

email: dir@nitttrc.ac.in
Website: www.nitttrc.ac.in

Phone : 2254 54 36
Fax: (044) 2254 1126



NATIONAL INSTITUTE OF TECHNICAL TEACHERS' TRAINING AND RESEARCH
Taramani P.O., Chennai – 600 113.

(Government of India, Ministry of Human Resource Development)

Ref. No. NITTTR/Data Centre/ Access point/ 2017-18/

Date: 08.03.2018

To

Delivery required by :

QUOTATION DUE DATE

(a) Please send your quotation within the due date on sealed envelope on or before:

Date: 20.03.2018

(b) Delivery required at : **NITTTR, TARAMANI, CHENNAI -113**

Sl.No.	Description of Items	Quantity
1.	Wireless Access point (Please refer the detailed specification in Annexure -1 & 2) Note : <ol style="list-style-type: none">1. Mention warranty period for the item2. Indicate the Reference No. and the last date on the Envelope3. Our Institute is exempted from Customs duty.4. TIN/TNGST/CST Registration No. must be furnished (Enclose Pamphlets, if any)	20 nos

Cover should be addressed to:

Dr. V. Shanmuganeethi,
Asst. Professor, Dept. of CSE
National Institute of Technical Teachers Training and Research,
Taramani P.O., Chennai – 600 113.

(For terms and conditions please see overleaf)

for DIRECTOR

Annexure - 1

S. No.	Description	Compliance (Yes / No)
General Requirement		
1	The bidder submitting the offer should be OEM Vendor or Authorized Reseller / Partner of OEM Vendor for wireless Products. Authorized reseller	
2.	OEM should be in the leader quadrant of the latest Gartner report released	
3	HW controller/virtual controller,NMS should be of same OEM	
Architecture		
1	WLAN Controller should be hardware/appliance-based controller OR software-based controller in which APs acts as a virtual controller.	
Scalability		
1	In case of hardware controller, controller shall be capable of supporting minimum of 125 AP's from day one for future scalability. In case of software-based controller, centralized management solution also shall be provided to manage software controllers.	
2	If customer requires need to show the reference of customer where 100 or more aps deployed in cluster	
High Availability		
1	High availability should be provided for controllers. In the event of a failure of the hardware/virtual controller, a standby controller shall automatically take over the master role.	
2	Virtual controller or Hardware controller should have VPN capabilities for the future expansion Access Points can be configured to provide part-time or dedicated air monitoring for spectrum analysis and wireless intrusion protection, VPN tunnels to extend remote locations to corporate resources,	
3	Virtual controller or Hardware controller should support cloud based solution for the future expansion	
WLAN Features		
1	Should support Band Steering feature that forces the dual-band capable clients to the 5 GHz band on dual-band access points.	
2	Should balance wireless clients across APs on different channels, based upon the client load on the APs.	
3	Should support internal DHCP server.	
4	WLAN Solution IEEE 802.11r roaming standard and shall support L3 mobility that allows a client to roam between APs on the same network but different client subnets, while preserving its IP address and existing data sessions.	

Network Policy features		
1	WLAN solution should be able to create access policies in order to allow or block packets for inbound traffic/outbound traffic.	
2	WLAN solution (either integrated or through external firewall) shall have a capacity to inspect all traffic from each user session and allow or deny any traffic that does not satisfy specified policies.	
3	WLAN solution (either integrated or through external firewall) shall provide identity-based controls to enforce application-layer security and prioritization. E.g You tube to be given defined bandwidth like 1 Mbps and some apps like Facebook to be denied or given defined bandwidth.	
4	WLAN solution shall be capable of controlling bandwidth per user.	
Spectrum scanning		
1	WLAN solution shall be capable enough to scan the 2.4 or 5GHz radio bands to identify sources of Wi-Fi and NON WI-FI interference sources, and make the results available locally and to a remote management solution.	
WLAN Security		
1	Should prevent students/users connecting to rogue AP and also prevent an outside user trying to connect to campus WLAN.	
2	Should prevent Ad-hoc connections (i.e. clients forming a network amongst themselves without an AP)APs to become part of a WLAN that is managed by a Mobility Controller. • Remote AP (RAP) for branch deployments • Air monitor (AM) for wireless IDS, rogue detection and containment • Spectrum analyzer, dedicated or hybrid, for identifying sources of RF interference • Secure enterprise mesh	
3	Should prevent windows bridge (i.e. client that is associated to AP is also connected to wired network and enabled bridging between two interfaces)	
Indoor Access Points		
1	Access point should be High-performance 802.11ac Wave 2	
2	Dual radio, dual band capable of supporting 2.4 GHz & 5 GHz simultaneously. - Supports up to 1,733Mbps in the 5GHz band (with 4SS/VHT80 or 2SS/VHT160 clients) and up to 300 Mbps in the 2.4 GHz band (with 2SS/HT40 clients)	
3	The Wireless AP should support 10/100/1000 Base-T PoE port.	
4	integrated dual-band down tiltOmni-directional antennas for 4x4 MIMO with peak antenna gain of 3.1dBi in 2.4 GHz and 5.0dBi in 5 GHz. Built-in antennas are optimized for horizontal ceiling mounted orientation of the AP. The down tilt angle for maximum gain is roughly 30 degrees. - Combining the patterns of each of the antennas of the MIMO radios, the peak gain of the effective per-antenna pattern is 2.6dBi in 2.4 GHz and 3.1dBi in 5 GHz.	
4	The Wireless AP should be Scheme Safety, cTUVus • UL2043 plenum rating • Wi-Fi Alliance (WFA) certified 802.11a/b/g/n/ac	

5	<p>Access points shall have Visual indicators (multi-color LEDs): For system and radio status • Reset button: Factory reset (during device power up) • Serial console interface (proprietary; optional adapter cable available) • Kensington security slot Built-in Bluetooth Low-Energy (BLE) radio - Enables location based services with BLE-enabled mobile devices receiving signals from multiple Aruba Beacons at the same time. • Advanced Cellular Coexistence (ACC) - Minimizes interference from 3G/4G cellular networks, distributed antenna systems, and commercial small cell/femtocell equipment. • Quality of service for unified communication apps - Supports priority handling and policy enforcement for unified communication apps, including Microsoft Skype for Business with encrypted videoconferencing, voice, chat, and desktop sharing.</p>	
6	<p>Built-in Bluetooth Low-Energy (BLE) radio - Enables location based services with BLE-enabled mobile devices receiving signals from multiple Aruba Beacons at the same time. • Advanced Cellular Coexistence (ACC) - Minimizes interference from 3G/4G cellular networks, distributed antenna systems, and commercial small cell/femtocell equipment. • Quality of service for unified communication apps - Supports priority handling and policy enforcement for unified communication apps, including Microsoft Skype for Business with encrypted videoconferencing, voice, chat, and desktop sharing.</p>	

Annexure – 2

Installation Details

The following equipments payment will be paid to actual

1. Cables should be in High Standard – CAT6 Molex Cable
2. Single Face Plate with High standard
3. CAT6 Information outlet with High standard
4. CAT6 5 feet patch cord with High standard
5. CAT6 patch panel – 2 Numbers of 24 port
6. 1/ 1.5 inch PVC Channel / Conduit

Terms & Conditions

1. The quotation must specify the period within which the supply could be effected from the date of receipt firm orders.
2. Quotation received after the due date mentioned on the reverse will not be considered.
3. Your quotations should be for materials strictly in accordance with the specifications shown. In case you are offering substitutes state clearly the exact specification etc, of the materials offered Drawing sketches or any other technical data should be submitted separately.
4. The prices quoted should clearly specify charges for delivery of the goods to destination indicated overleaf.
5. The prices quoted should include all packing costs and it will be assumed that packing materials (cases etc..) are non-returnable unless otherwise stated.
6. Sales tax or any other taxes if applicable should be shown separately giving the full rate of taxes for each items giving ex-incidence of such levies.
7. The Director reserves the right to accept the whole or part of any quotation without assigning any reason and the lowest or any quotation will not necessarily be accepted, and the Director's decision shall be the final.
8. Samples must accompany the quotation when so specified or within two days when asked for later.
9. If it is discovered that the materials supplied are not exactly according to the specification, the entire stock will be rejected.
10. We reserve the right to inspect the goods offered at any stage of manufacture / supply at your premises.
11. Any dispute arising out of or relating to this Enquiry shall be deemed to have arisen in Madras and is subject to adjudication of the Madras Courts.
12. Rates quoted once will remain firm for that particular dealing.
13. The quotation should be kept valid for a period of 60 days from the date of opening for acceptance.
14. Payment will be made after confirmation on receipt of the materials in good condition at this Institute (normally within 30 days.) Advance payment will not be entertained at any circumstances.
15. Printed conditions of the firm sent along with the quotation form if any, shall not be binding on us.
16. In case of Printing the Proof should be got approved before final strike.
17. Materials should be supplied at this institute in good condition.
18. Price quoted by the suppliers accepted by the Director is final, and no deviation there from will be accepted without the Director's agreement in writing.
19. If the rates are under D.G.S. & D. Please specify the same clearly enclosing necessary documents.