Adigrat University Wireless National Bid for 2009 E.C

Rno	Item		Minimum Requirement	Unit	Qty	Unit price	Total Price	Remark
1	**Indoor Wireless Access point**	Basic features	Support 802.11ac wave 2 standards, 4 x 4 MIMO and four spatial streams 800 Mbit/s at 2.4 GHz; 1.7 Gbit/s at 5 GHz; and 2.5 Gbit/s for the device	set	50			
		Antenna type	Built-in					
		Environmental specifications	Operating temperature：−10℃ to +50℃ Storage temperature：−10℃ to +70℃ Operating humidity：5% to 95% (non-condensing) Waterproof and dustproof grade：IP41					
2	**Outdoor Wireless access point**	Basic features	Support 802.11ac 3 x 3 Multiple-Input Multiple-Output (MIMO) chips, energy-efficient design, and a rate of up to 1.7 Gbit/s	set	200			
		Antenna type	Built-in					
		Environmental specifications	Operating temperature：−10℃ to +60℃ Storage temperature：−40℃ to +70℃ Operating humidity：0% to 100% (non-condensing) Waterproof and dustproof grade：IP67					
3	**High density indoor wireless access point**	Basic features	Support 802.11ac 2x2 Multiple-Input Multiple-Output (MIMO) chips, energy-efficient design, and a rate of up to 2.5 Gbit/s It shall be used in the high density scenario	set	70			
		Antenna type	Built-in					
		Environmental specifications	Operating temperature：−10℃ to +50℃ Storage temperature：−40℃ to +70℃ Operating humidity：5% to 95% (non-condensing) Waterproof and dustproof grade：IP41					
4	**Access controller**	general	should consider all the management of the Aps. They should work as redundant system.	set	2			
5	**24 Port POE Switch**	Switching capacity	320Gbit/s	set	100			
		Forwarding performance	90Mpps					
		Fixed ports	24x10/100/1000Base-T PoE Ethernet ports, 4x10GE SFP+ ports					
6	**48 port POE Switch**	Switching capacity	320Gbit/s	set	60			
		Forwarding performance	130Mpps					
		Fixed ports	48x10/100/1000Base-T PoE Ethernet ports, 4x10GE SFP+ ports					

			Unit	Qty			
7	Single Mode Fiber	Fiber cable - Single-Mode 12-core loose tube armoured outdoor cable - 9/125 cable. Suitable for direct burial, rodent resistant and waterproof. Must be provided on reel (will not be accepted without storage reel). New and complete reel of fiber optic single-mode 9/125 cable. Evidence of Single-mode cable must be provided on cable.	Meters	10000			
8	MultiMode Fiber	Fiber cable - Multi-Mode 12-core loose tube armoured outdoor cable - 50/125 cable. Suitable for direct burial, rodent resistant and waterproof. Must be provided on reel (will not be accepted without storage reel). New and complete reel of fiber optic Multi-mode 50/125 cable. Evidence of Multi-mode cable must be provided on cable.	Meters	9000			
9	Fiber optic cable - multi-mode cable 50/125mm - Duplex - LC-LC connector -	Fiber optic duplex cable - multi mode - LC-LC connectors - 5m length	pcs	200			
10	Fiber optic cable - single-mode cable 9/125mm - Duplex - LC-LC connector -	Fiber optic duplex cable - single mode - LC-LC connectors - 5m length. Both cables should be attached together	pcs	200			
11	Fiber Optic Patch panel 12 port with cable management - LC connectors - 1U - rack mounted	19" (inch) rack mounted 12 port fiber patch panel - LC connectors - Infalink make is preferable	pcs	150			
12	Fiber optic pigtail cable - 9/125mm - single mode - LC connector	Single mode fiber pigtail - 9/125mm - LC connector	pcs	80			
13	Fiber optic pigtail cable - 50/125mm - multi mode - LC connector	Multi mode fiber pigtail - 50/125mm - LC connector	pcs	80			
14	UTP Patch panel - 48 port UTP CAT6 - Infalink or mini-pro make or other equivalent	Rack mounted patch panel - Infalink or mini-pro make or other equivalent	Pcs	200			
15	UTP Patch panel - 24 port UTP CAT6 - Infalink or mini-pro make or other equivalent	Rack mounted patch panel - Infalink or mini-pro make or other equivalent	Pcs	200			
16	Switch cabinet - 9u - wall mounted - TOTEN make or other equivalent	Prebuilt/constructed 9u switch cabinet and it should have its own builtin PDU. The cabinet should include all accessories for installation.	Pcs	100			

17	**Network access management system**	Access Control Manager	Provides unified network access policies and supports multiple authentication methods such as 802.1X, Portal, MAC address, and SACG authentication. This implements unified access management on users from wired, wireless or VPN networks.	set	1			
		Free Mobility Manager	Support users receive the same service experience when they move on the network. Provides user group–based QoS policy configuration to preferentially forwards VIP users' data traffic when there are few network resources, delivering high QoE for VIP users.					
		Guest Manager	Provides full lifecycle guest management, including account application, approval, distribution, authentication, auditing, and deregistration.					
18	**Network management system (eSight)**	general	should consider all the devices management license such as platform, server manager, storage manager, WLAN Manager, network traffic analyzer manager, facilities infrastructure manager, uc/cc device manager, telepresence device manager, ipsec vpn manager.The management scale should be upto 5000	set	1			shouldbe compatible with the existing management system
19	**Module transceiver**	10GE transceiver	10GE Single model transceiver	pcs	150			
		1GE transceiver	1GE multiple model transceiver	pcs	150			
20	NOC (Network Operation Center)	2 set 50" LED Screen including all of the cabling system, installation and integration with university existing NMS.		set	2			
21	Accessories	All accessories such as docoration, poles, electrical equipments, fiber related componenets, UTP cable and related units, Network equipment, installations and other relevant materials for successsful deployment of the solution should be considered.						
22	Installation, Commissioning, and testing	Successful Bidders are required to install, commission, and test all wireless network facilities after delivery. Successful Bidders are required to extend the optic fiber lines to the selected locations asper the university guidance from the near by building or the university data center. They are also required to make necessary splicing and expansion of fiber lines. Any form of deformations or changes to the building or other facilities during installation, commissioning, and testing must be patched or repaired or restored by the supplier/winner.						

23	Relevant Trainings & Visits							
		On-Site Trainings	Successful Bidders are required to arrange germane onsite trainings for the AdU-ICT staffs covering all concomitant expenses during & after installation & commissioning.	number	5			
		On-factory Trainings & Visits	Successful Bidders are required to arrange visits to factories and on-factory trainings (on Facilities installation, configuration, & management) & certifications prior to the start of installation works covering all concomitant expenses (per-dime + certification fees + Air transport fares).	number	2			

| 24 | Handheld two-way radio | The handheld two-way radio should be more portable and durable. It should have a rubberized shell. Besides, the two-way handheld radio should have the following features
• Almost indestructible. The rubberized shell is very hard to crack.
• Feels good in your hand. The ergonomic shape helps you hang on.
• Boost the signal with a repeater. If you have a GMRS license, you can use a repeater to boost this radio's signal.
• Waterproof. This IP67 certified hand radio floats and can withstand submersion for 30 minutes.
• Good battery life. You can use the handheld two-way radio all day long and it won't run out of battery.
• Scans for NOAA weather alerts. This standard feature lets you know when a storm is blowing your way.
• 35 mile maximum range. The signal stays strong across long distances. | 20 | | | | **include all the accessories such as charger, battery, antenna, belt clip, headphone, earphone, case** |
| | | | | | **Total Price** | | |