



॥ यतो धर्मस्ततो जयः ॥

MNLUA/Admin/NIT-320 Dt: 19/05/2023

Maharashtra National Law University,
Aurangabad

NIT No.: MNLUA/Admin/NIT/2023/02
Tender for Network & Hardware Equipment

Tender Reference Number	MNLUA/ARC22-23/OFC
Date of Issue/Publish	20/05/2023
Due Date & Time/Submission End Date	05/06/2023 17:00 pm
Tender Opening Date (Technical Bid)	07/06/2023
Name, Address & Contact No. of Tenderer	The Registrar, Maharashtra National Law University, Paithan Road, Kanchanwadi campus, Aurangabad - 431005
Tender Fee	₹. 17,000 /- (Non-Refundable)
EMD	₹. 5,25,000 /-
Website	www.mahatenders.gov.in
Pre-Bid Meeting Date	30/05/2023 at 15:00 pm

ABOUT UNIVERSITY:

The State of Maharashtra realizing the importance of quality legal education and the need of well-trained law graduates for the Bar, Bench, and Professions took a very bold decision by creating three National Law Universities in the State of Maharashtra at Mumbai, Nagpur and Aurangabad. Further, all three are independent institutions created under the Maharashtra National Law University Act, 2014. The latest one added to the list of National Law Universities in India is the Maharashtra National Law University, Aurangabad, which commenced from March 16, 2017. The commencement of the University has fulfilled the aspirations of the people of the Marathwada region for an institution of national importance in Aurangabad. The law university is set to make a beginning with admissions from the Academic Year 2017-18. The University entered into an MOU with the Convenor, CLAT 2017 to make admissions from the merit list of the qualified CLAT-2017 aspirants. The authorities are making all efforts to make the admissions and to provide all facilities to the students who take admission in MNLU-Aurangabad.

Rad
Registrar
Maharashtra National Law University
Aurangabad - 431 005

A) PROJECT SCOPE

Sr. No.	ITEM DESCRIPTION	Qty	Amount								
1]	<p>NETGEAR Layer3 Core Switch - (XSM4348S) 24 1/10G Copper + 24 1/10G SFP+ Ports, 960Gbps Throughput, Stackable Managed Layer3 Switch</p> <p>Technical Specifications</p> <table border="1" data-bbox="272 394 1166 2116"> <tr> <td data-bbox="272 394 576 752">1.1) Physical Interfaces</td> <td data-bbox="576 394 1166 752"> 24 # 1/10G Base-T Copper Ports (Dedicated) 24 # 1/10G Base-X Fiber SFP Ports (Dedicated) Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Front) Console: Mini-USB (Front) Storage: USB (Front) Full-width 1-unit 1U rack mount 2 PSUs in RPS mode </td> </tr> <tr> <td data-bbox="272 752 576 954">1.2) CPU/ Memory</td> <td data-bbox="576 752 1166 954"> CPU: 800 MHz RAM: 1 GB Packet buffer memory: 56 MB Flash: 256 MB </td> </tr> <tr> <td data-bbox="272 954 576 1939">1.3) Performance</td> <td data-bbox="576 954 1166 1939"> Stack height: 8 switches Mixed Stacking on 10G & 1G models Non-Stop Forwarding Failover Switching fabric: 960 Gbps Line-Rate (non blocking fabric) Throughput: 714 Mpps Forwarding mode: Store-and-forward Address database size: 128K MAC addresses (48-bit MAC address) Number of VLANs: 4,093 (IEEE 802.1Q) simultaneously Number of multicast groups= 2K IPv4 Number of multicast groups= 2K IPv6 ARP/NDP= 8K Number of LAGs (802.3ad): 128 LAGs with up to 8 ports per group Number of hardware queues for QoS: 8 (Standalone) Number of routes: 12K IPv4 Unicast routes Number of routes: 4K IPv6 Unicast routes Jumbo frame support: up to 9KB packet size Mean time between failures (MTBF): 133,000 hours or more sFlow=416 samplers, 416 pollers, 8 receivers </td> </tr> <tr> <td data-bbox="272 1939 576 2116">1.4) L2 Services</td> <td data-bbox="576 1939 1166 2116"> Protocol based VLAN IP Subnet IPX ARP </td> </tr> </table>	1.1) Physical Interfaces	24 # 1/10G Base-T Copper Ports (Dedicated) 24 # 1/10G Base-X Fiber SFP Ports (Dedicated) Ethernet: Out-of-band 1G port (Front) Console: RJ45 RS232 (Front) Console: Mini-USB (Front) Storage: USB (Front) Full-width 1-unit 1U rack mount 2 PSUs in RPS mode	1.2) CPU/ Memory	CPU: 800 MHz RAM: 1 GB Packet buffer memory: 56 MB Flash: 256 MB	1.3) Performance	Stack height: 8 switches Mixed Stacking on 10G & 1G models Non-Stop Forwarding Failover Switching fabric: 960 Gbps Line-Rate (non blocking fabric) Throughput: 714 Mpps Forwarding mode: Store-and-forward Address database size: 128K MAC addresses (48-bit MAC address) Number of VLANs: 4,093 (IEEE 802.1Q) simultaneously Number of multicast groups= 2K IPv4 Number of multicast groups= 2K IPv6 ARP/NDP= 8K Number of LAGs (802.3ad): 128 LAGs with up to 8 ports per group Number of hardware queues for QoS: 8 (Standalone) Number of routes: 12K IPv4 Unicast routes Number of routes: 4K IPv6 Unicast routes Jumbo frame support: up to 9KB packet size Mean time between failures (MTBF): 133,000 hours or more sFlow=416 samplers, 416 pollers, 8 receivers	1.4) L2 Services	Protocol based VLAN IP Subnet IPX ARP	01	
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1.4) L2 Services	Protocol based VLAN IP Subnet IPX ARP										

	Subnet based VLAN	
	MAC based VLAN	
	Voice VLAN	
	Private Edge VLAN	
	Private VLAN	
	Guest VLAN	
	Double VLAN Tagging (QoQ)	
	GARP with GVRP/GMRP	
	MVR (Multicast VLAN Registration)	
	Multiple Registration Protocol (MRP)	
	Multicast VLAN Registration Protocol (MVRP)	
	LAG Hashing	
	LAG Member Port Flaps Tracking	
	UDLD support	
	Distributed Link Aggregation	
	Storm Control	
	Link Dependency	
	Spanning Tree Protocol	
	Per VLAN STP (PVSTP) with Fast Uplink and Fast Backbone	
	Per VLAN Rapid STP (PVRSTP)	
	STP Loop Guard	
	STP Root Guard	
	BPDU Guard	
	STP BPDU Filtering	
	STP BPDU Flooding	
	IGMP v2/v3 Snooping support	
	MLD v1/v2 Snooping support	
	Expedited Leave Function	
	Static L2 Multicast Filtering	
	MLDv1/2 Snooping Support	
	IGMPv2/3 Snooping Support	
1.5) L3 Services	IGMP Proxy	
	Policy based routing	
	MLD Proxy	
	Any Source Multicast (ASM)	
	Source Specific Multicast (SSM)	
	Multicast streams routing between subnets, VLANs	
	Multicast Static Routes (IPv4, IPv6)	
	DVMRP	
	Neighbor discovery (IPv4, IPv6)	
	PIM-DM (IPv4, IPv6)	
	PIM-SM (IPv4, IPv6)	
	PIM multi-hop RP support	
	IPMC replication (hardware support)	
	DHCP Client (IPv4, IPv6)	
	DHCP Server (IPv4, IPv6)	
	DHCP Snooping (IPv4, IPv6)	
	DHCP/ BootP Relay (IPv4, IPv6)	
	DHCP options 66, 67, 150, and 55, 125	
	Static Routing (IPv4, IPv6)	

		Port based Routing		
		ECMP Static Routing		
		Port Based Routing		
		VLAN Routing		
		RIP v1 and v2		
		OSPF v2 and v3		
		OSPF Flood Blocking		
		Route Redistribution		
		VRRP		
		VRRP Route/Interface Tracking		
		Loopback Interfaces		
		Tunnel interfaces		
		Router Discovery		
		IP Helper		
		IP Source Guard		
		IP Event Dampening		
		ECMP		
		Proxy ARP		
		Multinet ting		
		ICMP v4 and v6		
		IPv4/IPv6		
		DNS v4 and v6		
		IPv6 Routing		
		Configured v6-over-v4 tunnels		
		Automatic (6to4) tunnels		
	1.6) QoS	IEEE 802.1p CoS		
		DiffServ QoS		
		WRED (Weighted Deficit Round Robin)		
		Single Rate Policing		
		Strict Priority queue technology		
		Auto-VoIP		
		iSCSI Flow Acceleration		
		IP DSCP		
		IP Precedence		
		IP TOS		
		L3 IPv6 Flow Label		
		Interface Traffic Shaping		
		PHB Support		
		Minimum Bandwidth per-interface		
	1.7) Security	Broadcast, Multicast and Unicast Network Storm Protection		
		CPU Protection		
		DoS attack protection		
		ICMP throttling		
		Management ACL		
		Radius accounting		
		TACACS+		
		L2/L3/L4 Access Control List (ACL)		
		MAC, IPv4, IPv6, TCP, UDP ACL		
		Protocol based ACL		
		ACL over VLAN		
		Dynamic ACL		

	IEEE 802.1x Radius Port Access Authentication
	802.1x MAC Address Authentication Bypass (MAB)
	Port Security
	Dynamic ARP Inspection
	MAC Filtering
	Port MAC Locking
1.8) IEEE Network Protocols	IEEE 802.3 10Base-T
	IEEE 802.3 Ethernet
	IEEE 802.3i 10BASE-T
	IEEE 802.3u 100BASE-T
	IEEE 802.3ab 1000BASE-T
	IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX
	IEEE 802.3ae 10-Gigabit Ethernet
	IEEE 802.3ad Trunking (LACP)
	IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED)
	IEEE 802.1D Spanning Tree (STP)
	IEEE 802.1s Multiple Spanning Tree (MSTP)
	IEEE 802.1w Rapid Spanning Tree (RSTP)
	IEEE 802.1p Quality of Service
	IEEE 802.1Q VLAN tagging
	IEEE 802.1v protocol-based VLAN
	IEEE 802.1X Radius Network Access Control
	IEEE 802.3x flow control
	GMRP — Dynamic L2 multicast registration
	GVRP — Dynamic VLAN registration
	GARP -Generic Attribute Registration Protocol
1.9) Management	ISDP (Industry Standard Discovery Protocol)
	Out of band Management
	802.1ab LLDP and LLDP-MED
	SNMP v1, v2 and v3
	RMON 1, 2, 3, 9
	sFlow
	Command Line Interface (CLI)
	Web-based graphical user interface (GUI)
	Admin access control via Radius and TACACS+
	Telnet
	Dual Software (Firmware) images
	Dual Configurations file (Text-based)
	Radius accounting
	Malicious Code Detection
	SNTP
	XMODEM

	Port Mirroring
	Cable Test Utility
	SSH v1/v2
	SSL/HTTPS and TLS v1.0 for web-based access
	File Transfer (uploads, downloads) through TFTP/HTTP
	SCP/ SFTP/ HTTPS
	Syslog
	Non disruptive Config Management
	Remote Port Mirroring (RSPAN)
	Persistent log supported
1.10) Network Traffic	Access Control Lists (ACLs) L2 / L3 / L4
	Time-based ACLs
	ACL over VLANs
	IPv6 RA Guard Stateless Mode
	Network Authentication Successive Tiering
	802.1x MAC Address Authentication Bypass (MAB)
1.11) LED	Per port: Speed, link, activity
	Power, Fan, Stack Master, Stack ID
	Cooling front to back
1.12) Environmental	Operating Temperature: 32° to 122°F (0° to 50°C)
	Operating Humidity: 90% maximum relative humidity, non-condensing
	Storage Temperature: - 4° to 158°F (- 20° to 70°C)
	Storage Humidity: 95% maximum relative humidity, non-condensing
1.13) Certifications	CE mark, commercial
	FCC Part 15 Class A, VCCI Class A
	Class A EN 55022 (CISPR 22) Class A
	Class A C-Tick
	EN 50082-1
	EN 55024
	CSA certified (CSA 22.2 #950)
	UL listed (UL 1950)/cUL IEC 950/EN 60950
1.14) Warranty	True Lifetime Hardware replacement warranty
	Lifetime free latest firmware support
	Replacement with New Product Only No refurbished Products.

2]	<p>NETGEAR L3- Network Switch 24-Port 1/10G SFP+ Managed Switch with 480Gbps Throughput (XMS 4324FS)</p> <p>Technical Specifications : 24-Port 1/10G SFP+ Managed Switch with 480Gbps Throughput (XMS 4324FS)</p>	3							
3]	<p>NETGEAR L2- NETWORK Switch GS324TP</p> <p>Technical Specifications : (24-port 10/100/1000 Base-T Gigabit PoE+ Managed Switch)</p> <table border="1"> <tr> <td data-bbox="276 584 619 723">3.1) Physical Specifications</td> <td data-bbox="627 584 1161 723"> 24 # 10/100/1000 Base-T auto-sensing PoE+ ports 2 dedicated 100/1000 Base-X Fiber SFP ports </td> </tr> <tr> <td data-bbox="276 734 619 1619">3.2) Performance Specification</td> <td data-bbox="627 734 1161 1619"> CPU: 800MHz single core, 512MB DDR RAM, 2MB SPI NOR, 128MB FLASH Bandwidth: 52 Gbps non-blocking Mean Time Between Failures (MTBF): 1,328,429 hrs (152 yrs) Heat Dissipation (worst case, all ports used, full PoE, line-rate traffic) (BTU/hr):- Max: 784.88 BTU/hr Forwarding modes: Store-and-forward 4 Priority queues Weighted Round Robin (WRR) and Strict Priority MAC Address database size: 16,000 media access control (MAC) addresses VLAN: 64 512 Multicast groups Number of DHCP snooping bindings: 8K Access Control Lists (ACLs): 100 shared for MAC (ingress) Packet forwarding rate (64 byte packet size) (Mpps) : 38.6 Jumbo frame support: Up to 9K packet size Packet buffer memory (Dynamically shared across only used ports): 0.5 MB 1G Copper Latency (64-byte packets): 3.734µs 1G Fiber Latency (64-byte packets): 2.896µs Max power (worst case, all ports used, full PoE, line-rate traffic) (Watts): 229.9W PoE budget: 190W </td> </tr> <tr> <td data-bbox="276 1675 619 2094">3.3) IEEE Network Protocols</td> <td data-bbox="627 1675 1161 2094"> IEEE 802.3 Ethernet IEEE 802.3u 100BASE-T IEEE 802.1Q VLAN Tagging IEEE 802.3ab 1000BASE-T IEEE 802.3af PoE IEEE 802.3at PoE+ IEEE 802.3az Energy Efficient Ethernet (EEE) IEEE 802.3ad Trunking (LACP) IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX IEEE 802.3x Full-Duplex Flow Control IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED) IEEE 802.1p Class of Service </td> </tr> </table>	3.1) Physical Specifications	24 # 10/100/1000 Base-T auto-sensing PoE+ ports 2 dedicated 100/1000 Base-X Fiber SFP ports	3.2) Performance Specification	CPU: 800MHz single core, 512MB DDR RAM, 2MB SPI NOR, 128MB FLASH Bandwidth: 52 Gbps non-blocking Mean Time Between Failures (MTBF): 1,328,429 hrs (152 yrs) Heat Dissipation (worst case, all ports used, full PoE, line-rate traffic) (BTU/hr):- Max: 784.88 BTU/hr Forwarding modes: Store-and-forward 4 Priority queues Weighted Round Robin (WRR) and Strict Priority MAC Address database size: 16,000 media access control (MAC) addresses VLAN: 64 512 Multicast groups Number of DHCP snooping bindings: 8K Access Control Lists (ACLs): 100 shared for MAC (ingress) Packet forwarding rate (64 byte packet size) (Mpps) : 38.6 Jumbo frame support: Up to 9K packet size Packet buffer memory (Dynamically shared across only used ports): 0.5 MB 1G Copper Latency (64-byte packets): 3.734µs 1G Fiber Latency (64-byte packets): 2.896µs Max power (worst case, all ports used, full PoE, line-rate traffic) (Watts): 229.9W PoE budget: 190W	3.3) IEEE Network Protocols	IEEE 802.3 Ethernet IEEE 802.3u 100BASE-T IEEE 802.1Q VLAN Tagging IEEE 802.3ab 1000BASE-T IEEE 802.3af PoE IEEE 802.3at PoE+ IEEE 802.3az Energy Efficient Ethernet (EEE) IEEE 802.3ad Trunking (LACP) IEEE 802.3z Gigabit Ethernet 1000BASE-SX/LX IEEE 802.3x Full-Duplex Flow Control IEEE 802.1AB LLDP with ANSI/TIA-1057 (LLDP-MED) IEEE 802.1p Class of Service	52	
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	IEEE 802.1D Spanning Tree (STP)
	IEEE 802.1s Multiple Spanning Tree (MSTP)
	IEEE 802.1w Rapid Spanning Tree (RSTP)
	IEEE 802.1X Radius network access control
3.4) Network Security and Traffic	IEEE 802.1x
	Guest VLAN
	RADIUS-based VLAN assignment via .1x
	RADIUS accounting
	Network Storm Protection
	DoS attacks prevention
	Broadcast, Unicast, Multicast Protection
	Access Control Lists (ACLs) L2 / L3 / L4
	IP-based ACLs (IPv4)
	MAC-based ACL
	TCP/UDP-based ACL
	MAC lockdown
	MAC lockdown by the number of MACs
	IEEE 802.1x Radius Port Access Authentication
	Control MAC # Static entries: 48
	IEEE 802.1Q VLAN Tagging
3.5) L2 Services	Video VLAN
	Voice VLAN
	IEEE 802.3ad - LAGs - LACP (8 LAGS with max. of 8 members in each LAG)
	Broadcast Storm Control
	IGMP Snooping (v1, v2 and v3)
	IGMP Snooping queriers
3.6) Network Monitoring and Discovery Services	802.1ab LLDP
	SNMP V1, V2, V3
	RMON 1,2,3,9
3.7) Quality of Service (QoS)	Port-based rate limiting: Egress
	Port-based QoS
	DiffServ QoS
	IEEE 802.1p COS
	IPv4 DSCP
	IPv4 ToS
3.8) Management	Password management
	Configurable Management VLAN
	Admin access control via Radius and TACACS+
	Web-based graphical user interface (GUI)
	Dual Software (firmware) image
	SNTP client over UDP port 123
	SNMP v1/v2
	SNMP v3 with multiple IP addresses
	RMON 1,2,3,9
	Port Mirroring
	Many to One Port Mirroring
	Cable Test utility
	SSL/HTTPS and TLS v1.2 for web-based access
	TFTP/HTTP File transfers (uploads, downloads)
	HTTP Download (firmware)
	Syslog (RFC 3164)

3.9) LEDs	Per port: Speed, Link, Activity Per device: Power, Fan, PoE Max
3.10) Environmental Conditions	Operating Temperature: 0° to 45° C (32° to 113° F) Operating Humidity: 95% maximum relative humidity, non-condensing Storage Temperature: - 4° to 158°F (-20° to 70°C) Storage Humidity: 95% maximum relative humidity, non-condensing Operating Altitude : 10,000ft (3,000m) maximum
3.11) Certifications	CE mark, commercial FCC Part 15 Class A, VCCI Class A Class A EN 55022 (CISPR 22) Class A Class A C-Tick EN 50082-1 47 CFR FCC Part 15, SubpartB, Class A CCC
3.12) Safety	UL listed (UL 1950)/cUL IEC 950/EN 60950 CB report / certificate IEC 60950-1:2005 (ed.2)+A1:2009+A2:2013 CE LVD: EN 60950-1: 2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 BSMI: CNS 14336-1
3.13) Warranty and Support	5 Years hardware replacement warranty Replacement with New Product Only No refurbished Products.

4) Single Mode 1G SFP MODULE (AGM732F)

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Technical Specifications	
4.1) SFP Module	1000Base-LX Fiber SFP
	LC duplex connector
	1310 nm, for distances up to 10 km
	Single Mode Fiber
	ROHS Compliant
	Compliant with SFP Transceiver MSA specification
	Compliant with Specifications for IEEE 802.3z/Gigabit Ethernet
	Compliant with Industry Standard RFT Electrical Connector and Cage
	Single + 3.3V Power Supply and TTL Logic Interface
	EEPROM with Serial ID Functionality
	Laser Class 1 Product which comply with the requirements of IEC 60825-1 and IEC 60825-2

4.2) Warranty and Support	5 Years Hardware Replacement Warranty Replacement with New Product Only No refurbished Products.		
5)	Single Mode 10G SFP+ Module (AXM762)		08
Technical Specifications			
5.1) SFP+ Module	10GBase-LR Fiber SFP+ LC duplex connector 1310nm Wavelength 2m - 10km for 9/125 um SMF Single Mode Fiber ROHS Compliant Compliant with SFP+ Transceiver MSA specification Compliant with Specifications for IEEE 802.3ae 10-Gigabit Ethernet Over Fiber Compliant with Industry Standard RFT Electrical Connector and Cage Operating Temperature 32 -158° F (0 - 70°C) MTBF 4,986,536 hr (569 years) Power Consumption <1.5w UL 1950 CSA 22.2 No. 950		
5.2) Warranty and Support	5 Years Hardware replacement warranty Replacement with New Product Only. No refurbished Products.		
6)	NETGEAR Dual Band WiFi Access Point (WAX615)		183
Technical Specifications (2 x 2 Dual Band Wireless-AX Wave2 Access Point)			
6.1) Physical Interfaces	One 100/1000/2.5GBASE-T Gigabit Ethernet (RJ-45) ports with Auto Uplink (Auto MDI-X) supporting IEEE 802.3af or 802.3at Power over Ethernet (PoE) Two (2) Internal 2.9/2.8dBi (2.4GHz/5GHz) antenna Four (4) LED: Power and Cloud connection; LAN speed; 2.4GHz status; 5.0GHz status Power adapter (not included): 12V DC, 2.5A		
6.2) Standards	5.0GHz: 802.11a/n/ac/ax; 2.4GHz: 802.11b/g/n/ax IEEE 802.11ax WIFI 6 standard WMM - Wireless Multimedia Prioritization WDS- Wireless Distribution System Power over Ethernet (PoE) IEEE 802.3af/802.3at		
6.3) Security	Wi-Fi Protected Access (WPA, WPA2, WPA3), 802.11i WPA2 Enterprise Wireless access control to identify authorized wireless network devices MAC address filtering with access control 802.1x RADIUS support with EAP TLS, TTLS, PEAP Neighbor AP detection VLAN Support Secure Socket Layer (SSL) Guest Network/Captive Portal		

	Bandwidth management		
	Link Layer Discovery Protocol		
6.4) Network Management	Cloud based App Management for setup, monitoring and management from anywhere anytime (Remote configuration and management)		
	Easy-to-use Web browser-based management GUI		
6.5) Manageability	As standalone		
	Centralized Management through Mobile Application		
6.6) Advanced Wireless Features	Wireless Distribution System (WDS)		
	Bridge mode: Point-to-point wireless WDS mode		
	Bridge mode: Point-to-multipoint wireless WDS mode		
	Repeater mode		
	Adjustable Transmit Power Control (TPC)		
	Wireless backhaul to form Mesh Network		
	Device detection		
	Identify type of wireless clients in the network		
6.7) Other Specifications	PoE power consumption: 21.2W		
	Business class WiFi based on next generation 802.11ax WiFi 6 technology on both 5.0GHz and 2.4GHz bands. Backward compatible to 802.11b/g/n/a/ac		
	Dual band 2x2 (2.4GHz and 5.0GHz) 4 streams of data for an aggregate throughput of up to 3Gbps		
	Theoretical Throughput per Band: 5.0GHz: 2400Mbps, 2.4GHz: 600Mbps		
	Orthogonal Frequency Division Multiple Access (OFDMA)		
	Multi-Gigabit Support		
	Target Wake Time (TWT)		
	Basic Service Set Coloring (BSS Coloring)		
	Bandsteering		
	Block SSID Broadcast		
	Ceiling mounting / Wall mounting		
	Bidir and MU-MIMO support		
6.8) Warranty and Support	5 Years Hardware Replacement Warranty		
	5 Years Centralized Management license must be included		
	5 Years free latest firmware support		
	Replacement with New Product Only. No Refurbished Products.		
		183	

7]

SOPHOS-Firewall of XGS 2300 Xstream protection

01

Sophos

Feature set	
7.1)	General Requirement
7.1.1)	Must have a 64-bit hardware platform & based on Multi-Core Architecture with Optimization for excellent throughput for all your key processes
7.1.2)	The Proposed solution should have option for visibility into encrypted traffic flows, support for TLS 1.3 without downgrading the performance.
7.1.3)	The device should be having security functions like Firewall, VPN (IPsec Site to Site & SSL Client VPN), Gateway level antivirus, Category based web and application filtering, Intrusion prevention system, Traffic shaping, DoS/DDoS, WAF, Anti-Spam.
7.1.4)	Solution should offer with Central management solution with option to manage multiple firewalls from day one.
7.1.5)	Solution should support Multiple WAN link balancing multiple Internet connections, auto-link health check, automatic failover, automatic and weighted balancing, and granular multipath rules, should support more than two ISP
7.2)	Hardware & Performance Requirement
7.2.1)	The appliance should support 8 x GbE copper ports, 2 X SFP fiber ports from day one and should support 4 x 10GE SFP+ fiber ports for future extension.
7.2.2)	Appliance should have external redundant PSU option
7.2.3)	Should support SSD storage of min 1 x 120 Gb SATA-III
7.2.4)	Firewall must support at least 6.5 million concurrent connections
7.2.5)	Firewall must support at least 1,48,000 new sessions per second processing.
7.2.6)	Firewall should support up to 20 Gbps of Firewall IMIX throughput.
7.2.7)	Firewall should support integrated IPS throughputs of minimum 7 Gbps.
7.2.8)	Firewall should have a minimum Firewall throughput of 35 Gbps.
7.2.9)	Firewall should have a minimum Threat Protection throughput 1.4 Gbps.
7.2.10)	Firewall should have a minimum NGFW throughput of 6.3 Gbps.
7.3)	General Features
7.3.1)	Firewall must provide filtering capability that includes parameters like source addresses, destination addresses, source and destination port numbers, protocol type
7.3.2)	Firewall should be able to filter traffic even if the packets are fragmented.
7.3.3)	All known internet-based applications should be supported for filtering; like Telnet, FTP, SMTP, HTTP, DNS, ICMP, DHCP, ARP, etc.
7.3.4)	Firewall should support SSL inspection over HTTPS
7.3.5)	Firewall should support CLI and GUI based access to the firewall modules.
7.3.6)	Firewall should have application-based and user-based logs.

7.3.7)	Should support Local authentication and integration with third party authentication solutions like, Active Directory, LDAP Server, RADIUS, TACACS+, eDirectory and Kerberos
7.4)	Security
7.4.1)	Protects HTTP, HTTPS, FTP, POP3, POP3S, IMAP, IMAPS, SMTPS and SMTP.
7.4.2)	Pattern-based spyware blocking at the gateway.
7.4.3)	Centralized, daily updates, automatic and manual updates or offline update.
7.4.4)	Advance Threat Protection should have Instant identification and immediate
7.4.5)	response to today's most sophisticated attacks. Multi-layered protection identifies threats instantly
7.4.6)	Should support Sandboxing Inspects executables and documents containing executable content like - Windows executables (including .exe, .com, and .dll) - Word documents (including .doc, .docx, docm and .rtf) - PDF documents - Archives containing any of the file types listed above (ZIP, BZIP, GZIP, RAR, TAR, LHA/LZH, 7Z, Microsoft Cabinet)
7.4.7)	The proposed solution should have an option to enable features like Web Application Firewall and Email Protection if needed in future
7.5)	Web Filtering
7.5.1	Firewall should support minimum of at least 70+ predefined categories.
7.5.2	Should have flexibility to create network, user, Web and app-based traffic shaping (QoS) policy.
7.5.3	Blacklist and White listing based on IPs and URLs.
7.5.4	Exceptions based on network objects defined.
7.5.5	Notification of custom messages or URL redirection.
7.6)	Intrusion Prevention System
7.6.1)	IPS should protect for 5000+ Signatures database.
7.6.2)	Firewall should block attacks such as DoS- SYN, IP/ICMP/TCP/UDP related attacks.
7.6.3)	Solution should have IPS deep packet inspection engine with an option to select
7.6.4)	IPS patterns which can be applied firewall rule for better protection and should have option to create custom signature
7.6.5)	Firewall should block attacks such as DNS cache poisoning, FTP bounce, improper commands.
7.7)	Application Control
7.7.1)	Firewall should have feature to identify, allow, block or limit usage of applications beyond ports and protocols.
7.7.2)	Firewall should provide protection against Block potentially unwanted Applications
7.7.3)	Application signature database of 25000+ Applications for Application Control
7.8)	API Support
7.8.1)	The solution Should support API for 3rd party integration
7.8.2)	The API has option to add, update, or delete configurations.
7.8.3)	The API should have option to add or update policies for IPS, Web filter, Application filter

8]	7.8.4)	The solution API should have option to Manage physical interfaces and view Port wise Network and Zone details	01		
	7.8.5)	The Solution API should have option to update Gateway details. routes traffic between networks.			
	7.8.6)	The Solution API should have option to add or delete route			
	7.9)	Logging & Reporting			
	7.9.1)	Firewall logs must contain information about the firewall policy rule that triggered the log			
	7.9.2)	Firewall must provide at a minimum basic statistic about the health of the firewall and the amount of traffic traversing the firewall.			
	7.9.3)	Firewall should have support to log (in detail) all connections which are blocked or pass through the firewall.			
	7.9.4)	Firewall should have support to generate performance statistics on real-time basis.			
	7.9.5)	Firewall should have the capability to produce reports which measure usage.			
	7.9.6)	Should Support 1000+ drilled down reports on the appliance			
	7.9.7)	The solution should support User Threat Quotient to identify risky users based on recent browsing behaviour and ATP triggers			
	7.10)	OEM Criteria			
	7.10.1)	Proposed solution should have presence in Gartner's Magic Quadrant for Network Firewalls in latest reports			
	7.10.2)	Should have ISO 9001:2015 or above certificate			
	7.10.3)	Firewall operating system family should be EAL4+ certified from Common Criteria or under Indian Common Criteria Certification Scheme			
	7.10.4)	Should have IPv6 Ready Logo/certified (Please submit proof in BID)			
	7.11)	3 Year Lic. Xstream Protection for XGS 2300			
	7.11.1	Three Year Subscription license for Firewall, Advanced Threat Protection (ATP), Intrusion Prevention System (IPS), Zero-Day Protection, Anti-malware, Web and App visibility control, and protection, 24x7 support, security and software updates. License period will be counted after activation.			
	Passive Components				
	8.1) Technical Specifications:	Single Mode OFC LC-SC Patch cords 3 Mtr			220
	8.2)	Firewall, Layer3 & Layer2 PoE Switches and Access Points installation and Configurations charges			01

Attach separate sheet, if required .

- *Quote rates in words also.*
- *Fill in the details of over/under specifications offered in Appendix-A form.*
- *Model is to be specified. Quote all possible models and the articles with all details.*
- *Given Quantity may be vary as per the requirement.*

I hereby agree to abide by the Terms & Conditions of this tender enclosed herewith & duly signed by me.

Name of the firm:

Place:

Date:

*Signature of the Tenderer
With Rubber Stamp.*

APPENDIX -A

Over specification / under specification statement

Sr.No.	Item No.	Specification Required	Specification Offered

Name of the Supplier _____ *Signature of Supplier*

TERMS & CONDITIONS

1. The e-tender form & all the details are available on the website: www.mahatenders.gov.in. The tender form fees and respective EMD fees should be paid online at www.mahatenders.gov.in.

2. The e-tender should be submitted online over www.mahatenders.gov.in wherein the tenderer has to upload the Technical Documents & Commercial Bid in the respective two cover systems. The detailed instruction regarding is given in the website mentioned above.

3. Following documents which are compulsory documents for consideration of the Commercial offer must be uploaded in technical cover, otherwise the Tender may be disqualified.

(All Documents must be properly indexed and to be uploaded serially).

- *Copy of acknowledgement of Income Tax Return for **last three financial years.***
- *Copy of acknowledgement of GST Return as on **31 March 2023.***
- *Copy of updated registration of business (Incorporation Certificate) or Shop Act License.*
- *GST Registration Certificate.*
- *Copy of authorised certificate of Manufacturer / Authorized Dealer / Distributor / Service Provider for said e-Tender.*
- *Tenderer must possess at least three years of service experience in handling network infrastructure support to academic institutions / research organization / industry (Attach testimonials and orders from academic institutions / research organization / industry).*

4. List of Technical Staff should also be enclosed with escalation matrix, Proof of after Sales-Technical support, must be submitted.

5. List of five latest major clients with document reference should also be enclosed.

6. The commercial / Financial Offer must be submitted in the form of BoQ- a excel sheet given over www.mahatenders.gov.in. The tenderer shall fill up the column of rate per unit (units as given in BoQ) offered by him. It is necessary that the tenders must submit the financial bid for A – Project Scope - Components and B – Project Scope - Services section of BoQ for the fair competitiveness of the financial offers.

7. The Commercial Bid shall be opened only if valid documents are submitted as specified in sr. no. 3.

8. The University reserves the right to decide whether to open or not open the Commercial Cover of any Tenderer and objection of any Tenderer shall not be entertained on any ground whatsoever regarding this.

9. The rates quoted should be inclusive of all Taxes, other charges and delivery, installation, support. **Rates should be F.O.R. University.** The delivery charges for the articles replaced under warranty period should be paid by the tenderer.

10. The rates quoted should be valid minimum for 180 days or as per the ARC agreement after due date of e-tender and the rates should be binding on the tenderer for the purchase/work order issued to the tenderer within this period and it is applicable irrespective of the time of supply or service provided. Cost escalation will not be applicable for any reason.

11. The tenderer should have a Support service operating in or around Aurangabad and the complete details including telephone number for the same must be provided.

12. University reserves the right to reject any or all tender(s) without assigning any reason. The decision of the University in this regard shall be final. No enquiries in this regard shall be entertained.

13. Any fault reported to the tenderer should be attended within one hour and the functionality should be brought to working condition within 1-2 working days of the university and monitored as per Sr. No. 11. Delay beyond this period will attract penalty at the rate of 1% of the work order cost per day of delay subject to maximum 5% of the purchase order cost and it would be deducted from subsequent payments. The university reserves the right, without liability, to cancel the order in such cases and it will be free to place order on any other party.

14. The tenderer should supply said items / materials in the original.

15. For Switches and Access points- OEM Warranty Certificate duly signed & stamped by OEM.

16. Training & Installation for Switching and Wireless devices should be from OEM Engineer.

17. Registered Vendor under Micro and small scale industry (MSME)/UDYAM are exempted from EMD.

18. The successful tenderer is required to Deposit 5% of purchase order cost towards the Security Deposit within a period of 3 days after receipt of purchase order. The Security Deposit will not carry any interest.

19. If the Security Deposit is not deposited within a stipulated period, it will be presumed that successful tenderer is not interested in supply & therefore his EMD will be forfeited.

20. The original receipt of Earnest Money Deposit (EMD) & Security Deposit should be preserved by the tenderer and should be produced while claiming the refund of deposit along with time to time quarterly preventive maintenance Reports.

21. If any other necessary information/documents is essential should also be enclosed.

22. **Maharashtra National Law University, Aurangabad** is not bound to accept the lowest tender, and reserves the right to accept or reject the Tender(s) without assigning any reasons whatsoever.

23. Delivery and installation of the items are to be completed within 15 days from the date of confirmed purchase order. If delivery does not happen within 15 days, university reserve right to give work order to the next tenderer and additional cost etc. is to be borne by defaulter.

24. Usual payment terms: 50% against the delivery of items/goods and successful installation. The inspection will be done by the duly appointed committee by MNLU-A and 30% payment will be made after testing, training, and satisfactory certification from the concerned committee and the remaining 20% payment will be made after 6 months of successful running.

25. All the legal disputes are subject to the jurisdiction of Aurangabad court only.

I hereby agree to abide by the above stated terms and conditions.

Date:

**Signature of
Supplier
With Rubber Stamp**

Forwarding Letter
(To be filled by the tendering party)

FROM.....

.....

To,
The Registrar,
Maharashtra National Law University, Aurangabad

Sub: Tender for Network & Hardware equipment

Ref: Your tender notice dated.....

Sir,

I/ We are submitting herewith our tender for the Active Switching of the articles as specified in the tender form and as laid down in tender documents.

I/ We have read and understood all the terms and conditions governing the tender I/ We agree to abide by these terms and conditions.

We are enclosing herewith your receipt No..... dt..... as a proof of having purchased the nontransferable tender document.

According I/ We are enclosing herewith our Earnest Money Deposit online No.....dated.....for ₹ . _____ payable to Maharashtra National Law University, Aurangabad

I/ We undertake to replace the defective material, if any, at our cost.

I/ We have duly signed all pages of the tender document together with the copy of the “Terms and Conditions” contained in the tender document booklet. I/ We have signed the copy of these terms and conditions as a token of acceptance of these conditions.

We are enclosing as Annexure the following documents (up-to-date) in original/ attested copies in fulfillment of the conditions laid down in the tender document.

(Write "Page Number" in boxes)

A) Essential Documents with indexing

- *Copy of acknowledgement of Income Tax Return for financial year (2019-20, 2020-21,2021-22).*
- *Copy of acknowledgement of GST Return as on 31 March 2023.*
- *Copy of updated registration of business (Incorporation Certificate) or Shop Act License.*
- *GST Registration Certificate.*
- *Copy of authorised certificate of Manufacturer / Authorized Dealer / Distributor / Service Provider for said e-Tender.*
- *Tenderer must possess at least three years of service experience in handling network infrastructure support to academic institutions / research organization / industry (Attach testimonials and orders from academic institutions / research organization / industry).*

Yours faithfully

Stamp and Signatures of the Authorized Signatory

Name.....

Complete address.....

.....

Telephone no.s (HQs).....

CERTIFICATE OF ACCEPTANCE OF TERMS AND CONDITIONS

1. I/ We have read and fully understood the Terms and Condition as laid down in respect of this tender. I/ We agree to abide by the same.
2. I/ We undertake to replace the defective material, if any, at our cost.
3. I/ We have duly signed all pages of the tender document.
4. I am/ We are also enclosing as Annexure the documents (Up-to-date) as listed in the tender in fulfillment of the conditions laid down in the tender document to prove that I/ we are qualified for this tender.

Stamp and Signatures of the Authorized Signatory

Name.....

Complete address.....

.....

Telephone No.s (HQs).....

Tender for Network & Hardware Equipment

*The tender form may be downloaded from website www.mahatenders.gov.in
(₹.17,000/- Tender Form Fees-Non Refundable)*

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