

Router shall support Network Management through:

- i. SNMP V-2 & V-3
- ii. MIB I/II
- iii. Router shall support all standard MIBs based on OSPF, BGP etc.
- iv. Software Upgrade through FTP or TFTP
- v. TELNET Client and Server
- vi. SSH Version-2

Router shall support following in the user level of access i.e. the user with minimum privileges:

- i. Ping
- ii. Telnet
- iii. Traceroute
- iv. Display of pre-configured description / label on each interface.
- v. Display of Input and Output error statistics on all interfaces.
- vi. Display of Input and Output data rate statistics on all interfaces.
- vii. Display of Dynamic ARP table.

Router shall support System & Event logging functions as well as forwarding of these logs onto a separate Server for log management.

The Hardware / Software of Router shall not pose any problem due to change in date and time caused by event such as changeover of millennium / century, leap year etc. in the normal functioning of the system.

Router shall have Debugging features to display and analyze various types of packets.

The router shall support NetFlow / SFlow / JFlow / NetStream.

Regulatory Compliance

Router shall conform to UL 60950 or IEC 60950 or CSA 60950 or EN 60950 or equivalent Indian Standard like IS-13252:2010 or better for Safety requirements of Information Technology Equipment.

Router shall conform to EN 55022/55032 Class A/B or CISPR22 Class A/B or CE Class A/B or FCC Class A/B or equivalent Indian Standard like IS 6873 (Part 7): 2012 or better for EMC (Electro Magnetic Compatibility) requirements.

Router shall be manufactured in accordance with the international quality standards ISO 9001:2003 or latest valid ISO or equivalent Indian standard like BIS for which the manufacturer should be duly accredited.

Product Certification Required

Router / Router's Operating System should be tested and certified for EAL 2 / NDPP (Network Device Protection Profile)/NDcPP (Network Device collaborative Protection Profile) or above under Common Criteria Program for security related functions or under Indian Common Criteria Certification Scheme (IC3S) by STQC, DEIT, Govt. of India.

### Tier-3/4 Router (04 WAN Ports)

Sr. No.	Item Description
	<b>General Requirements</b>
1	Router shall be designed for continuous operations. The bidder shall furnish the MTBF (Mean Time Between Failure) predicted and observed values along with calculations by the manufacturer.
2	In case of full system failure, Router shall maintain a trace area in the NVRAM / FLASH which would be used for analysis / diagnosis of the problem.
3	Router shall have built in power on diagnostics system to detect hardware failures.
4	Router shall have suitable Visual Indicators for diagnostics and healthy / unhealthy status of Ports & modules.