

Dated 15.12.2016

1. The Technical bids will be opening on 20.12.2016 at 11.00A.M.
2. The following specifications of Laser Printers (Printing, Copying, Scanning) as per Annexure-E are modified to the following extent:

Make & Model		
Printer	Function	Printing, Copying, Scanning
	Speed	25 PPM and above
	Resolution	3 inches touch screen CGD (Colour Graphics Display)
	Memory	256MB
	OS Capability	Compatible with current versions of Windows 7, 8 & 10
	Duty Cycle, Monthly	Up to 10,000 pages
Paper Handling	Media Size Supported	A4, A5, A6 B5 (JIS)
	Interface	Hi speed USB 2.0, Ethernet 10/100
	Cartridge	Original Cart to be supplied with 2400 Pages yield.
Warranty	4 years comprehensive on-site with Level 1 support from supplier and Level 2 from support from OEM.	
Accessories	Required Cables and Driver CDs	

NOTE: These are the minimum specifications. Bidders are free to quote higher specifications than the minimum prescribed above.

3. Annexure G-1 stand replaced with G-2

Annexure-G-2

Layer 2 Switch for 24 Port Gigabit Smart Managed Switch

S.No	Specifications	Compliance
1	Architecture & Performance	
	Switch should have 24 Nos. of 10/100/1000 Mbps Gigabit Ethernet Ports and 2 Nos. of SFP ports	
	The Switch should have Non-blocking wire speed switch fabric	
	The Switch should have Min. 52 Gbps Back plane or more	
	The Switch should have Min. 39 Mpps or more	
	The Switch should support Min. 8K Mac address or more	
	Should have 525K Packet buffer (Egress/Ingress)	
	Should have 16MB Flash ,and 64 MB RAM	

	Should support IEEE 802.3az standard for minimise the power consumption on per port basis by supplying power on the basis of cable length and active ports only	
	Should support Dual Software (firmware) image	
2	Should support the following Standard	
	IEEE 802.3 10BASE-T Ethernet ,IEEE 802.3u 100BASE-TX Ethernet ,IEEE 802.3ab 1000BASE-T Ethernet ,IEEE 802.3z 1000BASE-X Ethernet ,IEEE 802.3x flow control	
	IEEE 802.1D spanning tree protocol IEEE 802.1w rapid spanning tree protocol ,IEEE 802.1s multiple spanning tree protocol	
	IEEE 802.1p class of service, priority protocols ,IEEE 802.1X port authentication ,IEEE 802.3ad LACP aggregation	
3	Traffic Management and QoS	
	Rate limiting: Rule-based/port-based bandwidth control, 64 kbps granularity	
	Port-based egress traffic shaping	
	should support broadcast storm control to avoid unwanted traffic attack on CPU	
	should support IEEE 802.1p with priority queues for different traffic types	
	Supports IGMP/IGMP snooping v1, v2, v3	
	Should support congestion control on all ports	
4	Link Aggregation	
	IEEE 802.3ad LACP link aggregation compliant	
	Up to 8 aggregation groups,	
5	Resilient Network	
	IEEE 802.1w Rapid Spanning Tree Protocol (RSTP)	
	IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)	
6	User Security and Authentication	
	should support MAC filtering per port secures access to each port	
	should support IEEE 802.1Q tag-based and port-based VLAN	
	should support Guest VLAN port based and MAC based	
	should support atleast 9 MAC per port	
	should support GVRP, automatic VLAN member registration	
	should support atleast 1K static VLAN, up to 4K dynamic VLAN	
	should support Port-base VLAN & VLAN isolation	
	should support limited MAC number per port	
	Should be capable to set mac ageing time	
	should support Loop guard to avoid loops in network generated on unmanaged switches	
	should support RADIUS MAC login	
	should support 802.1X port-based authentication, compensated assignment over VLAN and bandwidth for valid access	
7	Network Administration Security	
	User name/password required for Web administrators	
	should support SSL	
8	IPv6 Support	
	IPv6 over Ethernet ,IPv6 Addressing, ICMPv6 ,DualStack ,Neighbor discovery	

9	Network Management	
	Web-based management ,SNMP v1, v2c, v3	
	RMON four RMON groups 1, 2, 3, 9 (history, statistics, alarms and events) for enhanced traffic management, monitoring and analysis	
	Port mirroring: supports source/destination/both port mirroring	
10	Intelligent ACL (L2/L3/L4 Access List Control)	
	Based on MAC address , VLAN, IP address, Protocol, TCP/UDP type and DSCP	
11	Certification	
	CE-LVD ,FCC, CE ,BSMI	
	RoHS compliant	
12	Environmental specifications	
	Operating temperature 0 DegC to 50 Deg C	
	Operating Humidity 10% to 95 % (Non condensing)	
	Switch should be supplied with management software to manage and maintain multiple layer2 switches for Centralized and batch configurations like IP configurations, IP renew, Web Gui access, Firmware update, device locating etc.	
	The OEM Brand should be having valid ISO 9000, ISO 14000 and ISO 50001 certificates, all these certificates must be submitted in technical bid.	

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