

UNIVERSITY OF CALICUT

(Purchase Division)

168110/PURCHASE-ASST-A1/2017/Admn

Calicut University.P.O.

13.11.2017

Tender Notice

Sealed superscribed competitive tenders are invited by the Registrar, University of Calicut for the purchase of 10 Nos 24 Ports Network Switches for various departments of Calicut university . The specifications in the schedule attached below.

Tender Notice	168110/PURCHASE-ASST-A1/2017/Admn
Last date and time for receipt of the tender	27.11.2017 4:00 p.m.
Date and time of opening of the tender	28.11.2017 11:00 a.m.
Designation and address of the officer to whom the tender is to be addressed	Deputy Registrar, Purchase Division, University of Calicut, Calicut University P.O., Thenhipalam, Malappuram Dt. PIN 673635 PH: 0494-2407130/60
Date up to which rates are to be firm	90 days from acceptance of tender
Superscription	Tender for purchase of 24 port Network Switches
Address for delivery	Executive Engineer (Eelctrial) University Engineering Department, Calicut University Campus, Calicut University P.O. Malappuram 673 635

The tender form can be obtained from the Purchase Division on payment of the tender cost or can be downloaded along with General conditions from the University website (www.universityofcalicut.info) for which separate challan or DD should be enclosed.

Sealed tenders with cost of tender form of Rs. 448/- (inclusive of 12 % GST) and EMD of Rs.2000/- in separate demand drafts in favour of the Finance Officer should be submitted along with the tender documents.

The necessary superscription, due date for the receipt for tenders, the date up to which the rates will have to remain firm for acceptance and the name and address of officer to whom the tender is to be sent are noted above. Any bids received after the time fixed on the due date will be rejected.

The rate quoted should be inclusive of all taxes and all other charges, including delivery charges to the University of Calicut, Main Campus, Thenhipalam, Malappuram District, Kerala.

SPECIFICATION

Distribution Switch With 24 X 10G Ports

- The bidder needs to quote for the entire item and should supply within 5 days from purchase order.
- All Kerala Government Rules regarding purchase are applicable to the this tender.

SCHEDULE OF ITEMS:-

Distribution Switch With 24 X 10G Ports

	Distribution Switch With 24 X 10G Ports Description	Compliance yes/no
Sl. No.	make & Part No:	
	Hardware and interface requirements	
1	The Switch Should Support L2 & L3 functions with Minimum 24*10G SFP+ Slots.	
2	Switch should have minimum switching capacity of 480 Gbps	
3	Switch should have minimum 350 mbps of forwarding rate (64-byte packets)	
4	Switch should be stackable up to 8 units in a stack. Up to 192 ports managed as a single system with hardware failover. Stacked core switches should be able to provide aggregated uplink throughput and automatic fail over towards the access switches connected with redundant uplinks to core switch stack	
	layer 3 Switching features	
7	Switch should support SIP BPDU Guard, STP Root Guard, DHCP snooping, IP/Mac/Port Binding (IPMB)	
8	Switch should support Dynamic ARP Inspection (DM), IP Source Guard (IPSG)	
9	Switch should support Static Routing/ Layer 3 switching between VLAN's. IPv4 routing should support Up to 8K static routes and up to 256 IP inter-faces	
10	Switch should support Wire speed IPv6 Static Routing up to 4K and Interfaces up to 200	
11	Switch should support L3 interface on physical port, LAG, VLAN interface or loopback	
	layer 2 Switching features	
12	Switch should support Standard 802.1d Spanning Tree support, Fast convergence using 802.1w (Rapid Spanning Tree [RSTP]), enabled by default 8 instances are supported, Multiple Spanning Tree instances using 802.1s (MSTP)	
13	Switch should support for IEEE 802.3ad Link Aggregation Control Protocol (LACP), Up to 8 groups, Up to 8 ports per group for each (dynamic) 802.3ad link aggregation.	
	Switches should support for up to 4K VLANs simultaneously, Port-based and 802.1Q tag-based VLANs,MAC-based VLAN, also known as	

14	protected ports, with multiple uplinks, Guest VLAN, Unauthenticated VLAN, Dynamic VLAN assignment via Radius server along with 802.1x client authentication and CPE VLAN	
15	Switch should support Guest VLAN, Voice VLAN, GVRP/GARP.. support Dynamic Host Configuration Protocol (DHCP) Relay at Layer 2 with option 82, Internet Group Management Protocol (IGMP) versions 1, 2 and 3 snooping and 256 multicast groups	
16	Switch should support be able to support source based multicasting & Head-of-line (HOL) blocking prevention.	
	Security features	
17	The Switch must have IEEE 802.1X: RADIUS authentication and accounting, Single/multiple host mode, Single/multiple sessions Support for time-based 802.1X, and Dynamic VLAN assignment	
18	Switch should be able to support Locking of MAC addresses to ports and should also be capable of limiting the number of learned MAC addresses	
19	Switch should support RADIUS authentication where switch functions as client.	
20	Switch should support storm control for Broadcast, multicast, and unknown unicast.	
21	Switch should support 2K ACLs	
22	Switch should support DoS attack prevention.	
23	Switch should support Access Control List features using which Dropping and rate limiting can be done based on following:- source and destination MAC, VLAN ID, Port grouping, Differentiated services code point (DSCP)/IP Precedence, TCP/UDP source and destination ports, 802.1p priority	
	Quality of Services features	
24	Switch should support Priority levels with 8 hardware queues.	
25	Switch should support scheduling using Strict priority and weighted round-robin (WRR) and Queue assignment based on DSCP and class of service	

	(802.1p/COS)	
26	The Switch should be capable of supporting Class of service based on following	
27	Port based, 802.1p VLAN priority based, Ipv4/v6 IP precedence/type of service (ToS)/DSCP based, Ipv4/v6 IP precedence/type of service (ToS)/DSCP based, Differentiated services (DiffServ)	
28	The Switch should be capable of supporting IPv6 features like IPv6 host mode, IPv6 over Ethernet, Dual IPv6/IPv4 stack, IPv6 neighbor and router discovery (ND), IPv6 stateless address auto-configuration, Path maximum transmission unit (MTU) discovery, Duplicate address detection (DAD), ICMP version 6, IPv6 over Ipv4 network with Intra-Site Automatic Tunnel Addressing Protocol (ISATAP)	
29	The switch should have support for IPv6 application such as Web/SSL, Telnet server/SSH, ping, trace route, Simple Network Time Protocol (SNTP), Trivial File Transfer Protocol TFTP), SNMP, RADIUS, syslog, DNS client, protocolbased VLANs	
	Management features	
30	Switch should have Built-in switch configuration utility of ready browser-based device configuration (1-ITTP/HTTPS/CLI/SSH).	
31	Switch should support built-in web based utility should be support configuration, system dashboard, system maintenance	
32	Switch should support SNMP version 1, 2c and 3 with support for traps, and SNMP version 3 user-based security model (USM)	
33	Switch should support remote monitoring with Embedded RMON software agent with support of 4 RMON groups (history, statistics, alarms , and events) for enhanced traffic management monitoring, and analysis.	
34	Switch should support firmware upgrade using web, TFTP and console as well. Switch should support Dual images for resilient firmware upgrades	
35	Switch should support port mirroring and Vlan mirroring feature for analysis with a network analyzer or RMON probe.	
36	The Switch should support Text-editable config files easier and faster mass deployments.	
37	Switch should support minimum 16K mac addresses and jumbo frames with Frame sizes up to 9 KB supported on Gigabit interfaces.	

	Warranty	
38	Switch should be provided with hardware replacement warranty and ongoing software upgrades for all major and minor releases for a period of 3 years.	
39	Preferred Make: HPIJuniperCisco	



DEPUTY REGISTRAR
PURCHASE DIVISION



To
The System Administrator (For publication in the University Website)