

Ref: C-CAMP/L-119/2020-21(C)

January 20, 2020

**ENQUIRY REMINDER**

Dear Sirs,

Please let us have your lowest quotation for the following:

Sl.No.	Item/s description
1.	Data & Telephone works for first floor Additional office and security cabin at CCAMP BOQ – Attached.

Note:

1. The quotation shall be submitted in a sealed envelope duly superscribed with the enquiry number, and the due date for ..... Ref No:..... The bids should be addressed and to be mailed / couriered (sent by post/courier) to 'THE HEAD-PURCHASE'.

The bids are liable to be rejected if the sealed envelope is not addressed to “THE HEAD-PURCHASE” with Tender Ref No. and Item Description and due date. The bids delivered in person shall be dropped in Purchase Section. If the bids are sent through courier or mail, it should reach by submission date and time and CCAMP/NCBS will not be responsible for the delay.

**2. DUE DATE FOR SUBMISSION OF QUOTATION AGAINST THIS ENQUIRY IS 27/1/2021 BY 5.30PM.**

**3. QUOTATIONS RECEIVED AFTER THE DUE DATE SHALL BE REJECTED.**

4. The validity of your quotation should be for 60 days from the due date.

5. All duties, taxes, surcharge and cess as currently applicable must be stated in your quotation, separately. Otherwise your quote is liable to be rejected.

6. Your quotation should indicate delivery period & warranty period.

7. Delivery to be made to our stores. Please indicate charges, if any extra. Transit Insurance should be done upto CCAMP Stores.

8. If you are unable to supply the quality, specifications or brand as mentioned in our enquiry, please state so and then offer alternative to quality/specifications.

9. Payment: within one month after delivery & acceptance/satisfactory installation.

10. Please ensure that the enquiry number and the due date is superscribed on the envelope failing which your quotation is liable to be rejected.

**11. If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with xerox copy of the DGS&D order.**

12. Any dispute or differences that may arise between the parties shall be referred to the sole arbitration of the Centre Director or his nominees. The decision of the arbitrator shall be final and binding on the parties. The venue for arbitration shall be Bangalore. The provisions of the Arbitration and Conciliation Act, 1996 as amended from time to time shall apply. The courts in Bangalore shall have exclusive jurisdiction to deal with any or all disputes between the parties

13. Since we are a research institution, we are exempted from paying Customs duty (Except ad valorem duty of 5% + 2% Cess and 1% Cus Sec & High Edu. CESS vide Notification No.51/96 with latest amendments) and excise duty vide Notification No. 10/97 CENTRAL EXCISE dated 01-03-1997 for all scientific equipments, technical instruments, equipments (including computers), their accessories, spares, consumables and software. Hence, please offer your prices

14. If the item is covered under DGS&D rate contract, please quote the rate as per the DGS&D rate contract with xerox copy of the DGS&D order.

15. CCAMP is a public funded research institute and is entitled to concessional rate of GST @ 5% for certain items supplied for research purpose vide notification no. 47/2017 and 45/2017 dated 14th Nov, 2017. The offer should be submitted after fully considering the above notification.

16. Liquidity Damages: If the equipment/ items as per specifications in our P.O. is not supplied (shipped) within the specified delivery schedule, then liquidated damages (not in terms of penalty) will be imposed automatically and shall be deducted from the bill at the rate of 0.5% per week subject to a maximum of 10% of the order value.

17. Income Tax at the applicable rates as per the Indian Income Tax Act 1961 will be deducted at source for the services availed / ordered. In case of service provider, the rate of tax deduction shall be at 2% as per Section 194C, and in case of fee for professional / technical services

*Chetana*  
20/11/21  
Chetana S. R.

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## Specification for the Network Switch

SL No Switch Specification

1 Port type/density/architecture/features

- a) All ports on the switch should be of nonblocking architecture
- b) 24 1Gb/ 10Gb SFP+ ports with 1 x 10Gb/40Gb QSFP+ and 2 100Gb QSFP28 ports or more
- c) Switch should be equipped with Variable speed Fan and it should be hot swappable
- d) Minimum of 11.5 Mb packet buffer
- e) Switch should be equipped with hot swappable redundant power supply.
- f) Switching fabric 850 Gbps or higher
- g) Should have minimum 4 Gb DRAM Flash memory 32 GB
- h) System Status LEDs: management, fan and power
- i) Switch should support front to back and back to front airflow depending on site requirement
- j) Jumbo Frame size of 9KB support
- k) should be capable of wirespeed stacking
- l) Support one USB port
- m) 1x Serial console port RJ-45
- n) should support stacking (upto 8 units) with other models of same brand switches as well
- o) Latency: <820 Nanoseconds (64 byte)

2 Operating system:-

Should support zero touch provisioning when used with a Network Management system

Switch should have a modular operating system so that individual processes can be restarted without rebooting the switch

3 Resiliency Support:-

1. 802.1D spanning Tree and PVST+, 802.1w, 802.1s, Should have BPDU Guard or equivalent feature

2. Should support ITU G.8032 or equivalent for ring backbone and fast network recovery

3. Should support 128 or more LAG group. Should support aggregating and load balancing of traffic to two or more peer switches within same VLAN

4 Switching / Security / QOS:-

1. Support Private Vlan , Vlan Translation, 802.1V, MAC Vlan, and VMAN (Q-in-Q)
2. Minimum support for 4094 vlan and 1k Configurable VLANs with Port, 802.1Q tag, Protocol, Dynamic Vlan Propagation with 802.1AK
3. Should support 250K MAC address , 93K hardware Multicast entries and minimum 1 K ACL
5. Should support policy based traffic redirection and IP route compression
6. Should 802.1x with dynamic vlans and local radius server. Should also have guest VLAN and web based Captive portal.
7. Should support Many to many mirroring per session, multisession mirroring (minimum 4 )
8. Should support IPv6 in hardware and software from day 1
9. Should support DHCP Snooping , Trusted DHCP server , Packet Anomaly detection, DHCP Secured ARP, GARP protection
10. Should support DOS protect, Loop detection and prevention, Storm control for multicast, unicast and broadcast
11. Should support flexible traffic analysis with NetFlow or sFlow or similar protocol
12. Support for IEEE 802.1AS - Timing and Synchronization for Time Sensitive Applications in Bridged Local Area
13. Should support automatic configuration of ports based on events

5 Layer 3 features :-

Switch should support OSPF, BGP, IS-IS, or static routes by default or atleast using a license upgrade.

Should support PIM atleast 4 interfaces

Should support IPV4 and IPV6

6 Management Features :-

1. Support Embedded Event Manager, Syslog. Batch command execution. Keyword match Log Filtering
2. SNMPv3, NTP, HTTPS, SSHv2, SCP2, SFTP
3. L2 Ping & L2 trace route, IPv6 telnet and TFTP , LLDP and CDP
4. Inbuilt browser based bandwidth monitoring
5. Should support Energy Efficient Ethernet 802.3az

7 Warranty, Standards and Compliance:-

Switch should be covered by 24 x 7 TAC support with India Toll Free number and NBD RMA directly from OEM India Depot

OEM should have atleast two RMA depots in India

OEM should feature as a Leader in the Gartner Magic Quadrant

MAF(Manufacturer Authorization Form) is to be provided and its mandatory.

Vendor should have Local presence in Bangalore

Installation charges needs to be quoted.

3.yrs Onsite NBD warranty

**Name of the Work : Data and Telephone works for First Floor Additional Office and Security Cabin at C-CAMP**

1	Telephone/ Intercom/ Internet points	Unit	Qty	Rate	
				Supply	Installation
1.1	Supply and fixing of RJ-11 telephone socket with suitable IO in a suitable size without modular PVC Box covered with modular plate in existing PVC cable management system / mettalic trunk including supply of all fixing materials, and associated civil works with interconnections etc. complete as required and as directed by EIC. Make : MK/SYSTIMAX	Nos	12		
1.2	Supply and fixing of RJ-45 LAN socket with suitable IO in a suitable size without modular PVC Box covered with modular plate in existing PVC cable management system / mettalic trunk including supply of all fixing materials, and associated civil works with interconnections etc. complete as required and as directed by EIC. Make : SYSTIMAX	Nos	37		
1.3	<b>Telephone/ Intercom/ Internet Wiring</b>				
1.3.1	Supply ,laying,testing and commissioning of of CAT6 cable in already MS conduits/PVC cable management system/race ways/mettalic trunk from the NETRACK. The Preferable make: SYSTIMAX	Mtrs	1800		
1.3.2	Supply , laying and fixing of 10G Single Mode FIBER OPTIC CABLE ( Systimax ) from ground floor server room to DATA rack located in office space area in existing 65mm GI pipe	Mtrs	100		
1.3.3	Supply and laying of 65mm GI pipe In the soil. This work including earth excavation up to 450MM depth from FGL, re filling and removal of excess soil and as per the instructions given by the EIC.	Mtrs	50		
1.3.4	Supply and installation of Layer 2 switch with layer 3 features. The Switch should be compatible with 2 transievers compatible with the quoted fiber (Specification sheet is attached). Preferble make : CISCO/HP/EXSTREME or Equivalent.	Nos	1		
1.3.5	Supply and Installation of 6U Netrack 600mm depth. Preferable Make : Floor/Wall mounted type.	Nos	1		
	<b>Total for Telephone/ Intercom/ Internet points</b>				