

INDENT NO.- 68494283

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(2) (A3)

W.C.R.

TECHNICAL SPECIFICATION OF 2 LAN/ 08X02Mbps WAN PORT ROUTER

Router 02 LAN/08 x 02 Mbps WAN Port

Recommended Make – CISCO/NORTEL/JUNIPER/HP

1. Hardware details

| SNO | Specifications |
|-----|--|
| 1 | Router shall have modular configuration. Router shall have 02 no 10/100 Base Tx/1000 Base-T port as per IEEE 8902.3u specification. The Fast Ethernet Ports should support full duplex capabilities. |
| 2 | Router shall have 08 no. WAN ports supporting G.703 Interface. These ports shall be operable up to speed of 02 Mbps. |
| 3 | Router shall support 19' rack mountings. |
| | The Router shall have enough CPU capacity and Memory so as to efficiently meet all the functionalities laid down in the specifications. The bidder should specify the offered CPU and memory model. |
| 5 | Router shall support aggregate packet forwarding rate greater than or equal to 1, 00,000 - 64 byte packets per second. |
| 6 | Router shall support Upgrade of Software through Flash Memory. |
| 7 | Router shall support on line software reconfiguration to implement changes without rebooting. |
| 8 | Router shall support a console port with RS-232 Interface for configuration and diagnostic purposes. |

2. SOFTWARE DETAILS

The router shall support following protocols.

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|------|--|
| i | TCP/IP with support for IP ver. 4. |
| ii | Support for IP Ver 6 in future. |
| | ARP, RARP, ICMP, DHCP, TFIP and DNS. |
| iv | Network address translation (NAT) as per RFC 1631. |
| V | Support for both TCP and UDP at layer 4. |
| Vi | Sub networking. |
| Vii | Classless Inter Domain Routing (CIDR). |
| Viii | Variable Length Subnet Masking (VLSM) |
| ix | IEEE 802.1Q based VLAN tagging. |
| x | VRRP based on RFC 3768 |



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3. The router shall support following IP routing protocols.

| | |
|-----|--------------------------------|
| i | PPP as per RFC 1661. |
| ii | Multi-Link PPP as per RFC 1717 |
| iii | HDLC |
| iv | Frame Relay |

4. The router shall support following WAN protocols.


| | |
|-----|---------------------------------|
| I | RIP Version 2 |
| ii | OSPF Version 2 as per RFC 1583. |
| iii | OSPF on Demand as per RFC 1793. |
| | Static and dynamic routing. |
| ✓ | BGP Version 4 as per RFC 1771. |

5 Router shall support following quality of service (QoS) FEATURES

| | |
|------------------------------|---|
| Weighted fair queuing (WFQ). | |
| ii | IP Precedence i.e. Priority based on TOS field of IP ver. 4 |
| iii | Differentiated Services (Diff Serve) i.e. Priority based on DS field of the IP version 4. |

6 The router shall support following WAN optimization features.

| | |
|-----|--|
| i | Load Balancing on LAN as well as WAN ports. |
| ii | I TCP Header compression. |
| iii | Data compression for both Header and payload to be supported for frame relay and leased WAN links. |


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