



കേരള കോ -ഓപ്പറേറ്റീവ് മിൽക്ക് മാർക്കറ്റിംഗ് ഫെഡറേഷൻ ലിമിറ്റഡ്  
**Kerala Co-operative Milk Marketing Federation Ltd.**

KCMMF/KHO/SYS/11H/2024-25

31/12/2024

**QUOTATION NOTICE**

We invite your lowest quotation within the shortest delivery period for the supply of two numbers layer 3 network switch with SR modules at KCMMF Head Office, Trivandrum.

<b>L3 SWITCH WITH SR MODULES - 2 Nos</b>		
<b>BRAND PREFERRED: HPE ARUBA / BROCADE</b>		
<b>S1</b>	<b>Specifications</b>	<b>Compliance Yes / No</b>
<b>1</b>	<b>Architecture</b>	
	Shall be 19" Rack Mountable	
	24 RJ-45 autosensing 10/100/1000 ports and 4 SFP+ 1/10GbE ports Populated with 2 * 10G SR Transceivers	
	The switch should have 1 dual-personality (RJ-45 or USB micro-B) serial console port	
	1GB SDRAM and 12 MB Packet buffer size	
	Shall have switching capacity of 128 Gbps	
	Shall have up to 95 million pps switching throughput	
	The Switch should support 32000 MAC address	
	The switch should have Routing table size of 10000 entries (IPv4), 5000 entries (IPv6)	
<b>2</b>	<b>Software Defined Networking (SDN) Capability</b>	
	OpenFlow protocol capability to enable software-defined networking	
	The switch should support OpenFlow 1.0 and 1.3 specifications to enable SDN by allowing separation of the data (packet forwarding) and control (routing decision) paths	
<b>3</b>	<b>Features</b>	
	The switch should support HTTP redirect function	
	The switch should support User role to defines a set of switch-based policies in areas such as security, authentication, and QoS. A user role can be assigned to a group of users or devices, using switch configuration	
	The switch should support Per-port tunneled node to provides a secured tunnel to transport network traffic on a per-port basis to a Controller. Authentication and network policies will be applied and enforced at the Controller	
	The Switch should support Static IP Visibility to do accounting for clients with static IP address	
<b>4</b>	<b>Quality of Service (QoS)</b>	
	The switch should support Traffic prioritization (IEEE 802.1p) to allows real-time traffic classification into eight priority levels mapped to eight queues	

	The switch should support Layer 4 prioritization to enable prioritization based on TCP/UDP port numbers	
	The switch should support Class of Service (CoS) to sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ	
	The switch should support Rate limiting to sets per-port ingress enforced maximums and per-port, per-queue minimums	
	The switch should Provide graceful congestion management	
<b>5</b>	<b>Connectivity</b>	
	The switch should support Auto-MDIX to provide automatic adjustments for straight-through or crossover cables on all 10/100 and 10/100/1000 ports	
<b>6</b>	<b>IPv6 Feature</b>	
	The switch should support IPV6 host to enable switches to be managed in an IPv6 network	
	The switch should support Dual stack (IPV4 and IPV6) to transition from IPv4 to IPv6, supporting connectivity for both protocols	
	The switch should support MLD snooping to forward IPv6 multicast traffic to the appropriate interface	
	The switch should support ACL and QoS for IPv6 network traffic	
	The switch should support static and RIPng protocols for IPV6	
<b>7</b>	<b>Security</b>	
	The switch should support RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping	
	The switch should have Energy-efficient design	
	The switch should support Energy-efficient Ethernet (EEE) to reduce power consumption in accordance with IEEE 802.3az	
	The switch should support very low latency, increased packet buffering, and adaptive power consumption	
	Selectable queue configurations	
	The switch should have facility to allow for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications	
<b>8</b>	<b>Convergence</b>	
	The switch should support IP multicast routing and PIM Sparse and Dense modes to route IP multicast traffic	
	The switch should support IP multicast snooping and data-driven IGMP	
	The switch should support LLDP-MED (Media Endpoint Discovery)	
	The switch should support IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	
	The switch should support Local MAC Authentication	
<b>9</b>	<b>Resiliency and high availability</b>	
	The Switch should creates one virtual resilient switch from four switches and attached the network devices using standard LACP for automatic load balancing and high availability to simplify network operation by reduce the need for complex protocols like Spanning Tree Protocol (STP), Equal-Cost Multipath (ECMP), and VRRP	
	The switch should support Virtual Router Redundancy Protocol (VRRP)	
	The switch should support IEEE 802.1s Multiple Spanning Tree	
	The switch should support IEEE 802.3ad link-aggregation-control protocol (LACP) and port trunking	

	The switch should provide easy-to-configure link redundancy of active and standby links	
<b>10</b>	<b>Management</b>	
	The switch should support SNMPv1, v2, and v3	
	The switch should support Zero-Touch Provisioning (ZTP)	
	The switch should support cloud based management platform offers simple, secure, and cost effective way to manage switches	
<b>11</b>	<b>Manageability</b>	
	The switch should support Dual flash images	
	The switch should allow assignment of descriptive names to ports	
	Find-Fix-Inform	
	The switch should have the capability to find and fixes common network problems automatically, then informs administrator	
	The switch should allow multiple configuration files to be stored to a flash image	
	The switch should support RMON, XRMON, and sFlow	
	The switch should provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events	
	The switch should support ingress and egress port monitoring enable network problem solving	
	The switch should support Unidirectional link detection (UDLD)	
	The switch should support IP service level agreements (SLA) for voice	
<b>12</b>	<b>Layer 2 switching</b>	
	The switch should support IEEE 802.1Q (4094 VLAN IDs) and 2K VLANs simultaneously	
	The switch should support Jumbo packet support	
	The switch should support IEEE 802.1v protocol VLANs	
	The switch should support Rapid Per-VLAN Spanning Tree (RPVST+)	
	The switch should support GVRP and MVRP	
	The switch should support encapsulation (tunneling) protocol for overlay network that enables a more scalable virtual network deployment	
<b>13</b>	<b>Layer 3 services</b>	
	The switch should support DHCP server	
<b>14</b>	<b>Layer 3 routing</b>	
	The switch should support minimum 256 static IP routing	
	Routing Information Protocol (RIP)	
	The switch should support RIPv1, RIPv2, and RIPv3 routing and support 10,000 RIP routes	
	The switch should support OSPFv2 and OSPFv3 protocols for routing between access and the next layer on the LAN.	
	The switch should support Policy-based routing	
<b>15</b>	<b>Security</b>	
	The switch should support IEEE 802.1X	
	The switch should support Web-based authentication	
	The switch should support MAC-based authentication	
	The switch should support Multiple IEEE 802.1X users per port	

	The switch should support Concurrent IEEE 802.1X, Web, and MAC authentication schemes per port and accept up to 32 sessions of IEEE 802.1X, Web, and MAC authentications	
	The switch should support Access control lists (ACLs)	
	The switch should provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number	
	The switch should support Source-port filtering	
	The switch should support RADIUS/TACACS+	
	The switch should support Secure shell	
	The switch should support Secure Sockets Layer (SSL)	
	The switch should support Port security	
	The switch should support MAC address lockout	
	The switch should support Secure FTP	
	The switch should support Switch management logon security	
	The switch should support STP BPDU port protection	
	The switch should support DHCP protection	
	The switch should support Dynamic ARP protection	
	The switch should support STP root guard	
	The switch should support Identity-driven ACL	
	The switch should support Per-port broadcast throttling	
	The switch should support Private VLAN	
<b>16</b>	<b>Environmental Features</b>	
	Shall support IEEE 802.3az Energy-efficient Ethernet (EEE) to reduce power consumption	
	Operating temperature of 0°C to 45°C	
	Safety and Emission standards including EN 60950; IEC 60950; VCCI Class A; FCC Class A	
<b>17</b>	<b>Warranty and Support</b>	
	The below Warranty shall be offered directly from the switch OEM.	
	Limited Lifetime warranty with advance replacement and next-business-day delivery	
	Software upgrades/updates shall be included as part of the warranty	

## Terms and conditions

1. The rate should be **inclusive of GST**, you shall be carried out proper packing to avoid breakages/losses during transmit. The price indicated above on FOR site basis.
2. KCMMF should not be liable to pay any extra cost due to rise in the prices of material cost once the purchase order is placed.
3. Your quotation should be valid **for minimum 2 months** from the date of opening of the quotation.
4. Full details of the item offered including make, specifications, model, technical details, guaranty period and specifications must be enclosed with your offer. Any software licences supplied shall be genuine, perpetual, full use.
5. The bidder should submit **authorization letter** from manufactures for concerned product.

6. You will guarantee to repair/replace without any extra cost of the item or part thereof if found defective due to bad designing, workmanship or substandard material within three years from the date of installation of the item.
7. Address To: Managing Director, KCMMF Ltd, Pattom P.O, Trivandrum 695004.
8. Sealed Quotation shall reach our office on or before 5 PM on 09/01/2025 and will be opened on next day 3PM.

Sd/-

MANAGING DIRECTOR