

S&T technical specifications.

1.1.1 Wireless Access Point

Access Point Should work with existing WLAN Controller of Cambium Cn Maestro.	
Access Point will take power supply Through POE. However, Firm shall supply Power adapter along with AP.	
S.No	Description of Specification requirements
1	The Access Point should have auto-sensing 10/100/1000 Mbps RJ-45 port with 802.3af/802.3at POE support..
2	The APs should support the IEEE 802.11a,802.11b,802.11g,802.11n, 802.11acWave2 & 802.11ax standards with OFDMA. It should support minimum 2 MU-MIMO clients simultaneously.
3	Should support minimum 2x2:2 MU-MIMO or better on both radio bands for an aggregate capacity of more than 2.900Gbps (500 Mbps on 2.4Ghz and 2400 Mbps on 5Ghz)with upto 1024-QAM, and 20/40/80/160 MHz channel size.
4	The access points should be centrally managed through Cloud Controller or On premises Server based Appliance or standalone mode operation .
5	The access point should support 802.1q VLAN tagging.
6	The access point should support WPA3-SAE , WPA 3-Enterprise , WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise (802.1x/EAP), WEP , ePSK , OSEN , OWE , Open etc..
7	Implement Wi-Fi alliance standards WMM, 802.11d, 802.11h and 802.11e and 802.11r .
8	AP should provide minimum EIRP 23 dBm on 5 Ghz& 23 dBm on 2.4 Ghz bands. (EIRP should be limited as per govt regulation for indoor AP's).
9	AP should support minimum Antenna Gain 5 dBi at Both Bands .
10	Should support Transmit power tuning in 1dB increments in order to reduce interference and RF hazards
11	Upto 16 SSIDs per AP for multiple differentiated user services (e.g. voice).
12	Should support up to 128 clients per Radio
13	Should support IPv4 and IPv6 from day one
14	For troubleshooting purposes, the administrator should have the ability to online packet capture and / or 802.3 frames from an access point without disrupting client access
15	The access point should support following security mechanism: WPA3, WPA2 (CCMP, AES, 802.11i), WPA2 Enterprise
16	System should support Authentication via 802.1X, mac authentication to support for external RADIUS and Active Directory.
17	AP should support RESTful management and statistics API Presence location APIs
18	Should be WiFi Alliance and Passpoint 3.0 certified.
19	Operating Temperature: 0°C - 50°C
20	Operating Humidity: upto 95% non-condensing.
21	Should be UL 2043 plenum rated and comply to WEEE/RoHS.
22	AP Power consumption should not be more than 11W .
23	Should be EN 60601-1-2 Medical compliant & IEC 60950, FCC, IC , ETSI , CE , UL 2043, EN 61373
24	Mechanism for physical device locking using padlock /Kensington lock / Twist lock or equivalent

1.1.2 Networking Rack 19", 12U

It should have the following features:

1. MS rack 19", 12U with minimum 500 mm depth, with front toughened glass door. Doors shall be with internal lock. Cable entry shall be from top and bottom panels, with Mechanical sealing protection. It shall have a grounding terminal.
2. Rack should be fitted with AC power accessories. i.e. with 5 nos. 5/15 Amp. Universal Sockets, ON/Off switch, MOV surge protection, Fuse etc.
3. One standard tray with cable manager.
4. The rack should be fitted with a minimum of 2 fans.
5. Rack shall have metallic back cover.
6. The rack shall be wall mountable.

It shall be of EPI or President or Netcell or Rittal or Netrack or Novaroor Rackom or Schneider or other reputed make.