

**TECHNICAL SPECIFICATION
SUPPLY OF AP ACCESS SWITCH (TYPE A)**

Unit: _____

Suitable medium requirement Access point heavy environment/ High power requirement network Access.

No.	SPECIFICATION	VENDORS PROPOSAL	COMPLIANCE (YES/NO)
TYPE A	AP ACCESS SWITCH		
<p align="center">Network Capabilities</p>	<ul style="list-style-type: none"> • 24 ports (10/100/1000 Gbps) CL4 POE support • Stackable Layer 3 switches with BGP, EVPN, VXLAN, VRF, and OSPF with robust security and QoS • Built-in high-speed 10G/25G uplinks 4 Small Form-Factor Pluggable(SFP). • High performance 448 Gbps system switching capacity, 334 MPPS of system throughput, and up to 200 Gbps stacking bandwidth. • Size 1U and Power-to-port switch bundle with back-to-front airflow ideal for data center 1GbE ToR and OOBM deployments • Support for automatic VLAN information, assignment & configuration. • Device management support with: <ul style="list-style-type: none"> ○ Command-Line Interface (CLI) ○ Secure shell (SSH) ○ Simple Network Management Protocol (SNMP) ○ RJ-45 or USB console access ○ Configuration with minimum 1Gbps link speed • Port Security with 802.1X support for <ul style="list-style-type: none"> ○ Port Mirroring / Monitoring ○ Bridge Protocol Data Unit (BPDU) Guard Protection ○ Spanning-tree / Loopguard / Rootguard • Other Security features: <ul style="list-style-type: none"> ○ Multidomain authentication ○ Internet Group Management Protocol (IGMP) filtering, ○ Terminal Access Controller Access Control System (TACACS) / Radius authentication ○ Access control list (ACL) 		

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	<ul style="list-style-type: none"> ○ Dynamic Segmentation / VLAN 		
Service requirements	<p>Make sure that the deployment of the switch inherits the network configuration of the uplink switch such as but not limited to:</p> <ul style="list-style-type: none"> • VLAN configuration • LLDP enablement • Campus SNMP configuration • Connection Integration with an uplink switch such as a port channel or trunking requirements 		
Accessories	<p>Must make sure to include the following accessories, unless stated not:</p> <ul style="list-style-type: none"> • Rackmounts/rack tray installed to fit with existing racks including bolts/nuts etc. • Minimum 1 Installed AC 680W module along the switch • Minimum 1 10G SFP+ LC LR Transceiver and 3m LC-LC SMF Patchcord 		
Base warranty	<ul style="list-style-type: none"> ▪ Must come with minimum 1 YEAR support and product warranty by Principle. 		
Documentation	<ul style="list-style-type: none"> • SSM Letter (Form 9, company profile) • Bank statements (ending balance for 3 Months) • MOF certificate • Letter from principal for all supplied items • Heatmap before and after installation • FAT and UAT for all supplied items 		
Penalty	<p>In the event the vendor fails to install the Product within the Installation Period, IIUM shall have the rights against the vendor as follows:</p> <p>(a) A penalty of RMXXX per unit per day until the installation/relocation is complete; and/or</p>		
	<p>In the event the vendor fails to replace the faulty Product after one (1) working day, IIUM shall have the rights against the vendor as follows:</p> <p>(a) A penalty of RMXXX per unit per day until the replacement is complete; and/or</p> <p>(b) If necessary by IIUM, the right to purchase the replacement of the Product from another source and the said replacement shall not exceed the specification described in the Agreement.</p>		

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	In the event the vendor fails to meet SLA, IIUM shall have the rights against the vendor as follows: (a) A penalty of RMXXX per unit per hour until the Products are restored		
PIC INFORMATION Name: Telephone No. : Email:		<i>PIC SIGNATURE & COMPANY STAMP</i>	

**TECHNICAL SPECIFICATION
SUPPLY OF MULTI-GIG SWITCH (TYPE B)**

Unit: _____

Suitable medium requirement high requirement access point heavy environment/ High power requirement network Access.

No.	SPECIFICATION	VENDORS PROPOSAL	COMPLIANCE (YES/NO)
TYPE B	MULTI-GIG SWITCH		
Network Capabilities	<ul style="list-style-type: none"> • 24 ports (1/2.5/5/10 Gbps) multi-gigabit and CL6 POE support • Stackable Layer 3 switches with BGP, EVPN, VXLAN, VRF, and OSPF with robust security and QoS • Built-in high-speed 10G/25G/50G uplinks 4 Small Form-Factor Pluggable(SFP). • High performance 780 Gbps system switching capacity, 580 MPPS of system throughput, and up to 200 Gbps stacking bandwidth. • Size 1U and Power-to-port switch bundle with back-to-front airflow ideal for data center 1GbE ToR and OOBM deployments • Support for automatic VLAN information, assignment & configuration. • Device management support with: <ul style="list-style-type: none"> ○ Command-Line Interface (CLI) ○ Secure shell (SSH) ○ Simple Network Management Protocol (SNMP) ○ RJ-45 or USB console access ○ Smart rate configuration with minimum 1Gbps link speed • Port Security with 802.1X support for <ul style="list-style-type: none"> ○ Port Mirroring / Monitoring ○ Bridge Protocol Data Unit (BPDU) Guard Protection ○ Spanning-tree / Loopguard / Rootguard • Other Security features: <ul style="list-style-type: none"> ○ Multidomain authentication ○ Internet Group Management Protocol (IGMP) filtering, ○ Terminal Access Controller Access Control System (TACACS) / Radius authentication ○ Access control list (ACL) 		

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	<ul style="list-style-type: none"> ○ Dynamic Segmentation / VLAN 		
Service requirements	<ul style="list-style-type: none"> ● Make sure that the deployment of the switch inherits the network configuration of the uplink switch such as but not limited to: <ul style="list-style-type: none"> ● VLAN configuration ● LLDP enablement ● Campuses SNMP configuration ● Connection Integration with an uplink switch such as a port channel or trunking requirements 		
Accessories	<ul style="list-style-type: none"> ● Must make sure to include the following accessories, unless stated not: <ul style="list-style-type: none"> ● Rackmounts/rack tray installed to fit with existing racks including bolts/nuts etc. ● Minimum 1 Installed AC 1050W module with switch ● Minimum 1 10G SFP+ LC LR Transceiver 3m LC-LC SMF Patchcord 		
Base warranty	<ul style="list-style-type: none"> ▪ Must come with minimum 1 YEAR support and product warranty by Principle. 		
Documentation	<ul style="list-style-type: none"> ● SSM Letter (Form 9, company profile) ● Bank statements (ending balance for 3 Months) ● MOF certificate ● Letter from principal for all supplied items ● Heatmap before and after installation ● FAT and UAT for all supplied items 		
Penalty	<p>In the event the vendor fails to install the Product within the Installation Period, IIUM shall have the rights against the vendor as follows:</p> <p>(a) A penalty of RMXXX per unit per day until the installation/relocation is complete; and/or</p>		
	<p>In the event the vendor fails to replace the faulty Product after one (1) working day, IIUM shall have the rights against the vendor as follows:</p> <p>(a) A penalty of RMXXX per unit per day until the replacement is complete; and/or</p> <p>(b) If necessary by IIUM, the right to purchase the replacement of the Product from another source and the said replacement shall not exceed the specification described in the Agreement.</p>		

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	In the event the vendor fails to meet SLA, IIUM shall have the rights against the vendor as follows: (a) A penalty of RMXXX per unit per hour until the Products are restored		
PIC INFORMATION Name: Telephone No. : Email:		<i>PIC SIGNATURE & COMPANY STAMP</i>	

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