

## **Specification of IP based SIP Non Executive phones**

- It should work on SIP technology as per RFC 3261.
- It should have Dual Gigabit ethernet port with integrated PoE so that the PC can be connected to the SIP phone for normal data service.
- Option for external power supply should also be available. However, external adaptors are not required to be supplied unless asked for separately.
- It should support voice codec's G.711 (a-law/g-law), G.723.1 , G.729a, G.726.
- Phone should support DTMF in audio, RFC 2833, SIP INFO.
- Phones should be required with at least two line display systems so that information like incoming calls etc. is displayed on the same.
- Phone should have minimum 4 physical programmable keys to be used for speed dialing as well as monitoring of extension status of extension.
- These LED shall have the following behavior:
  - Extension idle: OFF
  - Extension ringing: BLINK
  - Extension busy: ON
- Phone should have at least 2 user accounts.
- Pre-Moulded Cat 6 Ethernet patch cord of at least 2 meter should be supplied along with the phone.
- Phone should support class 1/2 PoE for it to be environment friendly and use less power. This is required for ensuring that the phones are powered using the existing switches.
- Phones should support VLAN tagging of voice packets so that data and voice packets use different VLANs.
- Phone should be IPv4 and IPv6 compliant.
- The phone should support auto-provisioning through DHCP and HTTP using normal text based files. The format for this text file shall be provided by the firm.
- Should support NTP and SNTP for time synchronization.
- OEM should be ISO 9001:2015 and ISO 14001:2015 certified.
- Should have regulatory compliance of UL/FCC/CE/TEC.
- Should have EMC certification from any NABL accredited lab which is designated by TEC for safety testing of Telecom & IT products.