**TECHNICAL SPECIFICATION**

**SUPPLY OF WIRELESS ACCESS POINT**

(TYPE A: LESS 20 PEOPLE)

*Type A Wireless Access point is suitable for small density deployment for up to 20 people such as class room, small meeting room.*

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **SPECIFICATION** | **COMPLIANCE** | **PROPOSAL DESCRIPTION** |
| **Type A** | WIRELESS ACCESS POINT |  |  |
| **1.** | Supply Wireless Access Point 802.11ac wave 2* AP type: Indoor, dual radio, 5GHz 802.11ac 3x3 MIMO and 2.4GHz 802.11n 2x2 MIMO.
* One 10/100/1000BASE-T Ethernet network interface (RJ-45)
	+ Auto-sensing link speed and MDI/MDX
	+ 802.3az Energy Efficient Ethernet (EEE)
* 5GHz **3x3 MIMO** (1,300 Mbps max rate) and 2.4GHz 2x2 MIMO (400 Mbps max rate) radios, with a total of three integrated omni-directional down-tilt dual-band antennas.
* Supports multiuser MIMO (MU-MIMO) and 3 spatial streams (3SS) or higher.
* Compatible with IIUM existing Wireless Controller (minimum)
	+ Aruba Mobility Controller 7240XM
	+ Aruba OS 8.3
 | <X> |  |
| **2.** | Supply Cabling together with each access point installed. Cable type is UTP Cat6 (AMP or Equivalent quality) | <X> |  |
| **3.** | Supply accessories per access point as stated below:* Access Point ceiling mounting
* Access Point license that support Policy Enforcement
* Proprietary console cable
* Power Injector for POE+ power requirement.
* Label and Tagging at both end
* Security bracket (if required)
 | <X> |  |
| **4.** | Provide Support and Warranty for hardware and software.* Must come with minimum 1 YEAR support and lifetime product warranty by Principle.
 | <X> |  |

(TYPE B: UP TO 100 PEOPLE)

*Type B Wireless Access Point is suitable for High Density deployment for up to 100 people such as Conference Hall or Lecture Hall.*

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **SPECIFICATION** | **COMPLIANCE** | **PROPOSAL DESCRIPTION** |
| **Type B** | WIRELESS ACCESS POINT |  |  |
| **1.** | Supply Wireless Access Point 802.11ac wave 2* AP type: Indoor, dual radio, 5GHz 802.11ac 4x4 MIMO and 2.4GHz 802.11n 4x4 MIMO.
* One HPE Smart Rate port (RJ-45, maximum negotiated speed 5Gbps)
* Auto-sensing link speed (100/1000/2500/5000BASE-T) and MDI/MDX
* 2.5Gbps and 5Gbps speeds comply with NBase-T and 802.3bz specifications
* PoE-PD: 48 Vdc (nominal) 802.3at PoE
* One 10/100/1000BASE-T Ethernet network interface (RJ-45)
	+ Auto-sensing link speed and MDI/MDX
	+ PoE-PD: 48 Vdc (nominal) 802.3at PoE
* 5 GHz (1,733 Mbps max rate) and 2.4 GHz (**600** Mbps max rate) radios, each with **4x4 MIMO** support and a total of eight integrated omni-directional down tilt antennas.
* Support Four spatial stream SU-MIMO for up to 1,733 Mbps wireless data rate to a single client device. Three spatial stream MU-MIMO for up to 1,300 Mbps wireless data rate to up to three MU-MIMO capable client devices simultaneously.
* Compatible with IIUM existing Wireless Controller (minimum)
	+ Aruba Mobility Controller 7240XM
	+ Aruba OS 8.3
 | <X> |  |
| **2.** | Supply Cabling together with each access point installed. Cable type is UTP Cat6 (AMP or Equivalent quality) | <X> |  |
| **3.** | Supply accessories per access point as stated below:* Access Point ceiling mounting
* Access Point license that support Policy Enforcement
* Proprietary console cable
* Power Injector for POE+ power requirement.
* Label and Tagging at both end
* Security bracket (if required)
 | <X> |  |
| **4.** | Provide Support and Warranty for hardware and software.* Must come with minimum 1 YEAR support and lifetime product warranty by Principle.
 | <X> |  |