Management Development Institute Murshidabad (MDIM)

Limited Tender Enquiry (LTE)

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Tender No. 2024-25/MDIM/IT/Wi-Fi/62   Date: 30/05/2024

Tender document for supply & installation of Wi-Fi & related equipment at MDI Murshidabad campus

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MDI Murshidabad

Kulori, PO – Uttar Ramna, Dist. – Murshidabad, PIN-742235, West Bengal
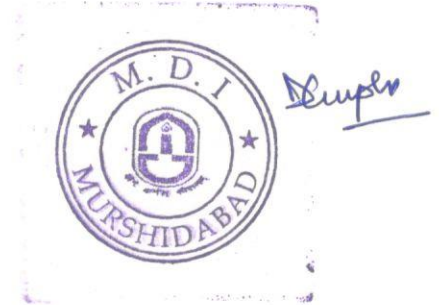
Tender No. 2024-25/MDIM/IT/Wi-Fi/62   Date: 30/05/2024

Sub: Tender document for supply & installation of Wi-Fi & related equipment at MDI Murshidabad campus.

Management Development Institute Murshidabad (MDIM) invites bids (in digital format) from the OEM or its authorized partners for supply & installation of wi-fi & related equipment at MDI Murshidabad campus as per the technical specifications, scope of work and terms & conditions mentioned in Annexure-I, II & III.

Bids are to be submitted in the following manner:

● The quotation along with other required documents to be created in a single PDF file format and the said file must be password protected and to be sent at **etender@mdim.ac.in** along with password (mandatory) on or before **11/06/2024 up to 05:30 PM.**

● While submitting, all the pages of bid documents must be signed and stamped as a token of acceptance of all terms and conditions.

The bidders are requested to read the tender documents carefully and ensure compliance with all terms & conditions and specifications herein. Non-compliance with specifications and terms & conditions in this document may disqualify the bidders from the bidding process.

Bids received after the due date and time will not be considered or accepted and no request or appeal will be entertained in this regard. MDIM authority reserves the right to accept or reject any or all the bids without assigning any reason whatsoever.

Please refer to our website (https://www.mdim.ac.in/tender) for Addendum, if any.

Encl. –
1) Annexure-I (Terms & Conditions)
2) Annexure-II (Technical Specifications)
3) Annexure-III (Financial Bid)

Registrar
MDI Murshidabad

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ANNEXURE – I
(TERMS & CONDITIONS)

1) Financial bid in the format mentioned in Annexure-III (on the Letter head of the bidder) along with one set of this tender document (duly signed and stamped by the bidder on all pages) and other required documents to be created in a single PDF file format and the said file must be password protected and to be sent at **etender@mdim.ac.in** along with password (mandatory) on or before **11/06/2024 up to 05:30 pm.**

2) All bids in which any of the prescribed conditions is not fulfilled or any condition is put forth or conditional bids by the bidder(s) shall be summarily rejected.

3) Payment: 100% payment to be released within 15 days after satisfactory completion of work and submission of tax invoice & warranty documents.

4) Performance Security Deposit:

   a. The agency will be required to deposit security money equivalent to 5% of the total order value (incl. of all) in the form of **Online Fund Transfer/Term Deposit** within 15 days from the date of award of contract.

   b. The security money deposited by the agency will be retained by the Institute till completion of the contract (3 years w.e.f. the commissioning date) and will be released thereafter on claim subject to adjustment, if any, by the Institute. Performance Security should remain valid for a period of 30 days beyond the date of completion of all contractual obligations incl. warranty obligations. No interest will be payable on the Performance Security Deposit.

      • Beneficiary Name: Management Development Institute Society
      • Bank & Branch: State Bank of India, Omarpur Branch (12355)
      • Account No: 33987582978
      • IFSC Code: SBIN0012355
      • Type of Account: Current Account

5) Bidder's Criteria: The bidders must be an authorised partner of the OEM. They are essentially required to submit a valid authorization certificate/MAF from the OEM, failing which their bid(s) shall be rejected.

6) Validity: The quoted price of the bidders should valid up to 45 days w.e.f. the bid date of the bidder.

7) Job Completion Period: The job should be completed within 6 weeks w.e.f. the order issue date.

8) Scope of work: Supply & installation of the network & related equipment at MDI Murshidabad Campus as mentioned in Annex-II & III and configure the same as per the Institute's requirement.
      • New cable laying through conduit pipe for new access points from switch end.
      • Extension of cable for relocated access points.
      • I/O box punching for the relocated access points.
      • RJ45 crimping for all LAN cable ends.
      • Installing of access point with rod/angle both for old and new APs.
      • Mounting of access points.
      • Mounting of new PoE switch on rack.
      • Configuration of the PoE switch and access points.
      • New access points license add into the controller.

9) Warranty period: All the equipment should be covered under NBD warranty & support with advanced replacement of the hardware for 3(three) years from the date of invoice and the said warranty information must be reflected in the OEM's portal.

10) Liquidated Damage (LD): The successful bidder is required to supply and install all the items within 5(five) weeks w.e.f. the issue date of Purchase Order (PO). Delay in delivery will attract a penalty @1% of PO value (excluding GST) per week subject to a max. of 10%. Alternatively, the order will be cancelled.

11) The bidder must have a valid PAN & GST Certificate. (copies to be attached)

12) The bidder should not be blacklisted/ debarred or involved in any corrupt & fraudulent practices in any Central/ State Govt./ PSUs/ Quasi-Govt. Organisation/ Autonomous Body/ Private Organisation in India and a self-declaration in this regard to be submitted.

13) Sub-contract is strictly not allowed, if found that sub-contracting have been done then the order will be summarily cancelled, and no payment will be made to the vendor.

14) Institute reserve the right to accept or reject any or all the bids without assigning any reason whatsoever.

15) All legal disputes will be subject to local court of Murshidabad district, West Bengal.

16) Declaration:

I/We do hereby confirm that I/We have the necessary authority and approval to accept the above stated clauses (1 - 15 mentioned in Annex-I) and Technical Specifications (Annexure-II) for supply & installation of wi-fi & related equipment at MDI Murshidabad campus and, hereby, agree and accept the terms & conditions mentioned in Annexure-I & II without any conditions.

Date :-

Place:-

(Signature)

(Name of Authorised Signatory)

(Designation of Authorised Signatory)

(Name of Vendor)

(Seal)

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ANNEXURE – II (Technical Specifications)

	Wi-Fi Access Point (Indoor)	
	Make & Model:	
SL No	Specification / Requirement	Compliance (Yes/No)
1	The APs should support the 802.11a, 802.11b, 802.11g and 802.11n, 802.11ac and 802.11ax standards.	
2	Simultaneous client support on dual band radio is essential.	
3	Shall provide Min 25 dBm Radio output power for both Radio's.	
4	Should support minimum 2x2:2 or higher MIMO on both radio bands for an aggregate capacity of around 1700 Mbps	
5	AP should be flexible hardware to be deployed as Standalone, Controller-less (Cluster), Controller-based, Cloud-based.	
6	It should have adaptive antenna technology for performance optimization and interference mitigation features. Antenna should provide Extended coverage utilizing multi-directional antenna patterns. Access point to have Polarization Diversity with Maximal Ratio Combining.	
7	Antenna should dynamically choose antenna patterns in real-time environment to establish the best possible connection with every device. Should support at least 50 antenna patterns combinations.	
8	The access point should be able to detect clients that have dual band capability and automatically steer those clients to use the 5GHz band instead of the 2.4GHz band.	
9	The antennas to be dual polarised and should be integrated inside the access point enclosure to minimize damage and create a low-profile unit that does not stand out visually.	
10	The access point should have minimum 2 x 1 Gigabit Ethernet port	
11	The access point should support 802.1q VLAN tagging	
12	The access point should support IOT based technologies such as Bluetooth, zigbee either inbuilt or using an external usb module.	
13	The access point should support WPA2 and WPA3 enterprise authentication and AES/CCMP encryption. AP should support Authentication via 802.1X and Active Directory.	
14	Implement Wi-Fi alliance standards WMM, 802.11d, 802.11h and 802.11e	
15	Should support the following channelization - 20MHz, 40MHz, 80MHz	
16	The Access Point should provide for concurrent support for high-definition IP Video, Voice and Data application without needing any configuration.	
17	Antenna should direct the radio signals per-device on a packet-by-packet in real-time to support high device density environments. Should have 3 dBi gain. Antenna operates without the need for device feedback to support devices using legacy standards.	
18	Channel selection based on measuring throughput capacity in real time and switching to another channel should the capacity fall below the statistical average of all channels without using background scanning as a method.	
19	The access point should support application recognition and control	
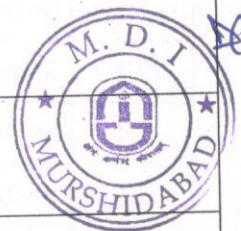
20	AP should be able to act as sensor for WIPS, Location analytics engine and Network analytics engine.	
21	Should support 1GB RAM and 512 MB flash	
22	Should support up to 30 simultaneous VoIP clients	
23	Should support min 500 clients per AP or more	
24	AP should have recovery SSID for easy access to CLI console when AP is unreachable through network.	
25	AP should support DHCP and NAT	
26	Should support tunneling such as Layer 2 Tunnelling protocol and Generic routing Encapsulation.	
27	Should support meshing technologies where cable infrastructure may not be available	
28	Shall support 30 SSID's per AP.	
29	Shall have 1 USB port	
30	Operating Temperature: 0°C - 45°C	
31	Operating Humidity: 10 % - 95% non-condensing.	
32	Should be plenum rated and comply to RoHS and TEC (India-DoT Certified)	
33	Should be WiFi certified; WiFi certificate to be enclosed	
34	Should be WPC approved; ETA certificate to be enclosed	
35	Should support the following standards - WEEE & RoHS, EN 60950, EN 61000	
36	Device should be UL 2043 Plenum Rated.	
37	AP mgmt. license should be included so that it can be managed by existing controller (Ruckus Smart Zone 100)	
38	3 years warranty & TAC support with NDB service should be provided.	

PoE Access Switch - 24 Port		
Make & Model:		
Sl No	Specification / Requirement	Compliance (Yes/No)
1	**General Features :**	
1.1	Switch should be 1U and rack mountable in standard 19" rack.	
1.2	Switch should support internal field replaceable unit redundant power supply from day 1.	
1.3	Switch should have minimum 2 GB RAM and 2 GB Flash.	
1.4	Switch should have dedicated slot for optional stacking.	
2	**Performance :**	
2.1	Switch shall have minimum 56 Gbps of switching capacity and 41.6 Mpps of forwarding rate.*	
2.2	Switch shall have minimum 16K MAC Addresses and 250 active VLAN.	
2.3	Should support minimum 11K IPv4 routes or more	
2.4	Switch shall have 1K or more multicast routes.	
2.5	Switch should support atleast 16K flow entries.	

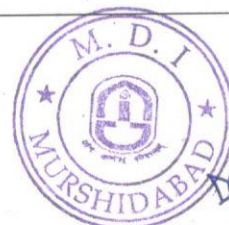| 2.6	Switch should support 128 or more STP Instances.	
2.7	Switch should have 6MB of packet buffer.	
3	**Functionality :**	
3.1	Switch should support IEEE Standards of Ethernet: IEEE 802.1D, 802.1s, 802.1w, 802.1x, 802.3ad, 802.3x, 802.1p, 802.1Q, 802.3, 802.3u, 802.3ab, 802.3z.	
3.2	Switch must have functionality like static routing, RIP, PIM, OSPF, VRRP, and QoS features from Day1	
3.3	Switch shall have 802.1p class of service, marking, classification	
3.4	Switch should support management features like SSHv2, SNMPv2c, SNMPv3, NTP, RADIUS and TACACS+ .	
3.5	Switch should support IPv6 Binding Integrity Guard, IPv6 Snooping, IPv6 RA Guard, IPv6 DHCP Guard, IPv6 Neighbor Discovery Inspection and IPv6 Source Guard.	
3.6	Switch should support 802.1x authentication and accounting, IPv4 and IPv6 ACLs and Dynamic VLAN assignment and MACSec-128 on hardware for all ports.	
3.7	Switch must have the capabilities to enable automatic configuration of switch ports as devices connect to the switch for the device type.	
3.8	During system boots, the system's software signatures should be checked for integrity. System should capable to understand that system OS are authentic and unmodified, it should have cryptographically signed images to provide assurance that the firmware & BIOS are authentic.	
4	**Interfaces:**	
4.1	Switch shall have 24 nos. 10/100/1000 Base-T ports and additional 4 nos. SFP uplinks ports.	
4.2	The switch should have fixed Uplink ports.	
4.3	All 24 port should support PoE (802.3af) and PoE+ (802.3at) with a PoE power budget of 370W.	
5	**Certification:**	
5.1	Switch shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 Standards for Safety requirements of Information Technology Equipment.	
5.2	Switch shall conform to EN 55022 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B Standards for EMC (Electro Magnetic Compatibility) requirements.	
5.3	Switch / Switch's Operating System should be tested for EAL 2/NDPP or above under Common Criteria Certification.	

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ANNEXURE – III
(FINANCIAL BID)

Sl No	Equipment Details	Qty (Nos.)	Unit Cost (Rs.)	Total Cost (Rs.)	Remarks
1	PoE Access Switch - 24 Port (as per Annex-II)	01			
2	3yrs 8×5×NBD Support for the item mentioned in Sl No 1	01			
3	Indoor Wi-Fi Access Point (as per Annex-II)	06			
4	Multi-support mounting bracket for the item mentioned in Sl No 3 (Supports mounting to hard wall, ceilling, pole or truss) (for Sl No 3)	06			
5	Single AP Upgrade License for Ruckus SmartZone 100 wireless controller (for Sl No 3)	06			
6	3 Year warranty & software support for Indoor Wi-Fi Access Point (for Sl No 3)	06			
7	3 feet stand for Wi-Fi accessories	30			
8	10 feet stand for Wi-Fi accessories	6			
9	Cat-6 IO module with face plate & back box (DLink/Molex/Digisol)	24			
10	Cat-6 Cable (DLink/Molex/Digisol)	2 box (305 mtr/box)			
11	RJ45 Connector (DLink/Molex/Digisol)	1 box			
12	Cat-6 cable laying charges with required all wiring materials like conduit pipe, connector crimping, screw etc.	610 mtr.*			
13	One time installation charge for configuration of POE switch, 3ft & 10ft stand, IO box, 12 new access point installation, configuration in controller & access point etc.	1 lot			
	Sub-Total				
	Add: Delivery Charge if any				
	Add: Applicable GST (.......%)				
	Grand Total incl. GST & Delivery Charges				

Rupees in word: ....

....

Note:

*Payment will be made on actual quantity used.

If there is mismatch of amount in number and word then MDIM will only consider that one which will be less cost among the two.

Delivery Period ……………days.

Bid Validity Date: - The quoted price of the bidders should valid up to 45 days w.e.f. bid date of the bidder.

Date :-   (Signature)

Place:-

(Name of Authorised Signatory)

(Designation of Authorised Signatory)

(Name of Vendor)

(Seal)