

**GOVERNMENT OF WEST BENGAL
OFFICE OF THE PRINCIPAL
RAMKRISHNA MAHATO GOVT. ENGINEERING COLLEGE
PURULIA, PIN-723103**

Memo No. 04 /CA/RKMGECE/2021-22

Dated, Purulia the 16th November-2021

QUOTATION NOTICE NO. : Spot-04 /CA/RKMGECE/2021-22

Spot quotation for supply and installation of LAN switch at RKMGECE, Purulia

Spot quotations are invited by the Principal, Ramkrishna Mahato Govt. Engineering College, Purulia for the supply and installation of LAN switch at RKMGECE, Purulia (details are given in college website <https://www.rkmgece.ac.in>) from the reputed agency. The quotation documents can be obtained from the office of the Principal, Ramkrishna Mahato Govt. Engineering College on any working day from 17/11/21 to 23/11/21 (11-00 A.M to 2-00 P.M.).

Quotation papers must be submitted in sealed envelope to the office of undersigned on or before 24/11/21 up to 12-00 P.M. addressed to the Principal, Ramkrishna Mahato Govt. Engineering College, Purulia and must be mentioning the subject mentioned above *and Quotation No. Spot-04/CA/RKMGECE/2021-22* on the top of cover. The quotations will be opened at 1.30 P.M. on 24/11/21 in presence of the vendors willing to be present at that time in the Institute office.

Validity of offered rates should remain valid Up to 31.03.2022.

Copies of Income Tax, PAN, GST account details, Trade License for proprietorship firms must be enclosed along with the quotation papers.

The price of the item(s) should be quoted **exclusive and inclusive all taxes**.

Item is to be supplied and job to be completed within 07 days from receiving order.

The undersigned reserves the right to accept or reject any quotation without assigning any reason.

If the last day of Receiving Quotation/Opening Quotation happens to be holiday the quotation(s) will be opened on the next working day at the same time and place.



Dr. Bibek Chakrabarti)

Principal
Ramkrishna Mahato Government Engineering College
Vill: Agharpur, P.O.- Ramamoti, Block: Joypur
District: Purulia, Pin.- 723103

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Copy for information & necessary action to display this notice in his notice board to:-

1. The Sabhadhipati, Purulia Zilla Parishad, Purulia - with a request to display this notice in your notice board.
2. The District Magistrate, Purulia- with a request to display this notice in your notice board.
3. The SDO, Jhalda, Purulia- with a request to display this notice in your notice board
4. Office of the Gram Panchayat, Baragram - with a request to display this notice in your notice board.
5. District information officer, Purulia- with a request to upload the notice in district NIC portal.
6. Notice Board, Ramkrishna Mahato Govt. Engineering College, Purulia.
7. College website (<https://www.rkmgec.ac.in>).



Dr. Bibek Chakrabarti

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Quotation documents for Supply and installation of LAN switch at RKMGEC, Purulia

Purchase requirement for the supply and installation of LAN switch of the college					
Department : Office Administration					
Sl No.	Item	Description/ Specification	QTY	Total price in Rs./- excluding all taxes	Total price in Rs./- including all taxes
1	LAN switch with installation	(a) Supply of layer 2 switch with 24 port 24 x 10/100/1000BASE-T xSFP(Make-TPlink/Dlink/Cisco)	1 No		
		(b) Installation, termination, Labelling & testing of equipment	1 Job		

Sl. No.	Description	Parameters (24 Port switch L2+)	Compliance (Yes/No)
1	General Features for Access switch		
1.1	Form Factor	19 Inch Rack mountable Ethernet switch.	
1.2	Architecture and OEM criteria	Non-Blocking architecture. Must have EAL3 /NDcPP or above common criteria certification. All the switches should be on the same IOS. The switches, Modules, Wireless components should be from the same OEM. The OEM should be present in the latest Gartner magic quadrant for Wired and wireless in Leader Quadrant. OEM should have R& D Centre in India and should have TAC center with India Toll free number reflected in OEM official website .	
1.3	IPV6	All Functionalities of Switch shall be IPV6 compliant and it	



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	Compliance	should work on IPv6 Platform without any additional hardware/ software.	
1.4	End of sale	OEM End-of-sale declaration shall not have been released for the quoted model at the time of the bid submission.	
1.5	Latest OS version	The switch shall be supplied with the latest OS version and all the proposed switch should be of same IOS.	
1.6	Feature Availability	All the specified features/parameters/certifications must be available on the Technical Bid opening date. Features /parameters /certifications proposed to be available in near future / on roadmap shall not be considered.	
1.7	Basic Layer-3 Support	Switches must be managed Basic layer-3 type for better broadcast segmentation.	
1.8	Interface Specifications:	Non-blocking architecture	
1.9	Ports	<ul style="list-style-type: none"> • IEEE 802.3 10BASE-T Ethernet (twisted-pair copper) • IEEE 802.3u 100BASE-TX Fast Ethernet (twisted-pair copper) • IEEE 802.3u 100BASE-FX 100 Mbps over fiber optic • IEEE 802.3ab 1000BASE-T Gigabit Ethernet (twisted-pair copper) • IEEE 802.3z 1000BASE-X 1 Gbps over fiber optic • IEEE 802.3az Energy-Efficient Ethernet (EEE) • IEEE 802.3x Flow Control • IEEE 802.3ae 10 Gigabit Ethernet 	
1.10	SFP Transceivers	All the Transceivers/Modules used to connect the Switches should be from the same OEM/make of the switches only	
1.12	Port status display	Each port must have a dedicated LED for status display.	
2	Hardware Specifications:		



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2.1	Back Plane Bandwidth	At least 128Gbps switching bandwidth	
2.2	Packet throughput	90Mpps or more for each member switch.	
2.3	MAC Addresses and memory	16 K or more, DDR3 RAM, 64 mb Flash	
2.4	VLANs (802.1q tagged VLAN)	4000 or more Concurrent	
3	Standards and Protocols		
3.1	L2 Loop Protection	IEEE 802.1d Spanning tree protocol	
		802.1s MSTP (Multiple instances of STP)	
		802.1w RSTP (Rapid spanning tree), Should support less than 50 Millisecond convergence based on G.8032 .	
3.2	Link Aggregation	802.3ad Link Aggregation	
3.3	QOS Support	At least 8 nos of 802.1p Priority Queues per port.	
3.4	IP Multicast	IGMP Snooping	
3.4	Port Mirroring / Span port	Port mirroring must be available.	
4	Routing Features		
4.1	Routing Protocols:	The switch shall have hardwarebased forwarding for IPv4 & IPv6. Following protocols shall be supported with IPV4: Static routing IPV6: PBR, Static routing	



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4.2	Security Features	<p>Broadcast/Multicast/Unicast Storm Control</p> <ul style="list-style-type: none"> • D-Link Safeguard Engine • Traffic segmentation • SSH v2 • TLS v.1.2 • DoS attack prevention • 802.1X Port-based Access Control • Port Security • Supports up to 64 MAC addresses per port • ARP Spoofing Prevention • Max. 127 entries • DHCP Server Screening • IP-MAC-Port Binding (Smart Binding) • ARP Inspection • Max. 64 entries • IPv4 Inspection • Max. 127 entries • IPv6 Inspection • Max. 63 entries • DHCP Snooping • Max. 512 entries 	
4.3	Network Login	MAC and 802.1 X based Login must be available	
4.4	Access Control Lists:	L2/L3/L4 IP based, Source port, destination port, MAC based, Time based	
4.5	AAA (authentica	• 802.1X Authentication	



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	tion, authorization and accounting)	<ul style="list-style-type: none"> • Supports local/RADIUS database • Supports port-based access control • Supports host-based access control • Supports EAP, OTP, TLS, TTLS, PEAP • IPv6 RADIUS server • Support MD5 authentication • Max. 128 entries when using local database 	
5.	Management and Monitoring:		
5.1	Management	<p>Following in-band management methods shall be available:</p> <p>Secure Web based management (On https)</p>	
5.2	Out-of-band management	<p>Following out-of-band management methods shall be available:</p> <p>Serial console port</p> <p>Management ethernet port. Dedicated OOB port</p>	
5.3	Role based Administration	The switch shall support multiple administrator accounts. Each administrator account shall be configurable with the desired level of management privileges.	
5.4	Remote Monitoring	<p>RMON Support</p> <p>RFC 5357 for measuring round-trip performance between two devices</p>	
5.5	Network Management	The switch should support SNMP V2c and V3, SDN with Openflow/Openstack	
5.6	Log Management	Syslog shall be supported with multiple syslog destinations.	
5.7	Flow export	Shall support Netflow/IPFIX/sflow for flow exports.	
5.8	Time synchronization	Time synchronization using Network time protocol must be available.	

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	tion		
5.9	Configurati on backup & restore	The switch shall have feature of backing up the configuration & restoring a backed- up configuration. Multiple Configuration files must be supported.	
5.10	TFTP/FTP upload and download	Config/image upload and download from TFTP/FTP server shall be available.	
6.	Other Requirements:		
6.1	Interface cables and other features	Console cable and power cable (As per Indian standards) to be provided. All Cables shall be factory-terminated. The Switch Operating System (OS) should mandatorily support individual process (egssh ,snmp, telnet, dhcpetc) restart to prevent reboot in case of Software Process Crash by running processes on top of Kernel. Should support AVB to ensure set of standards that provide the means for highly reliable delivery of low-latency, time-synchronized AV streaming services through Layer 2 Ethernet networks	
6.2	Power Supply & FAN	Each switch should be populated with 1 PSU,.	
6.3	Safety certification	The switch shall conform to IEC-60950/CSA-60950/EN-60950/UL-60950 standard for safety requirements of information technology equipment.	
6.4	Environme ntal conditions	The offered equipment must be able to operate in the following environmental conditions	
		Operating temperature: 0°C to 50°C	
		Relative Humidity: 10% to 95% Non-condensing	
6.5	Electromag netic interferenc e	The Offered equipment shall have FCC certification. CB and CE.	

