(s) are produced with tender form for gaining unlawful advantage. We understand that MNNIT Allahabad is authorized to make enquiry to establish the facts claimed and obtained confidential reports from clients.
- c) In case it is established that any information provided by us is false / misleading or in the circumstances where it is found that we have made any wrong claims. Further MNNIT Allahabad is also authorized to blacklist our firm/company/agency and debar us in participating in any tender/bid in future.
- d) I / We assure the Institute that neither I /We, nor any of my /our workers, will do any act which is improper / illegal during the execution in case the tender is awarded to us.
- e) I / We assure the Institute that I / We will NOT be outsourcing any work specified in the tender document, to any other firm.
- f) Neither I / We, nor anybody on my /our behalf will indulge in any corrupt activities /practices in my /our dealing with the Institute.
- g) Our Firm / Company / Agency is not been blacklisted or banned by any Govt. Department, PSU, University, Autonomous Institute or any other Govt. Organization.
- h) I/We certify that, I have understood all the terms & conditions (GCC and ITB etc.), as indicated in enquiry of the tender document, and hereby accept all the same completely.
- I/We, further certify that I/We, possess all the statutory /non-statutory registrations, permissions, approvals, etc., from the Competent Authority for providing the requisite services,
- We understand that you are not bound to accept the lowest or any bid you may receive.
- k) I/We hereby declare that this tender on acceptance communicated by you shall constitute a valid and binding contract between us.
- I) I/We certify that the submitted quotation is duly paginated and contains from page no. 1 to

Date:

Signature and Seal of the Manufacturer/Bidder

Technical Compliance of Goods (ON THE LETTER HEAD OF THE BIDDER)

Specification	Details	Compliance (Yes/No)	Quoted Model
Physical Specification	 Should be rack mountable with 24-port 10/100/1000 Mbps ports and having an option of at least 4 SFP- based Gigabit Ethernet ports in addition to the Copper 	(100110)	
opeeniedden	Ports		
General	Switch with 176Gbps switching fabric with min 80Gbps of forwarding bandwidth		
Specifications	Min. 40 million packets per second forwarding rate on 64-byte packets		
	8000 MAC address supported		
	255 IGMP groups		
	Should support Redundant Power Supply		
	Should have USB console and flash		
	Should Support Ipv6 (ready to use)		
	Should Support Stacking and Redundant Power Source		
Layer-2 Features	IEEE 802.1Q VLAN encapsulation. Up to 255 VLANs per switch and up to 4000		
	VLANIDS		
	 Support for Automatic Negotiation of Trunking Protocol, to help minimize the configuration & errors 		
	 Centralized VLAN Management. VLANs created on the Core Switches should 		
	be propagated to all the other switches automatically, thus reducing the		
	overhead of creating / modifying / deleting VLANs in all the switches in turn		
	eliminating the configuration errors & troubleshooting.		
	Spanning-tree Port Fast for fast convergence		
	• 802.1d, 802.1p, 802.1Q, 802.1s, 802.1w, 802.1x, 802.1xREV, 802.1ab,		
	802.3ad,		
	• Spanning-tree root guard to prevent other edge switches becoming the root		
	bridge.		
	 IGMP snooping v1, v2 and v3 Link Aggregation Protocol (LACP) 		
	 Support for Detection of Unidirectional Links and to disable them to avoid 		
	problems such as spanning – tree loops		
	 Should be able to discover the neighboring device of the same make giving the 		
	details about the platform, IP Address, Link connected through etc, thus helping		
	in troubleshooting connectivity problems.		
	• Support for Switch port auto recovery (err disable) to automatically re-enable a		
	link that is disabled because of a network error.		
	Should support Multicast VLAN registration		
	Should support DHCP Server enabling a convenient deployment option for the		
	assignment of IP addresses in networks that do not have a dedicated DHCP		
	 server. Should support Local Proxy Address Resolution Protocol (ARP) works in 		
	conjunction with Private VLAN Edge to minimize broadcasts and maximize		
	available bandwidth		
	• Should support LLDP and LLDP-MED including client location information.		
	Should exchange link and device information in multivendor networks.		
	• Should support configuration rollback to replace current configuration with any		
	saved Configuration file.		
	Should support link state tracking which provides layer2 redundancy in the setucidual support link state tracking which provides layer2 redundancy in the		
QoS Features	network when used in conjunction with server teaming.		
Q03 realures	 Standard 802.1p QoS and DSCP classification using marking and reclassification on a per-packet basis by source and destination IP address, 		
	source and destination MAC address, or Laver 4 TCP or UDP port number.		
	Control – and Data-plane QoS ACLs		
	 No performance penalty for highly granular QoS functions 		
	• Four egress queues per port to enable differentiated management of up to four		
	traffic types		
	 Weighted tail drop (WTD) to provide congestion avoidance 		
	Strict priority queuing mechanisms		
	Rate limiting support based on source and destination IP address, source and destination IP address, source and destination or apply		
	destination MAC address, Layer 4 TCP and UDP information, or any combination of these fields, using QoS ACLs (IP ACLs or MAC ACLs), class		
	maps, and policy maps.		
	 Up to 64 aggregate or individual policers for per Fast Ethernet or Gigabit 		
	Ethernet port.		
	Support for Automatic Quality of Service for easy configuration of QoS features		
	for critical applications		
Network Security	• IEEE 802. 1x to allow dynamic, port-based security, providing user		
Features	authentication		
Warranty	Three year comprehensive warranty.		

Wireless	Nireless Access Point (CISCO WAP150 or equivalent): Qty-64 No's					
S.N	Specification	Details	Compliance (Yes/No)	Quoted Model		
1	Standards	IEEE 802.11ac, 802.11n, 802.11g, 802.11b, 802.3af, 802.3u, 802.1X				

2 Cabling type Category 5e or better 3 Antennas Internal antennas optimized for installation on a wall or ceiling 4 LED Indicators Intelliguation LED 5 Operating system Linux 7 Buttons Reset button, power on/off push buton 6 Ports AC adapter individed) 7 Buttons Reset button, power on/off push buton 8 Lock slot Sist for Kennington lock 9 VLAN support Yes 10 Number of VLANs In management VLAN plus & VLANs for SSIDs 11 B02:1X supplicant Yes 12 Auto-channel selection Yes 13 Spanning tree Yes 14 IP/6 Yes 15 Layer 2 Yes, inchang Enterprise authentication 16 WFA, WPA2 Yes, inchange State (real-world throughput will vary) 18 Socure management Yes 20 Rogue access point Yes 18 Socure management access control list (ACL) plus MAC ACL <th></th> <th></th> <th>(security authentication), 802.1Q (VLAN), 802.1D (S 802.11i (WPA2 security), 802.11e (wireless QoS), IF</th> <th></th> <th></th> <th></th>			(security authentication), 802.1Q (VLAN), 802.1D (S 802.11i (WPA2 security), 802.11e (wireless QoS), IF			
3 Anternas Internal antennas optimizad for installation on a wall or ceiling 4 LED Indicators Intuitive control LED 5 Operating system Linux 6 Potts In'100/1000 Ethernet, with support for 802.34 /at PoE, power port for AC adapter (included) 7 Buttons Reset button, power ov/off push button 8 Lock slot Slot for Kensington lock 9 VLAN support Yes 112 Auto-channel selection Yes 123 Spanning tree Yes 124 Auto-channel selection Yes 125 Layer 2 R02 10-based VLANS, a cuive VLANs for SSIDs 126 Layer 2 Yes Noning Ether Protocol (NTP) 126 Layer 2 Yes, including Enterprise authentication Yes 127 Access control Yes, including Enterprise authentication Yes 126 Layer 2 Roya access point Yes Yes 129 SID broadcast Yes Yes Yes 20 Roya access point Yes Yes Yes 216 detection		Ochling to a				
4 LED indicators 1 multifunction LED 5 Operating system Linux 8 Pots 10/100/1000 Ethernet, with support for 802.3af /at POE, power port for AC adapter (included) 7 Buttons Reset button, power novioff push button 8 Lock stot Silo for Kenangion lock 9 VLAN support Yes 10 Number of VLANs I management VLAN plus 8 VLANs for SSIDs 11 802.1X supplicant Yes 12 Auto-channel selection Yes 13 Spanning free Yes 14 IPV6 Prof. 15 Layer 2 Box in-based VLANS, 8 active VLANs plus 1 management VLAN 16 WEA, WFA2 Yes 17 Solo broadcast Yes 18 Security 1 Security 1 19 SSID broadcast Yes 20 Oos WiFF Multimedia and Traffic Specification (WMM TSPEC), client Qos 24 Wireles stroughput V Ves 27 Numbes of acreas 4 <t< td=""><td></td><td>0 71</td><td>° ,</td><td>a allia a</td><td></td><td></td></t<>		0 71	° ,	a allia a		
5 Operating system Linux 6 Ports AC adaptor (included) 7 Buttons Reset button, power n/off push button 8 Lock slot Slot for Kensington lock 9 VLN support Yes 10 Number of VLANs 1 management VLAN plus 8 VLANs for SSIDs 11 Rot, Namp Tee Yes 12 Auto-channel selection Yes 13 Spanning tree Yes 14 IP/6 Protocol (NTP) 15 Layer 2 B02 10-bready LANS, 8 active VLANs plus 1 management VLAN 16 Layer 2 Yes malagement access control list (ACL) plus MAC ACL 17 Access control Yes Yes malagement access control list (ACL) plus MAC ACL 18 Sib broadcast Yes Malagement access control list (ACL) plus MAC ACL Wireless throughput 21 Multiple mouning options Destadoat Traffic Specification (WMM TSPEC), client QoS 22 Physical accurry lock Kansington lock slot Malagement access access fore access poracase at 2 (real-word throughput will war) <				cening		-
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8 Lock slot Slot for Kensington lock 9 VLAN support Yes 10 Number of VLANs 1 management VLAN plus 8 VLANs for SSIDs 11 802.1X supplicant Yes 12 Auto-channel selection Yes 14 IPX6 Yes 15 Layer 2 802.10-based VLANS, 8 active VLANs plus 1 management VLAN 16 WPA, WPA2 Yes, including Enterprise authentication 17 Access control Yes, management access control list (ACL) plus MAC ACL 18 Secure management HTTPS 20 Rogue access point Yes 21 Multiple mounting Desktop or Wall 22 Physical security lock Kensington lock slot 23 Oxos commended user Up to 12 CBps data rate (real-world throug/put wilviny) 24 Wirt FMultimedia and Traffic Specification (WMM TSPEC), client Ocs 24 Wire Status and thread rate (real-world throug/put wilviny) 25 Single Point Stup Yes 26 Single Point Stup Yes 27 <td< td=""><td></td><td></td><td>10/100/1000 Ethernet, with support for 802.3af /at PoE</td><td>, power port for</td><td></td><td></td></td<>			10/100/1000 Ethernet, with support for 802.3af /at PoE	, power port for		
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12 Auto-channel selection Yes 13 Spanning tree Yes 14 IPv6 Yes • IPv6 host support • IPv6 RADIUS, syslog, Network Time 15 Layer 2 802:10-based VLANS, 8 active VLANS plus 1 management VLAN 16 WPA, WPA2 Yes, including Enterprise authentication 17 Access control Yes, management access control list (ACL) plus MAC ACL 18 Secure management HTTPS 20 Rogue access point detection 21 Multiple mounting optical security lock 22 Physical security lock Kensington lock slot 23 QoS WirFI Multimedia and Traffic Specification (WMM TSPEC), client QoS 24 Wireless throughput Up to 12 Cobps data rate (real-world throughput will vary) Up to 44 connective users, 10 active users per radio 26 Single Point Setup Yes Yes 27 Number of access 4 28 Web user interface Built-in web user interface for easy browser-based configuration (HTTP, HTTPS) 29 Frequency Dual radio, orthogonal frequency division multiplexing (OFDM) 20 Acado and modulation Dual radio, orthogonal frequency division multiplexing (OFDM)			· ·			
13 Spanning tree Yes Protocol (NTP) 14 IPv6 Protocol (NTP) Protocol (NTP) 15 Layer 2 802.10-based VLANS, 8 active VLANs plus 1 management VLAN 16 WPA, WPA2 Yes, including Enterprise authentication Protocol (NTP) 17 Access control Yes, management access control list (ACL) plus MAC ACL Protocol (NTP) 19 SSID broadcast Yes Yes Protocol (NTP) 20 detection Desktop or Wall Protocol (NTP) Protocol (NTP) 21 options Desktop or Wall Protocol (NTP) Protocol (NTP) 23 OoS WiF-FMutimedia and Traffic Specification (WMM TSPEC), client OoS Protocol (NTP) 23 OoS WiF-FMutimedia and Traffic Specification (WMM TSPEC), client OoS Protocol (NTP) 24 Writeles throughput Up to 12 dops data rate (real-world throughput will vary) Protocol (NTP) 25 Recommended user Up to 14 connective users, 10 active users per radio Protocol (NTP) 26 Single Point Strup Yes Yes Yes 27 points per cluster Protocol (NTP) Protocol (NT						
14 IPv6 Yes IPv6 RADIUS, syslog, Network Time Protocol (NTP) 15 Layer 2 802:10-based VLANS, 8 active VLANS plus 1 management VLAN 16 WPA, WPA2 802:10-based VLANS, 8 active VLANS plus 1 management VLAN 17 Access control Yes, management access control list (ACL) plus MAC ACL 18 Secure management HTTPS 19 SSID broadcast Yes 20 detection Desktop or Wall 21 options Desktop or Wall 22 Physical security lock Kensington lock slot 23 OoS Wi-Fi Multimedia and Traffic Specification (WMM TSPEC), client QoS 24 Wridess throughput Up to 12 Gbps data rate (real-wold throughput will vary) 25 Recommended user Up to 42 connective users, 10 active users per radio 26 Single Point Setup Yes 27 Number of access 4 28 Web user interface Built-in web user interface for easy browser-based configuration (HTTP, HTTPS) 29 Frequency Dual concurrent radios (2.4 and 5 GHz) 30 Radio and modulatioin bus at 6						
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41 Warranty Three year comprehensive warranty. CAT-6 UTP Cable: Qty-6000Mts			Safety: • UL 60950-1 • CAN/CSA-C22.2 No. 60950-1 • EN 60950-1 Radio approvals: • FCC Part 15.247, 210 (Canada) • EN 300.328, EN 301.893 (Europ 4268.2003 (Australia and New Zealand) EMI and susc B): • FCC Part 15.107 and 15.109 • ICES-003 (0 301.489-1 and -17 (Europe)	15.407 • RSS- be) • AS/NZS septibility (Class		
CAT-6 UTP Cable: Qty-6000Mts						
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Specification Details Compliance (Yes/No) Quo		pecification	Details	Compliance (Yes/N	lo) Quo	ted Model

Specification	Details	Compliance (Yes/No)	Quoted Model
Туре	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801		
Conductors	23 AWG solid bare copper		
Insulation	Polyethylene		
Jacket	Flame Retardant PVC		
Pair Separator	Cross-member (+) fluted Spline.		

Approvals	(a) UL Listed / UL Verified	
	(b) ETL verified to TIA / EIA Cat 6	
Operating temperature	-20 Deg. C to +60 Deg. C	
Storage Temperature	-20 Deg. C to +80 Deg. C	
Frequency tested up to	Minimum 550 MHz	
Packing	Box of 305 meters	
Cable Outer Diameter	.23 inches	
Delay Skew	45ns MAX.	
Bend Radius	4 * Cable Diameter	
UL/NEC Ratings	CMR Rated	
Mutual Capacitance	5.6 NF MAX /100 Mtr.	
Conductor Resistance	66.58 Ohms Max / KM	
Propagation Delay	536 ns/100 Mtrs. MAX @ 250 Mhz	
Performance characteristics	Attenuation, Pair-to-pair and PS NEXT, ELFEXT and PSELFEXT, Return Loss, ACR and PS ACR	
ROHS Compliance	ROHS Complaint	

Specification	Details	Compliance (Yes/No)	Quoted Model
Туре	PCB based, Unshielded Twisted Pair, Category 6, TIA /EIA 568- C.2 and ISO/IEC 11801		
Modular Jack	750 mating cycles		
Wire terminal	200 termination cycles		
Accessories	Integrated bend-limiting strain-relief unit for cable entry		
	Integrated hinged dust cover or dust protection at user side information outlet		
	Support cable pair termination process on the jacks at 90 degree angle.		
	Bidder should have a mechanism to maintain the quality of the termination ir-respective of the skill level of the termination staff.		
Housing	Polyphenylene oxide, 94V-0 rated.		
110 Blocks	Polycarbonate, 94V-0 rated		
Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate		
Wiring blocks	Polycarbonate, 94V-0 rated		
Approvals	(a) UL Listed / CSA Approved		
	(b) ETL verified to TIA / EIA Cat 6		
Performance Characteristics	Attenuation, NEXT, PS NEXT, FEXT and Return Loss		
ROHS Compliance	ROHS Complaint		

UTP Jack/ Patch Pane	UTP Jack/ Patch Panel: Qty-07 No's					
Specification	Details	Compliance (Yes/No)	Quoted Model			
Туре	24-port, Modular, PCB based, Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 and ISO/IEC 11801					
Ports	24					
Port arrangement	Configured as 6 Port Module with individually replaceable CAT- 6 Jacks					
Circuit Identification Scheme	Front of each module shall be capable of accepting 9 mm to 12 mm labels					
Port Identification	9mm or 12mm Labels on each of 24-ports (to be included in supply					
Height	1 U (1.75 inches) for 24-Ports and 2 U for 48-ports					
Interface	Polyester Molding Compound, Black					
Modular Jack	750 mating cycles					
Wire terminal	200 termination cycles					
Accessories	Integrated bend-limiting strain-relief unit for cable entry					
Housing	Polyphenylene oxide, 94V-0 rated					
Wiring blocks	Polycarbonate, 94V-0 rated					
Jack contacts	Beryllium copper, plated with 1.27 mm [.000050] thick gold in localized area and 3.81 mm [.000150] minimum thick tin-lead in solder area over 1.27 mm [.000050] minimum thick nickel under plate					
Panel	Black, powder coated steel					
Approvals	UL listed / ETL Verified					
Termination Pattern	TIA / EIA 568 A and B;					
ROHS Compliant	ROHS Compliant					

UTP Patch Cord 3': Qty-64 No's					
Specification	Details	Compliance (Yes/No)	Quoted Model		
Туре	Unshielded Twisted Pair, Category 6, TIA / EIA 568-C.2 & ISO/IEC 11801				
Conductor	24 AWG 7 / 32, stranded copper conductors 100 Ohm				
Length	3/4 feet				
Plug Protection	Transparent Slim boot				
Warranty	25-year component				
Insulation	Flame Retardant Polyethylene				
ROHS Compliance	ROHS Complaint				

Faceplate: Qty-64 No's				
Specification	De	etails	Compliance (Yes/No)	Quoted Model
Туре	Single Gang, BS			
Material	ABS / UL94 V-0			
No. of ports	One/Two			
Shutter	ABS UL94V-0			
Spring of Shutter	Steel, Stainless			
Holder, Jack	ABS UL 94V-0			
Cover Label	Acrylic UL94V-0			
ROHS Compliance	ROHS Complaint			

ANNEXURE-C

PRICE BID (ON THE LETTER HEAD OF THE BIDDER)

SI.	Brief Description of the Goods		Quoted Unit Rate in Rs	Total Amount (in Rs.)		Тах	
51. No.				In Figures	In Words	VAT	Any other charges (if any)
	LAN Component	07 Nos.					
1.	Supply of Rack mountable manageable Layer 2 Access Switch with 24-port 10/100/1000 Mbps ports and having an option of atleast 4 SFP-based Gigabit Ethernet ports in addition to the Copper Ports (Cisco WS-C2960X TS-L or equivalent) with three years of Comprehensive Warranty.						
2.	1000BASE-T SFP transceiver module compatible with Cisco WS2960X TS-L (Cisco GLC-TSFP)						
	Access Points Component						
3.	Supply, Installation and Configuration of Access Points with IEEE 802.11ac, 802.11n, 802.11g, 802.11b, 802.3af, 802.3u, 802.1X (security authentication), 802.1Q (VLAN), 802.1D (Spanning Tree), 802.11i (WPA2 security), 802.11e (wireless Qos), IPv4 (RFC 791), 1 Pv6 (RFC 2460). With three year comprehensive warranty.	64 Nos.					
4.	UTP Components	-					
	1 Supply of CAT 6 UTP cable.	6000 Mts					
	2 Supply of Information Outlet Box with termination, complete in all respect. (I/O with Faceplate)	64 Nos					
	3 Supply of 6U Rack.	07 Nos.					
	4 Supply and Installation of Patch Cord 3' UTP CAT6.	64 Nos					
	5 Supply and Installation of Cable Manager.	07 Nos.					
	6 Supply, Installation and Punching of 24 ports Patch Panel Cat6 with proper ferruling.	07 Nos.					
	7 Supply and Crimping of RJ 45 connector.	50 Nos					
5.	Others						
	Cabling/Wiring of Internet point with CAT 6 Internet cable (AMP) in 1" PVC (ISI Mark) conduit/ Casing-Capping with fixing, termination and pulling etc. Termination of UTP cable at I/O end. Ferruling/ numbering of cable at both ends. Complete in all respect (Payment as per actual)						
	2 Installation and Mounting of 6U Rack.						
	(Detailed Specification attached at 'Annexure-B')						

We agree to supply the above goods in accordance with the technical specifications for a total contract price of ______ within the period specified in the Invitation for Quotations.

We also confirm that the normal commercial warrantee/guarantee of ______ months shall apply to the offered goods.

Signature and Seal of the Manufacturer/Bidder

ANNEXURE-D

PROFORMA FOR DIRECT PAYMENT/TRANSFER TO BANK ACCOUNT BY MNNIT ALLAHABAD

SI. No.	Particulars	Information
1.	Firm [Beneficiary] Name	
2.	Code No. allotted by the MNNIT Allahabad	
	[If code is not allotted yet, please enclose a cancelled cheque and copy of PAN card. Cancelled cheque &	
	PAN card is to be submitted only once]	
3.	Complete Bank Account No. of the Firm [beneficiary].	
	[in case of change in bank account vendor should write to Account Office]	
4.	Bank Name	
5.	Branch Address	
6.	IFSC Code No.	
7.	Permanent Account Number	
8.	Mobile No. [for SMS]	
9.	Email ID [for information]	

We undertake that all information provided above is correct and MNNIT Allahabad will not be responsible in case of any error on the part of firm.

[Seal and Signature of the firm]