

TECHNICAL SPECIFICATION FOR SERVER AND RELATED EQUIPMENT
FOR EPIS PROJECT

A. SERVER (4 Nos.)

1. Server Brand: Should be a brand from a reputable infrastructure company.
2. Model: Specify the exact model name of the proposed System
3. Country of Origin: Specify the Country of origin of the proposed system
4. Server type: Performance 2U, 2-socket full-featured enterprise server, Purpose-built for growing scale-out solutions
5. Server CPU: 2 x Intel Xeon Gold 6326 2.9G, 16C/32T, 11.2GT/s, 24M Cache, Turbo, HT (185W)
6. Server Memory: Include 4 x 32GB RDIMM, 3200MT/s, Dual Rank 16Gb BASE x8
7. Support up to 16 DDR4 DIMM slots, supports RDIMM 1 TB max, speeds up to 3200 MT/s
8. Supports registered ECC DDR4 DIMMs
9. Raid Controller Include an internal Hardware RAID controller with minimum of 8GB NV cache
10. Internal Storage: Include 6 x 960GB SSD vSAS Mixed Use 12Gbps 512e 2.5in Hot-Plug ,AG Drive SED, 3DWPD, Up to 16 x 2.5-inch SAS/SATA (HDD/SSD) max 122.88 TB
11. Internal Boot Supported Drive: Boot Optimized Storage Subsystem (BOSS-S2), HW RAID 1 2 x M.2 SSDs 240 GB, Embedded NIC, Include 2 x 1 GbE LOM Embedded
12. Network Connectivity: Include 2 x 10GbE SFP+ Open Compute Project - OCP 3.0 (x8 PCIe lanes), Include 1 X 4 Port 1GbE BASE-T Adapter, PCIe Low Profile, Up to 6 x PCIe Gen4 slots (5 x16 and 1x4) with support for SNAP I/O modules
13. Transceiver: Include 2 x SFP+ SR Optic 10GbE 850nm
14. Cooling: Fresh Air cooling
15. Fans: Standard Fan x 5
16. PCIe: Up to 5 x PCIe Gen4 slots / 1 x PCIe Gen3 slots
17. Ports: 1 x Remote Access Connection Direct (Micro-AB USB) port, 1 x USB 2.0, 1 x VGA"
18. Operating System Supports : Canonical Ubuntu Server LTS, Citrix Hypervisor, Microsoft Windows Server with Hyper-V, Red Hat Enterprise Linux, SUSE Linux Enterprise Server, VMware ESXi"
19. Server Management and Platform Security: with dedicated Network Port to support the server infrastructure management included with below security and management features. , Support Agentless architecture, Support Ability to use for template / policy based bare-metal server deployment, Support for Operating system deployment, Support Automate backup of hardware settings and firmware image ,Support Server management module should have tight integration with VMware vCenter and Microsoft System Center, Support

Alerts and notification for hardware issues and baseline configuration drifts, Support All events related to hardware and configurations should be logged and should be persistent, Support lockdown the system to prevent system configuration and firmware changes, Support BIOS recovery, Support BIOS and Chipset level security – Should include Silicon based hardware-root-of-trust for boot authentication, Support management/monitoring of the server such as wireless management module will be an added advantage

20. Physical Security: Support lockable Metal front Bezel to provide physical security
21. Server Bezel: 2U LCD Bezel with NFC capability that enabled communication between a mobile device and controller.
22. Power Supplies: Dual, Hot-plug, Redundant Power Supply (1+1) 1100W, Mixed Mode Titanium
23. Accessories: Include all required accessories for rack mounting and cabling management.
24. Warranty and Maintenance: The Tender should provide 36 months Warranty for all equipment and software included in the proposed solution.
25. Accessories: Cables

B. KVM (2 Nos.)

1. Brand: Should be a brand from a reputable infrastructure company.
2. Model: Specify the exact model name of the proposed System
3. Country of Origin: Specify the Country of origin of the proposed system
4. Product Description: Remote Console Switch (RCS) digital keyboard, video and mouse (KVM) over IP and serial console switches combine analog and digital technology to provide flexible, centralized control of data center servers, and to facilitate the operations, activation, and maintenance of remote branch offices where trained operators may be unavailable. The IP-based RCS gives you flexible target device management control and secure remote access from anywhere at any time through the RCS software or on-board web interface (OBWI).
5. Virtual Media: Virtual Media (VM) capabilities, configurable for analog (local) or digital (remote) connectivity
6. Common Access Card: smart card/Common Access Card (CAC) capability
7. True Serial: true serial capability through Secure Shell (SSH) and Telnet
8. Display Resolution: enhanced video resolution support, up to 1600 x 1200 or 1680 x 1050 (widescreen) native from target to remote
9. Power Supply: optional dual power models for redundancy
10. Intelligent Power Device Management: optional support for managing intelligent power devices
11. TCP/IP Support: dual stack IPv4 (DHCP) and IPv6 (DHCPv6 and stateless auto configuration) for simultaneous access
12. Network Speed: accessibility to target devices across 10/100/1000BaseT LAN ports.

13. Remote Network: a MODEM port that supports V.34, V.90 or V.92-compatible modems that may be used to access the switch when an Ethernet connection is not available
14. Server Interface POD: Reduce Wiring Clutter by combining Keyboard, Video and Mouse connection over a length of CAT-5/6 cable. Minimum eight (8) connections to Keyboard, Video and Mouse
15. Centralized Management: Include Rack Mounted Keyboard and 18.5" Display, 8-port analog, upgradeable to digital KVM switch with 1 local, user, 1 power supply

C. SERVER RACK (1 No.)

1. Model: Specify the exact model name of the proposed System
2. Country of Origin: Specify the Country of origin of the proposed system
3. Product Description: 36U Floor Standing Server Rack (650mmW x 1050mmD) CRCA Steel Frame with Aluminium Profiles & Side Panel-2 Nos with following items:
 - a. Top cover with cable entry
 - b. 1no. - Bottom cover with cable entry -1no.
 - c. 19" Mounting Angles – 2 pairs,
 - d. Finishing : Powder coated to 80 microns; Matted finished, black color, Front & Rear Perforated Door, Castor Wheel with Leveling Legs, 4 Fans 230VAC 90 CFM on top, 2 Nos. Horizontal Cable manager, 1U, 2 Nos. Vertical PDU with 21 Nos. of 10A/ C-13 Sockets.

D. UPS (2 Nos.)

1. UPS battery: 12v-65ah (For JD)
2. Nominal Voltage: 12V
3. Type of Battery: EP 65-12
4. Rated Capacity at 20 hr: 65V/Cell at 27 deg C
5. Rated Capacity at 10 hr: 60V/Cell at 27 deg C
6. Overall Height: 174mm(+/-2mm)
7. Height Upto Lid Top: 174mm (+/-2mm)
8. Warranty: 2 years
9. Battery should support 3 hours if there is power breakdown
10. Load Capacity: 5000 VA

E. Delivery

- a) The delivery, installation, commissioning and testing should be done at ICT Division, JDWNRH Hospital, Thimphu within 60 days for the date of issuance of the confirmed supply orders.