

No. F5(954)ST/MNIT/Com.Engg./2019/II

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NOTICE INVITING QUOTATIONS

1. **Registrar, Sponsored Research, MNIT, JLN Marg, Jaipur** invites sealed tenders for the supply of **“5G and Wi-Fi 6E Wireless Access Point and SDN Switch”** for **Department of Computer Science & Engineering** of this Institute in **Single bid system**. As per schedule given below

Event	Date & Time
Download of Tender	18.12.2020
Bid submission last date & time	08.01.2021 by 2.00 PM
Quotation will be opened at	08.01.2021 at 3.00 PM
Earnest Money	Rs.6,000/- (Kindly attached the RTGS details with cancelled cheque along with the Earnest Money)

Quotation must be enclosed in a properly sealed envelope addressed to the MNIT, Jaipur with kind attention to Deputy Registrar (S&P), MNIT, Jawahar Lal Nehru Marg, Jaipur -302017 by designation and not by name. The quotations must be super scribed “Quotations for the supply of **5G and Wi-Fi 6E Wireless Access Point and SDN Switch** ----- as called for in Tender Notice No. ----- dated _____”DUE ON----- AT -----AM/PM. The Quotation must reach on or before -----AM/ PM on or before the due date and time mentioned in the tender notice/tender document. The documents must be dropped in the tender box available in Central Store during office hours (9.30am to 6.00pm) on all working days. Bids delivered to any other place or any individual shall not be considered as valid document. Quotations sent by e-mail will not be considered valid. Tender documents may be downloaded from institute’s web site www.mnit.ac.in and CPPP site <https://eprocure.gov.in/epublish/app>

2. **THE RATES QUOTED SHOULD BE F.O.R. JAIPUR** inclusive of all charges e.g. packing, forwarding, transit insurance, for outside firms and free delivery at Institute stores in the case of local firms. The rates may also be quoted separately "ex-godown/F.O.R. dispatching station. In case of Ex-Godown rates, please mention your packing and forwarding charges.
3. As far as possible, quotations should be given for goods of India manufacture which are readily available. Foreign goods quoted and proposed to be supplied should be covered by normal import quota of the dealer. This institute is exempted from payment of custom duty.
4. Detailed specifications and "make" of each item should be clearly given supported by the illustrated pamphlets wherever possible. Quotations without specifying the make and other particulars may be rejected. The accessories included in the equipment should also be clearly mentioned.

5. Losses or damage in transit will be in to the account of the supplier in case of rates **F.O.R. JAIPUR.** The supplier may, if he so desires, get the goods insured and include such charges in the tendered rate.
6. The payment for the ordered items would be made after the articles have been received and found in order. **Payment will be made by RTGS. Kindly send the RTGS details and cancelled cheque along with the Invoice. The payment to foreign supplier will be made through FDD/Wire Transfer OR Letter of Credit as the case may be.**
7. Your rates should be valid at least for three months from the last date of opening of bid.
8. All legal proceedings, if necessity arises to institute may be any of the parties (Institute or Contractor/Supplier) shall have to be lodged in the courts situated at Jaipur and not elsewhere.
9. The institute is not bound to accept the lowest tender and may reject any tender or any part of the tender giving justification for such an action.
10. The rates must be quoted item-wise by giving Serial No. of our enquiry letter.
11. The quotations should preferably be sent duly typed.
12. (a) The Penalty Clause is as under :-

Should the tenderer fail to deliver the goods within the period specified in the tender form the Institute may, at its discretion, allow an extension in time subject to recovery from the tenderer as agreed liquidated damages, and not by way of penalty, a sum equal to the percentage of the value of stores which the tenderer has failed to supply for period of delay as stated below: -

(i)	Delay up to one month	1%
(ii)	Delay exceeding one month but not exceeding two month	2%
(iii)	Delay exceeding two month but not exceeding three month	5%
(iv)	Delay exceeding three month	5% for each month and part there of subject to maximum 10%

- (b) In case of failure to supply the goods within the prescribed time and in accordance with the specifications give in the Quotations, the institute shall be free to cancel the order and make purchases from the next higher tenderer or from the open market as the case may be. In that case the loss sustained by the institute shall be recovered from the defaulting supplier. The institute will be at liberty to recover the loss from the permanent earnest money/or any other pending claims of the supplier without prejudice to its general right to affect recovery from the supplier.
13. **EARNEST MONEY: A Demand Draft/Banker's Cheque or Bank Guarantee of Rs. 6,000/- from a Commercial bank only in the name of the Registrar, M.N.I.T. and payable at Jaipur may please be sent along with your tender as Earnest Money without which no tender shall be considered. Cheques are not accepted as earnest money amount. No interest is paid by us on the amount of earnest money. **Kindly attach the RTGS details with cancelled cheque along with the Earnest Money.****

14. While submitting the tender, the **GST Registration No., PAN & E-mail Address** is to be mentioned by the bidder positively. Failing this, their bid will be treated as non responsive. & Kindly provide
15. The Institute reserves the right to modify the quantity specified in this enquiry.
16. The quotation should be duly signed by an authorized person of the firm. The name and status of the signatory should be clearly to indicated, **UNSIGNED QUOTATIONS WILL BE LIABLE FOR REJECTION.**
17. **Performance Bank guarantee**
Successful Bidder has to Provide Performance security @ 10% of the equipment cost, valid for 03 Year + 60 days in the form of Bank's Guarantee from a commercial bank within 15 days from the date of issue our Purchase Order.
18. Specification Enclosed.

Deputy Registrar
(Store & Purchase)

1. 5G and Wi-Fi 6E Wireless Access Point (Quantity -1)

AirEngine 6760R-51 & 6760R-51E Access Points

AirEngine 6760R-51 and AirEngine 6760R-51E are next generation, high-performance outdoor Access Points (APs) that fully comply with Wi-Fi 6 (802.11ax) standards. Available with either built-in (AirEngine 6760R-51) or external (AirEngine 6760R-51E) antennas, both support 8x8 MU-MIMO and are capable of achieving a device rate of up to 5.95 Gbit/s.

Designed to more than meet industry requirements, the APs are IP68 rated — indicating water, dust, dirt, and sand resistance — and offer 6 kV/6 kA surge protection capability. The versatile AirEngine 6760R-51 and AirEngine 6760R-51E also feature both optical and electrical uplink ports, allowing customers to select different deployment modes based on needs, ultimately protecting and maximizing customer investment. Such strengths make them well-suited for outdoor scenarios such as town squares, pedestrian streets, and amusement parks.

S.No.	Item	Description
1	Power Input	in compliance with IEEE 802.3bt
2	Maximum Number of users	<= 1024
3	Port	1x5 GE electrical, 1xGE electrical, and 1x10 GE SFP+
4	Built in Bluetooth	BLE 5.0
5	Operating Temperature	-40 C to 65 C
6	Antenna Type	AirEngine 6760r-51:built in anteenas Air Engine 6760r-51e:external anteenas
7	MIMO: special streams	2.4 Ghz:4x4:4; 5GHz: 4x4:4
8	Radio Protocols	802.11a/d/g/n/ac/ wave2/ax
9	Maximum Rate	5.95 G bits per second

2. SDN Switches (Quantity -1)

SDN switch should supports the following set of capabilities:

- Switchport MTU settings (required)
- MTU set to >= 1674 Bytes (including L2-Ethernet Header)
- L3 protocols (required)
- ECMP
- BGP (IETF RFC 4271)-based ECMP

Implementations should support the following IETF standards.

- RFC 2545: "BGP-4 Multiprotocol extensions for IPv6 Inter-Domain Routing"
- RFC 4760: "Multiprotocol Extensions for BGP-4"
- RFC 4893: "BGP Support for Four-octet AS Number Space"
- RFC 4456: "BGP Route Reflection: An Alternative to Full Mesh Internal BGP (IBGP)"
- RFC 4724: "Graceful Restart Mechanism for BGP"

The following protocols are required.

- VLAN - Isolation of various types of traffic
- 802.1q trunk

The following required for Link control.

- Quality of service (PFC only required if using RoCE)
- Enhanced Traffic Selection (802.1Qaz)
- Priority Based Flow Control (802.1p/Q and 802.1Qbb)

a. WS-C2960X-48FPD-L

- 24 or 48 Gigabit Ethernet ports with line-rate forwarding performance
- 4 fixed 1 Gigabit Ethernet Small Form-Factor Pluggable (SFP) uplinks or 2 fixed 10 Gigabit Ethernet SFP+ uplinks
- PoE+ support with a power budget of up to 740W and Perpetual PoE
- Cisco IOS LAN Base or LAN Lite and Cisco IOS IP Lite
- Device management with web UI, over-the-air access via Bluetooth, Command-Line Interface (CLI), Simple Network Management Protocol (SNMP), and RJ-45 or USB console access
- Network management with Cisco Prime, Cisco Network Plug and Play, and Cisco DNA Center
- Stacking with FlexStack-Plus and FlexStack-Extended
- Layer 3 features with routed access (Open Shortest Path First [OSPF]), static routing, and Routing Information Protocol (RIP)
- Visibility with Domain Name System as an Authoritative Source (DNS-AS) and Full (Flexible) NetFlow
- Security with 802.1X, Serial Port Analyzer (SPAN) and Bridge Protocol Data Unit (BPDU) Guard
- Reliability with higher Mean Time Between Failures (MTBF) and Enhanced Limited Lifetime Warranty (E-LLW)
- Resiliency with optional dual field-replaceable power supplies

S.No.	Item	Description
1	form factor	1RU
2	Feature Set	LAN Base
3	Uplink Interfaces	2 x 10G SFP+
4	Ports	48 x 10/100/1000 Ethernet Gigabit ports
5	Power	740W
6	Maximum stacking number	8
7	Stack bandwidth	80G
8	Switching Bandwidth	216Gbps
9	RAM	512 MB
10	Flash Memory	128 MB
11	NIC	10/100 Mbps Ethernet (RJ-45)

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